

Hazard Mitigation Plan

Erie County, New York

March 2022

Volume II

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SECTION 8. PLANNING PARTNERSHIP

This section describes the Erie County’s Hazard Mitigation Plan (HMP) Planning Partnership, its responsibilities throughout the planning process, and the jurisdictional annexes developed as a result of the plan update efforts.

8.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

“Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan” [Section 201.6a(4)]

For the Erie County HMP, a Planning Partnership was formed to leverage resources and to meet requirements for the federal Disaster Mitigation Action of 2000 (DMA) for as many eligible governments as possible. Members of the Planning Partnership consisted of representatives from each jurisdiction. The DMA defines a local government as follows:

Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Members of the planning partnership have the expertise to develop the plan and have their jurisdiction’s authority to implement the mitigation strategy developed during the planning process. The planning partnership is responsible for developing and reviewing draft sections of the plan, creating the mitigation strategy for their jurisdiction, and adopting the final plan.

Each participating planning partner has prepared a jurisdictional annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

8.2 INITIAL SOLICITATION AND LETTERS OF INTENT

Erie County solicited the participation of all municipalities in the county at the commencement of this project. All municipalities interested signed a Letter of Intent and/or a resolution committing their participation and resources to the development of the Erie County HMP (Appendix B). Table 8-1 lists the jurisdictions that elected to participate in the update process and have met the minimum requirements of participation as established by the county and the Steering Committee. Erie County and the municipalities indicated in Table 8-1 participated in the HMP update.

Table 8-1. Participating Jurisdictions in Erie County

Jurisdictions		
Erie County	Concord, Town of	Marilla, Town of
Erie County Water Authority	Depew, Village of	Newstead, Town of
Akron, Village of	East Aurora, Village of	North Collins, Town of
Alden, Town of	Eden, Town of	North Collins, Village of
Alden, Village of	Elma, Town of	Orchard Park, Town
Amherst, Town of	Evans, Town of	Orchard Park, Village of



Jurisdictions		
Angola, Village of	Farnham, Village of	Sardinia, Town of
Aurora, Town of	Gowanda, Village of	Sloan, Village of
Blasdell, Village of	Grand Island, Town of	Springville, Village of
Boston, Town of	Hamburg, Town of	Tonawanda, City of
Brant, Town of	Hamburg, Village of	Tonawanda, Town of
Buffalo, City of	Holland, Town of	Wales, Town of
Cheektowaga, Town of	Kenmore, Village of	West Seneca, Town of
Clarence, Town of	Lackawanna, City of	Williamsville, Town of
Colden, Town of	Lancaster, Town of	
Collins, Town of	Lancaster, Village of	

8.2.1 Planning Partner Expectations

The Steering Committee developed the following list of planning partner expectations, which were confirmed at the kick-off meeting held on November 2, 2020 (see Appendix C [Meeting Documentation] for details):

- Complete administrative tasks:
 - Complete a letter of intent to participate and return to the Erie County Department of Homeland Security and Emergency Services.
 - Designate points of contact.
- Provide representation at Planning Partnership meetings.
- Provide information about jurisdictional assets (critical facilities, plans/ordinances, hazard events/damages, new development, etc.) as requested.
- Support public outreach efforts within the jurisdictions, including posting of notices and plan links on websites and local media sources, advertising and supporting public meetings, and supporting outreach to National Flood Insurance Program (NFIP) repetitive loss and severe repetitive loss property owners, where applicable.
- Solicit and encourage the participation of regional agencies, a range of stakeholders, and citizens in the HMP development process.
- Assist with the identification of stakeholders within the jurisdiction that should be informed and potentially involved with the planning process.
- Prepare and submit a jurisdictional annex:
 - Attend mitigation workshop.
 - Perform a capability assessment.
 - Review the risk assessment.
 - Involve local NFIP Floodplain Administrator in the planning process and have them complete the NFIP portion of the annex.
 - Review the 201 mitigation strategies and provide a status of each.
 - Identify jurisdiction-specific mitigation strategies to address each of the natural hazards posing a risk to the jurisdiction.
- Review draft plan sections when requested and provide comments and input as appropriate.
- Ensure the HMP update meets the requirements of the DMA 2000 and FEMA and New York State Division of Homeland Security and Emergency Services (NYS DHSES) guidance.
- Adopt the plan by resolution of local governing body after FEMA conditional approval.
- Provide information regarding progress on identified initiatives as requested by the County Hazard Mitigation Planning Coordinator.
- Participate, as able, in additional opportunities:
 - Attend municipal support meetings.



- Participate in and advertise the public review and comment period prior to adoption.

By adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume I. As described in Volume I, Section 7 (Plan Maintenance), it is intended that the Planning Partnership remain active beyond the regulatory update to support plan maintenance. Regarding the composition of the Steering Committee and Planning Partnership, it is recognized that individual commitments change over time, and it shall be the responsibility of each jurisdiction and its representatives to inform the HMP Coordinator of any changes in representation.

8.2.2 Jurisdictional Annex Preparation Process

As stated in the 2017 New York State Hazard Mitigation Planning Standards, jurisdictional annexes provide a unique, stand-alone guide to mitigation planning for each jurisdiction. The Erie County HMP Update is organized so that there is an annex for Erie County and for every jurisdiction within the county's borders. Section 9 (Jurisdictional Annexes) includes an annex for each jurisdiction in Erie County, including those that did not fully participate.

During the Erie County HMP planning process, the nation, the State of New York, and Erie County were facing the COVID-19 pandemic. The COVID-19 pandemic was declared a major disaster on March 20, 2020 (DR-4480). The Governor issued a stay-at-home Executive Order beginning March 22, 2020, which remained in effect the duration of the planning process. With the stay-at-home orders in place, all meetings during the planning process were held virtually.

Annex Development

In order to facilitate update of the County and Jurisdictional Annexes, data from the 2015 Erie County HMP annexes was transferred to the new annex format, which was developed to meet federal and state criteria. Clear instructions were provided to the county and municipality. These instructions provided a basis to address the following:

- Document changes in capabilities and vulnerabilities.
- Provide a current status of the 2015 HMP mitigation strategy.
- Develop a new mitigation strategy to address identified issues and to increase community resiliency.

The county invited all municipalities to participate in a municipal kick-off meeting held on November 18 and 19, 2020, to provide an overview of the planning process. Subsequently, each partner was asked to participate in one of six municipal informational meetings held in January and February 2021, during which key elements of the worksheets were discussed and subsequently completed by the appropriate jurisdictional personnel for each worksheet. The worksheets were collected, and the information was incorporated into each jurisdictional annex. In the event additional information was needed, the jurisdictional point of contact was contacted to provide more input into their annex.

A mitigation workshop was held on June 9, 2021, to provide an overview of developing a strong mitigation strategy. In preparation for this workshop, the consultant provided a consolidated list of problem areas/vulnerabilities identified during the planning process and feedback from the citizen survey to support the development of relevant projects to form the mitigation strategy.

Municipal Support Meetings

In addition to the municipal kick-off meeting, municipal support meetings were held on January 21, 22, 25, 26, and February 2, 2021. At these support meetings, the consultant worked with the Planning Partnership members to discuss the needs for their jurisdictional annexes. This included but was not limited to the following:



- Major incidents and their impacts
- Problem areas
- Flooding concerns
- Projects completed since the last HMP
- Questions on worksheets
 - Evaluation of Identified Hazards of Concern
 - Capability Assessment and Integration
 - NFIP Floodplain Administrator Questionnaire
 - Mitigation Action Progress
 - New Development and Building Permits
 - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing
- Outreach conducted by jurisdictions

Hazard Ranking Exercise

The presentation of the risk assessment and risk ranking for each jurisdiction was done on May 19, 2021. At this meeting, the consultant presented the overall risk assessment for the hazards of concern. In addition, each planning partner was asked to review the ranked risk specific for its jurisdiction. Refer to Section 5.3 (Hazard Ranking) for the methodology of the hazard ranking process. The calculated ranking was presented to each jurisdiction, and they were asked to review the ranking and revise based on history of events, probability of occurrence, and the potential impact on people, property, and the economy. The objectives of this exercise were to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as “high” for each jurisdiction as a result of this exercise were considered to be priorities for identifying appropriate mitigation actions, although jurisdictions also identified actions to mitigate “medium” or “low” ranked hazards as appropriate.

Mitigation Strategy Workshop

Two mitigation strategy workshops were conducted the week of June 9, 2021, for all participating jurisdictions to support the development of focused problem statements based on the impacts of natural hazards in the county and their communities. These problem statements are intended to provide a detailed description of the problem area, including its impacts to the municipality/jurisdiction, past damages, loss of service, etc. An effort was made to include the street address of the property/project location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing conditions (topography, terrain, hydrology) of the site. These problem statements form a bridge between the hazard risk assessment, which quantifies impacts to each community with the development of actionable mitigation strategies. In total, two workshops were held for Erie County’s municipalities. The nearly 100% participation of the planning partners reflects the excellent outreach and dedication of the planning team. The county and the mitigation consultant team worked with each jurisdiction to identify clear, implementable mitigation actions as well as to further support the completion of the jurisdictional annexes. The NYS DHSES Action Worksheet template and instructions are provided in Appendix J (NYS DHSES Planning Standards).

Jurisdictional Annexes

While the jurisdictional annex format is designed to document and ensure local compliance with the DMA 2000 regulations, its greater purpose and function includes:

- Providing a locally relevant synthesis of the overall mitigation plan that can be readily presented, distributed, and maintained;



- Facilitating local understanding of the community’s risk to natural hazards;
- Facilitating local understanding of the community’s capabilities to manage natural hazard risk, including opportunities to improve those capabilities;
- Facilitating local understanding of the efforts the community has taken, and plans to take, to reduce their natural hazard risk;
- Facilitating the implementation of mitigation strategies, including the development of grant applications;
- Providing a framework by which the community can continue to capture relevant data and information for future plan updates.

Each jurisdiction’s annex is intended to be a *living document* and will continue to be improved as resources permit. As such, its design is intended to promote and accommodate continued efforts to maintain the annex to be current and to improve the effectiveness of the annex as the key tool, reference, and guiding document by which the jurisdiction will implement hazard mitigation locally. The following provides a description of the various elements of the jurisdictional annex.

Section 9.X.1: Hazard Mitigation Planning Team: Identifies the hazard mitigation planning primary and alternate(s) contacts and Floodplain Administrators as identified by the jurisdiction. Provides details on which departments were involved throughout the development of the jurisdictional annex. Plans developed with the participation of the widest range of departments, stakeholders, and persons familiar with the jurisdiction should be involved in the development of the jurisdictional annexes. Further detail is provided in Section 3 (Planning Process), Section 9 (Jurisdictional Annexes), and Appendix B (Participation Matrix).

Section 9.X.2: Municipal Profile: Provides an overview and profile of the jurisdiction, including identification of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.3: Jurisdictional Capability Assessment and Integration: Provides an inventory and evaluation of the jurisdiction’s tools, mechanisms, and resources available to support hazard mitigation and natural hazard risk reduction. Within the municipal annexes, tables provide an inventory of the municipality’s planning, regulatory, administrative, technical, and fiscal capabilities. Further, another table identifies the municipality’s level of participation in state and federal programs designed to promote and incentivize local risk reduction efforts.

Section 9.X.4: National Flood Insurance Program (NFIP) Compliance: Summarizes jurisdiction-specific information related to managing and regulating the regulatory floodplain, including current and future compliance with the NFIP.

Section 9.X.5: Evacuation, Sheltering, Temporary Housing, and Permanent Housing: To meet the NYS DHSES requirement, jurisdictions provided evacuation routes, sheltering measures, and potential locations for temporary and permanent housing.

Section 9.X.6: Growth/Development Trends: Summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Section 9.X.7: Jurisdictional Risk Assessment: Provides information regarding each plan participant’s vulnerability to the identified hazards. Full data and information on the hazards of concern, the methodology used to develop the vulnerability assessments, and the results of those assessments that serve as the basis of these local risk rankings may be found in Section 5.



- **Hazard Area Extent and Location Map:** Each annex includes a map (or series of maps) illustrating identified hazard zones and critical facilities. Further, these maps show areas of known or anticipated future development, as available and provided by the jurisdiction.
- **Hazard Event History:** Identifies hazard events that have caused significant impacts within the jurisdiction, including a summary characterization of those impacts identified by the jurisdiction.
- **Hazard Ranking and Vulnerabilities:** The Erie County HMP identifies and characterizes the broad range of hazards that pose risk to the entire planning area; however, each jurisdiction has differing degrees of risk exposure and vulnerability aside from the whole. The local risk ranking serves to identify each jurisdiction's degree of risk to each hazard as it pertains to them, supporting the appropriate selection and prioritization of initiatives that will reduce the highest levels of risk for each community.
- **Critical Facilities:** Identifies potential flood losses to critical facilities in the jurisdiction based on the flood vulnerability assessment process presented in Section 5.
- **Identified Issues:** Presents other specific hazard vulnerabilities as identified by the jurisdiction.

Section 9.X.8: Mitigation Strategy and Prioritization: Discusses and provides the status of past mitigation actions and status and describes proposed hazard mitigation initiatives and prioritization.

- **Past Mitigation Initiative Status:** Where applicable, a review of progress on the jurisdiction's prior mitigation strategy is presented, identifying the disposition of each prior action, project, or initiative in the jurisdiction's updated mitigation strategy. Other completed or ongoing mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- **Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy:** Other completed or ongoing mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- **Proposed Hazard Mitigation Initiatives for the Plan Update:** Table 9.X-11 presents the jurisdiction's updated mitigation strategy. As indicated, applicable mitigation actions, projects, and initiatives are further documented on an Action Worksheet, which provides details on the project identification, evaluation, prioritization, and implementation process. Table 9.X-12 provides a summary of the local mitigation strategy prioritization process discussed in Section 6.

Section 9.X.9: Action Worksheets: Provides each municipality with a more developed starting point for project implementation should funding become available. Following NYS DHSES HMP Standards Guide, each municipality developed a minimum of two action worksheets. Workshops and additional meetings (in person, by email, or by teleconference) to complete the jurisdictional annexes were held with the Steering and Planning Committees throughout the planning process. In summary, all participating communities and the county completed the planning partner expectations and annex preparation process. Details regarding these meetings are described further in Sections 3 (Planning Process) and 6 (Mitigation Strategy). Completed jurisdictional annexes are provided in Section 9 (Jurisdictional Annexes).

8.2.3 Coverage Under the Plan

Of the 44 planning partners, all fully met the participation requirements specified by the Steering Committee. All planning partners are included in this volume. Those that did not meet the requirements will not be able to seek FEMA or NYS DHSES approval at the time of plan submittal nor will they be eligible to obtain FEMA grant funding.

Table 8-2 lists the status of each jurisdiction as well as their status in this plan update. It is noted that participation in scheduled Planning Partnership meetings provides only a partial indication of the level of participation of each jurisdiction. Throughout the bulk of the process, all municipalities' resources were strained due to the Covid-19 pandemic. Due to this, the consultant provided support in the manner of numerous calls as well as virtual



meetings to ensure each planning partner seeking approval for the HMP met the threshold for participation. Appendix B (Participation Matrix) and Appendix C (Meeting Documentation) provide details on participation and meeting attendance.

Table 8-2. Jurisdictional Status

Municipality	Letter of Intent to Participate	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
Erie County	N/A	X	X	X	X
Erie County Water Authority	X	X	X	X	X
Akron, Village of	X	X	X	X	X
Alden, Town of	X	X	X	X	X
Alden, Village of	X	X	X	X	X
Amherst, Town of	X	X	X	X	X
Angola, Village of	X	X	X	X	X
Aurora, Town of	X	X	X	X	X
Blasdell, Village of	X	X	X	X	X
Boston, Town of	X	X	X	X	X
Brant, Town of	X	X	X	X	X
Buffalo, City of	X	X	X	X	X
Cheektowaga, Town of	X	X	X	X	X
Clarence, Town of	X	X	X	X	X
Colden, Town of	X	X	X	X	X
Collins, Town of	X	X	X	X	X
Concord, Town of	X	X	X	X	X
Depew, Village of	X	X	X	X	X
East Aurora, Village of	X	X	X	X	X
Eden, Town of	X	X	X	X	X
Elma, Town of	X	X	X	X	X
Evans, Town of	X	X	X	X	X
Farnham, Village of	X	X	X	X	X
Grand Island Town, of	X	X	X	X	X
Gowanda, Village of	X	X	X	X	X
Hamburg, Town of	X	X	X	X	X
Hamburg, Village of	X	X	X	X	X
Holland, Town of	X	X	X	X	X
Kenmore, Village of	X	X	X	X	X
Lackawanna, City of	X	X	X	X	X
Lancaster, Town of	X	X	X	X	X
Lancaster, Village of	X	X	X	X	X
Marilla, Town of	X	X	X	X	X
Newstead, Town of	X	X	X	X	X



Municipality	Letter of Intent to Participate	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
North Collins, Town of	X	X	X	X	X
North Collins, Village of	X	X	X	X	X
Orchard Park, Town	X	X	X	X	X
Orchard Park, Village of	X	X	X	X	X
Sardinia, Town of	X	X	X	X	X
Sloan, Village of	X	X	X	X	X
Springville, Village of	X	X	X	X	X
Tonawanda, City of	X	X	X	X	X
Tonawanda, Town of	X	X	X	X	X
Wales, Town of	X	X		X	X
West Seneca, Town of	X	X	X	X	X
Williamsville, Village of	X	X	X	X	X



9.1 Erie County

This section presents the jurisdictional annex for Erie County. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the county participated in the planning process; an assessment of the county’s risk and vulnerability; the different capabilities utilized in the county; and an action plan that will be implemented to achieve a more resilient community.

9.1.1 Hazard Mitigation Planning Team

Erie County followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many county departments, including Public Works, Homeland Security and Emergency Management and Environment and Planning. The Department of Homeland Security and Emergency Services represented the county on the Erie County Hazard Mitigation Plan Planning Partnership and Steering Committee and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gregory Butcher, Deputy Commissioner Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Gregory.butcher@erie.gov	Name/Title: Melissa Calhoun, Special Assistant Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Melissa.calhoun@erie.gov
Additional Contributors	
Name/Title: Daniel Castle, Deputy Commissioner, Erie County Department of Environment & Planning Method of Participation: Participated in several meetings and provided written input	
Name/Title: Joe Fiegl, Deputy Commissioner, Erie County Division of Sewerage Management Method of Participation: Participated in a meeting and provided input in writing and on the phone	
Name/Title: Jon DePlanche, Senior Engineer, County Highway Department Method of Participation: Participated in a meeting and provided input in writing and on the phone	
Name/Title: Joanna Panasiewicz Method of Participation: Participated in meetings and completed capabilities information and information about identified hazards and risks	

9.1.2 Jurisdiction Profile

Please refer to Section 4, Volume I of this HMP for details on Erie County’s population, location, climate, history, growth, and development.





9.1.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. The jurisdictional annexes for each municipality summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. The Erie County Department of Environment & Planning leads the county’s economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county. The department also provides technical assistance to municipal boards, such as planning and zoning boards, as well as to municipalities updating their master plans or zoning.

9.1.4 Capability Assessment and Integration

Erie County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

Areas where mitigation is currently integrated are summarized in this Capability Assessment. Erie County identified specific integration activities that will be incorporated into procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Erie County. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.1-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	No	Yes	Regulated at Local and State Levels	State and Local	Local Code or Building Departments
Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels.					
Zoning Code	Yes	No	Regulated at local level	Local	Zoning Board of Appeals or Adjustment
Comment: Adopted and enforced at the local level					
Subdivision Ordinance	No	No	Regulated at local level	Local	Planning or Zoning Boards



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Adopted and enforced at the local level					
Stormwater Management Ordinance	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations	Local	Erie County Department of Environment and Planning /DSM (manages City of Lackawanna's stormwater management system)
Comment: Statewide regulation related to stormwater management standards.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	Regulated at local level	Local	Local Planning Boards
Comment: Regulated at the local level and is pursuant to their local codes.					
Site Plan Review	Yes	No	NYS General Municipal Law 239 L & M	State	Erie County Department of Environment and Planning and Erie County Department of Public Works
Comment: New York State General Municipal Law Section 239 requires municipalities to refer certain projects and/or actions to Erie County for review. The County's Department of Environment and Planning reviews and makes a recommendation or provides comments on the project to the local board within 30 days.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: Regulated by NYS regulations per New York State Environmental Conservation Law; Department of Environmental Conservation.					
Flood Damage Prevention Ordinance	No	Yes	Regulated at local level	Local	Municipal floodplain administrator
Comment: Regulated and enforced at the local level					
Municipal Separate Storm Sewer System (MS4)	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations	County/State	Erie County Department of Public Works
Comment: The County Department of Public Works and other county departments implement the MS4 regulations to manage storm flows safely and collaboratively.					
Emergency Management Ordinance	Yes	Yes	Erie County Charter – Article 14, Emergency Management Ordinance	County	Erie County Department of Homeland Security and Emergency Services
Comment: This article establishes the county's Department of Homeland Security and Emergency Services					
Climate Change Ordinance	No	Yes	-	-	-
Comment: New York State Climate Leadership and Community Protection Act; NYS Department of Environmental Conservation					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	LL6-2007, Green Buildings Act	Local	County Department of Public Works - Erie County Department of Environment and Planning. And all local municipalities.
Comment: The Plan states that all major facility projects of Erie County shall be designed, constructed, and certified to at least the LEED silver standard. 2) Public buildings can be built and renovated using high-performance methods that save energy costs, preserve the environment, and make workers and students safer and more productive.					
Planning Documents					
Comprehensive Plan	Yes	No	Framework for Regional Growth	Erie & Niagara Counties	Erie County Department of Environment and Planning
<p>Comment: Erie & Niagara Counties have partnered to develop the Framework for Regional Growth. As envisioned by County leaders, the Framework establishes basic policies and principles to guide the future growth and development of the Region. Specifically, the Framework provides:</p> <ul style="list-style-type: none"> ▪ a vision for how we wish the region to grow and redevelop over the next 15 years. ▪ direction regarding growth and redevelopment matters to county decision-makers and other regional organizations linked to the two counties via funding, membership, or other relationships. ▪ information on the ways local governments, private sector, and non-profit actions and initiatives can reinforce the overall regional vision; and ▪ mechanisms to ensure that the goals, concepts, and recommendations of the Framework for Regional Growth are implemented in an efficient and accountable manner. 					
Capital Improvement Plan	No	No	-	-	-
Comment: While the County does not have a capital improvement plan, the Department of Environment Planning plays a lead role in coordination and review of proposed capital projects. Department personnel review capital projects for consistency with the county's comprehensive plan and manage the environmental review process for capital projects. The Division of Sewerage Management has a separate asset management/capital improvement planning process for Erie County Sewer District facilities.					
Disaster Debris Management Plan	Yes	No	County Emergency Management Plan, 2018, Debris Management	-	-
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC). The CEMP is contained in three distinct, but interconnected volumes. The CEMP contains information about debris management planning.					
Floodplain or Watershed Plan	Yes	No	Regional Niagara River/ Lake Erie Watershed Management Plan Phase 2 – June 2019 www.erie.gov/wmp	Erie County and regional counties	Developed by Erie County and the Lake Erie Watershed Protection Alliance and Buffalo Niagara Waterkeeper
Comment: The goal of the Watershed Management Plan is to outline a strategy to improve water quality within the Niagara River/Lake Erie watershed. Active participation and stakeholder involvement is key to developing a comprehensive and successful watershed-wide management plan. Stakeholders such as citizens, community groups, environmental organizations, businesses, agencies, and public officials will have opportunities as detailed in this plan, to shape the resulting findings and recommendations. The Plan is based upon water quality monitoring, modeling and assessments currently underway.					
Stormwater Plan	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations. And County Stormwater Management Plan; November 2010	Local	Erie County Department of Environment and Planning and County Department of Public Works
Comment: The aim of the NYS State Pollution Discharge Elimination System is to protect water quality by reducing pollution.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Habitat Conservation Plan	Yes	No	Niagara River Habitat Conservation Strategy – August 2021	County	Developed by Buffalo Niagara Waterkeeper
Comment: The purpose of the Strategy is to serve as blueprints for habitat restoration and conservation in both the Niagara River watershed and Niagara River Greenway. Both efforts followed the Conservation Action Planning (CAP) process like that utilized for the Lake Ontario Watershed, the Lake Erie Watershed, and the Niagara River Watershed in Canada.					
Economic Development Plan	Yes	Yes	Erie and Niagara County Framework for Regional Growth, 2017	Regional	Counties, all municipalities
Comment: The Erie County Comprehensive Economic Development Strategy (CEDS) is an extraction and combining of the primary findings and strategic directives of several recent planning studies and reports undertaken by County and City government, economic development organizations and area institutions.					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: A Draft Plan was developed in 2003 but not adopted.					
Transportation Plan	Yes	No	New York State Transportation Improvement Plan Title 23 USC and 49 USC Chapter 53	State	County Department of Environment and Planning and Niagara Frontier Transportation Authority
Comment: The State Transportation Improvement Plan is a five-year capital plan for NYS Transportation facilities and includes certain projects in Erie County. The EC Department of Public Works collaborates with the Greater Buffalo Niagara Regional Transportation Council to develop county projects within the Transportation Improvement Program annually.					
Climate Change /Resilience/ Sustainability Plan	Yes	No	Erie County Climate Action and Sustainability Plan for internal operations, 2019	County	County Department of Environment and Planning
Comment: In addition to this plan the county is also developing a climate vulnerability assessment.					
Agriculture Plan	Yes	No	County Agricultural and Farmland Protection Plan, 2012	County	Erie County Department of Environment and Planning; Erie County Agricultural and Farmland Protection Board
<p>Comment: The Plan sets as its key goal is to keep land in agricultural production by protecting farmland, helping a new generation to farm, and improving the viability of all farms in the County. Included in the Plan are:</p> <ul style="list-style-type: none"> • an analysis of agriculture and development pressure in the County, • summaries of the various public meetings and individual interviews that were conducted as part of the process, Erie County Agricultural and Farmland Protection Plan pg 2 • summaries of other planning documents specific to agriculture that are currently being used in the County, • information about the “tools in the toolbox” that Erie County does, and can, use to support farms and protect farmland, and • a set of strategies with goals and recommended actions for implementation. 					
Other	-	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Emergency Management Plan, 2017	State/ county	Erie County Department of Homeland Security and Emergency Services
Comment: Each county in New York State is required to prepare a CEMP. The purpose of this plan is to minimize the effect of disasters by (i) identifying appropriate local measures to prevent disasters, (ii) developing mechanisms to coordinate the use of local resources and manpower for service during and after disasters and the delivery of services to aid citizens and reduce human suffering resulting from a disaster, and (iii) providing for recovery and redevelopment after disasters.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: See "Other" for information about the county's CEPA.					
Post-Disaster Recovery Plan	Yes	No	Comprehensive Emergency Management Plan Annex 16.0	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: Post Disaster Recovery is a section of the CEMP					
Continuity of Operations Plan	Yes	No	County Continuity of Operations Plan, 2012	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: The COOP states that all emergency response activities within the county will utilize the National Incident Management System (NIMS). This plan employs a MAC structure that includes a MACC coordinator, a Planning section (situation unit / resource unit / strategic foresight unit), a Logistics section, Joint Information Center (JIC) and agency/organization representatives.					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	Yes	County Emergency Preparedness Assessment (CEPA)	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: Every three years, NYS DHSES assesses the county's programs in a manner similar to how the state develops its THIRA.					

Development and Permitting Capability

The table below summarizes the capabilities of Erie County to oversee and track development.

Table 9.1-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	Buildout varies by municipality.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Erie County and their current responsibilities which contribute to hazard mitigation.



Table 9.1-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustments	No	-
Planning Department	Yes	Erie County Department of Environment and Planning leads the county's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Division of Environmental Compliance Services develops and implements programs in partnership with a variety of stakeholders to address the pressing environmental needs and concerns of the region. The Division leads and supports a variety of programs in the county, including but not limited to climate action and sustainability, invasive species, public outreach, water quality, and watershed management.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Erie County Office of Economic Development is part of the Department of Environment and Planning. They focus on business development, attraction, retention, and expansion.
Public Works/Highway Department and Weight and Measures	Yes	The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The department is divided into four divisions: Buildings and Grounds, Highways, Weights and Measures, and Fleet. The Department regularly addresses stormwater, sewer and tree trimming needs to address hazard impacts.
Construction/Building/Code Enforcement Department	No	No
Emergency Management/Public Safety Department	Yes	The Department of Homeland Security and Emergency Services is responsible for the overall planning and response coordination for emergencies in the county and ensures the county is prepared to respond to, and recover from, all natural and man-made emergencies for our citizens, employers, and visitors.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	ECDHSES manages the warning system, to include NY-Alert, Ready Erie app, IPAWS, NAWAS
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The Highway Division is responsible for the engineering and inspection of over a thousand miles of roadways. The Division is currently working on several projects including culvert repairs and replacements, roadway extensions, roadway stabilizations and bridge replacements.
Mutual aid agreements	Yes	The Department of Homeland Security and Emergency Services maintains a mutual aid plan and an Emergency Managers Mutual Aid structure.
Other	No	-
Technical/Staffing Capability		



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	Yes	The County Department of Environment and Planning leads the County's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Division of Buildings and Grounds – designs, constructs, maintains, and manages county-owned facilities. The Division of Sewerage Management designs, constructs, maintains, and manages Erie County Sewer District facilities. Division of Highways designs, constructs and maintains county owned transportation assets.
Planners or engineers with an understanding of natural hazards	Yes	County Department of Public Works and County Department of Environment and Planning
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	County Department of Environment and Planning
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	The county's Emergency Manager is the Deputy Commissioner of Preparedness and Homeland Security
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	The County Department of Environment and Planning staffs a Compliance Specialist, a Hazardous Waste Coordinator, a Sustainability Coordinator, and a Watershed Protection Coordinator

Fiscal Capability

The table below summarizes financial resources available to Erie County.

Table 9.1-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes (sewer)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	EPA Great Lakes Restoration Grants, NYS CFA grants for infrastructure, nonpoint source pollution and conservation.

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Erie County.

Table 9.1-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	The Office of GIS (EDDEP) and the Department of Information and Support Services
Hazard mitigation information available on your website	Yes	The Department of Homeland Security and Emergency Services has information about hazard mitigation and the HMP update with links to the HMP project website. The main county website has news and announcements on the main page.
Social media for hazard mitigation education and outreach	No	The county employs the following social media platforms to distribute hazard mitigation related information; Facebook, Linked In, Instagram, Twitter and YouTube
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Erie County Environmental Management Council, Lake Erie Watershed Protection Alliance, County Agricultural and Farmland Protection Board, WNY Stormwater Coalition, Solid Waste Management Boards
Other programs already in place that could be used to communicate hazard-related information	Yes	Community Climate Change Task Force, Erie County Hazardous Waste Program, Food Policy Council of Buffalo and Erie County.
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to Erie County.

Table 9.1-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	Bronze	9/26/2019
Storm Ready Certification	Yes	-	7-13-2016
Fire wise Communities classification	No	-	-
Other	No	-	-



Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.1-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.1.5 National Flood Insurance Program (NFIP) Compliance

Management and regulation of the regulatory floodplains are done at the local level. Refer to the individual jurisdictional annexes for details on the NFIP for each municipality.

9.1.6 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Erie County has an Evacuation Annex 2019 that directs evacuation procedures countywide and provides guidance on operations and responsibilities for evacuations when necessary.

Sheltering

Erie County has identified the following designated emergency shelters within the county.



Table 9.1-9. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The County will collaborate with municipalities to identify potential emergency shelters, per Proposed Action # 009							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. Erie County has identified the following sites suitable for placing temporary housing units.

Table 9.1-10. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 010					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. Erie County has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.1-11. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 009					

9.1.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for Erie County’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which Erie County has significant exposure. The maps also show the location of potential new development, where available. These maps are included in the respective Hazard Profiles.



Hazard Event History

Erie County has a history of natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The County’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. For details of hazard events that impacted the County, refer to Volume I, Section 5 of this plan.

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes Erie County’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Erie County. Erie County has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the county indicated agreement with the results as shown below.

Table 9.1-12. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance





flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.1-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Springville Dam	County owned dam	Yes	Yes	2022-Erie County-002

Source: XXXX

Identified Issues

After review of Erie County’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, Erie County has identified the following vulnerabilities within their community:

- Municipalities are not generally participating in the Community Rating System.
- The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county regularly reports to NYSDEC that the dam is serviceable.
- The Erie County Court building is vulnerable to wind damage.
- The Erie County Correctional Facility parking lots are subject to flooding.
- Coastal erosion is causing damage to lakeside structures
- Ellicott Creek is eroding streambank/road embankment and endangering road which is a main access route to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Dept.
- Parking lots at the Erie County Correctional Facility are in the floodplain and sometimes are covered with water.
- Several streams throughout the county are eroding.
- Residents living along coastal areas need more information about the hazards.
- The county is not able to identify shelters and temporary/permanent housing locations.
- There are approximately 20 pump stations that lack a backup redundant power source and backup power for cooling centers should be considered.

9.1.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.1-14. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
1	Road repair/ culvert reconstruction – various locations County-wide	Flooding	Not Identified	DPW	Ongoing Capability			<ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW
2	Debris Removal from Creeks & Streams – various locations County-wide	Flooding	Not Identified	DPW	Ongoing Capability			<ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW
3	NOAA Storm Watcher and Storm Ready Programs	Nnatural events	Not Identified	Emergency Services	Ongoing Capability			<ol style="list-style-type: none"> Discontinue This is a Continuing Item with 3-year renewal Skywarn Spotter Trainings are conducted yearly
4	Tree removal & trimming along various County roads to prevent power outages and road closures.	Severe storms, tornadoes, winter storms, high winds, ice storms	Not Identified	DPW	Ongoing Capability			<ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW
5	Replace & upgrade storm drainage system along various County roads to reduce flood risks.	Flooding	Property Damage	DPW	Ongoing Capability			<ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

Erie County did not identify specific mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

Erie County participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.1-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	-	-	X	-	-	-	-	-	X
Cyber Attack	-	-	-	X	-	-	-	-	-	X
Earthquake	-	-	-	X	-	-	-	-	-	X
Expansive Soils	-	-	-	X	-	-	-	-	-	X
Extreme Temperature	-	-	-	X	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	X	-	X
Hazardous Materials	-	-	-	X	-	-	-	-	-	X
Landslide	-	-	-	X	-	-	-	-	-	X
Pandemic	-	-	-	X	-	-	-	-	-	X
Severe Storm	-	X	-	X	-	X	X	-	-	X
Severe Winter Storm	-	X	-	X	-	X	X	-	-	X
Utility Failure	-	-	-	X	-	-	-	-	-	X
Wildfire	-	-	-	X	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.1-16 summarizes the comprehensive range of specific mitigation initiatives Erie County would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.1-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.1-16. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-001	Community Rating System	1	Flood	<p>Problem: Communities are not generally participating in CRS.</p> <p>Solution: Encourage all municipalities to participate in the CRS, which will decrease flood insurance rates and protect more properties. The county will provide technical assistance to help interested jurisdictions move forward.</p>	No	No	Within 5 years	County Emergency Management, County Department of Environment and Planning	Staff Time	Protect facilities from flooding damage	Municipal budget	High	LPR	PR
2022-Erie County-002	Protect Springville Dam to the 0.2% flood event	1	Flood	<p>Problem: The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable.</p> <p>Solution: The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam.</p>	Yes 💧	No	1 year	County Emergency Management, Department of Public Works	TBD by feasibility assessment	Preserve dam functionality and properties downstream from damage	BRIC and High Hazard Potential Dam Program	High	LPR, SIP	PP, PR



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-003	Manage Streambank erosion and flooding	1	Flood, Severe Storm	<p>Problem: Ellicott Creek eroding streambank/road embankment endangering access to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Department.</p> <p>Solution: County Public Works Department will assess the danger posed to the facilities. The DPW will then implement erosion control measures.</p>	Yes	No	Within 1 year	County DPW	\$1,200,000	Ensure continued access to these important facilities	Municipal budget	High	EAP	PR
2022-Erie County-004	Erie County Correctional Facility	1	Flood	<p>Problem: Several buildings and parking lots of the prison are in the 0.2% annual chance flood area and susceptible to flood damages.</p> <p>Solution: The County Sheriff and Public Works Department will complete a study to determine mitigation options to alleviate flooding in this area. Once projects are identified, they will be implemented.</p>	No	No	Within 3 years	County Sheriff and Public Works Department	TBD during design process	Ensure continued access to the Correctional facility	Municipal budget for study; HMGP and FMA for mitigation measures	High	LPR, SIP	PP
2022-Erie County-005	Protect Erie County Court building from wind damage	1	Severe Storm, Severe Winter Storm	<p>Problem: The building's exterior cladding is vulnerable to high wind which could generate large pieces of flying debris.</p> <p>Solution: The Sheriff Department will determine and implement the optimal</p>	No	No	Within 3 years	County Sheriff Department	TBD by engineering feasibility	Ensure continued access to the County Court	BRIC, HMGP, Municipal budget	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				wind damage protection measures.										
2022-Erie County-006	Provide/improve backup power to pumping stations and other sewer district facilities	1	Flood	<p>Problem: There are approximately 20 county operated pump stations that lack backup redundant power source, with other pumping stations and facilities with older units requiring upgrades. In the event of a power outage, the locations are at risk of not being able to provide the proper services to the county.</p> <p>Solution: Develop and prioritize a list of pump stations to receive backup power or for improvements to existing backup systems. This will include identifying the type, size, and fuel source for each generator. Once identified, the county will begin purchasing and installing the generators.</p>	Yes	No	Within 5 years	County Division of Sewerage Management	TBD by feasibility analysis	Ensure continued service from these critical facilities	HMGP, county budget	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-007	Coastal Resilience Outreach	2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Severe weather including precipitation and wind, coupled with high lake levels have caused severe coastal erosion and flooding of structures along the Lake Erie coastline, exposing these critical facilities to failure.</p> <p>Solution: Working with NY Sea Grant, convene with municipal representatives to complete a needs assessment to assess the current understanding of coastal processes, regulations, and programs/resources and develop a Story Map resource with information on natural processes, NFIP, permitting case studies/ examples, and flood mitigation project examples.</p>	No	No	Within 2 years	Sea Grant, County Department of Homeland Security and Emergency Services	\$50,000	Improve capacity of local stakeholders to implement hazard mitigation measures along the Lake Erie coastline	Sea Grant, county budget	High	EAP	PI
2022-Erie County-008	Identify Emergency Shelters and temporary/permanent housing locations	1	All Hazards	<p>Problem: Erie County does not maintain a list of identified shelters, temporary housing locations, or permanent housing locations. In the event of an emergency or disaster, the county does not have identified facilities for residents to go to. Nor do they have a buildable land inventory to relocate displaced residents or structures in the event of repetitive losses or proximity to hazard areas (i.e., WUI).</p>	Yes	No	Within 3 years	County Department of Homeland Security and Emergency Services	Staff Time	Provide emergency shelters and temporary/permanent locations	BRIC, HMGP, municipal budget	High	LPR, SIP	ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The Department of Homeland Security and Emergency Services will work with the necessary departments and agencies to develop and implement a program to identify sites suitable for shelters, temporary housing, and permanent housing. This will also include identifying ways to make the sites suitable to provide these services to the county.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ♦ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.





- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.1-17. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Erie County-001	Community Rating System	1	1	0	1	1	1	1	1	0	1	0	1	1	1	11	High
2022-Erie County-002	Protect Springville Dam to the 0.2% flood event	1	1	1	0	1	1	1	1	1	1	0	1	1	1	12	High
2022-Erie County-003	Manage Streambank erosion and flooding	1	1	1	1	1	1	1	1	1	0	0	1	1	1	12	High
2022-Erie County-004	Erie County Correctional Facility	1	1	1	0	1	1	0	1	1	1	1	1	0	1	11	High
2022-Erie County-005	Protect Erie County Court building from wind damage	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-Erie County-006	Provide/improve backup power to pumping stations and other sewer district facilities	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Erie County-007	Coastal Resilience Outreach	1	1	1	0	1	1	1	0	0	1	1	1	1	1	11	High
2022-Erie County-008	Identify Emergency Shelters and temporary/permanent housing locations	1	1	1	0	1	1	1	0	0	1	0	1	1	1	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.1.9 Action Worksheets

The following action worksheets have been developed by Erie County to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Erie County Action Worksheet			
Project Name:	Protect Springville Dam to the 0.2% flood event		
Project Number:	2022-Erie County- 002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Springville dam is county owned and is designated a High Hazard Potential Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable.		
Action or Project Intended for Implementation			
Description of the Solution:	The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	Estimated Benefits (losses avoided):	Ensures continuity of operation of this Potential High Hazard dam
Useful Life:	50 years	Goals Met:	1
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	Within 1 year	Potential Funding Sources:	BRIC, High Hazard Potential dam
Responsible Organization:	County Emergency Management, Department of Public Works	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Remove dam	Very High	Loss of flood control services provide by the dam, including controlling intrusion from sea lamprey; infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Erie County Action Worksheet		
Project Name:	Protect Springville Dam to the 0.2% flood event	
Project Number:	2022-Erie County- 002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the High Hazard dam
Property Protection	1	Project will protect the important flood control services provided by the dam
Cost-Effectiveness	1	
Technical	0	
Political	1	
Legal	1	The county has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Erie County Action Worksheet			
Project Name:	Protect the Erie County Court House from wind damage		
Project Number:	2022-Erie County-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm		
Description of the Problem:	Original construction of the building has degrading materials has allowed water to get behind the building. The Building's cladding is vulnerable to high wind which could generate large pieces of flying debris.		
Action or Project Intended for Implementation			
Description of the Solution:	The Department of Public Works will determine and implement wind damage protection measures. The Department will then work with the Sheriff Department to ensure that protective measures are implemented.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect up to 100 mph winds	Estimated Benefits (losses avoided):	Ensures continuity of operations at the important county courthouse
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	BRIC, HMGP, municipal budget
Responsible Organization:	County Sheriff	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Tear down the courthouse building	Very High	Loss of important services provided at the courthouse.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Erie County Action Worksheet		
Project Name:	Protect the Erie County Court House from wind damage	
Project Number:	2022-Erie County-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the courthouse
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The county has legal authority to complete the project.
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm
Timeline	1	3 year
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



9.3 Village of Akron

This section presents the jurisdictional annex for the Village of Akron. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Akron’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.3.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Akron’s hazard mitigation plan primary and alternate points of contact. The Village of Akron followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from village departments, including the Mayor’s and the Code Enforcement Office. The Code Enforcement Officer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.3-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Carl Patterson, Mayor Address: 21 Main Street Akron, NY 14001 Phone Number: 716-542-9636 Email: AkronMayor@akronvillage.us	Name/Title: Daniel Kowalik, Emergency Manager Address: 21 Main Street Akron, NY 14001 Phone Number: 716-913-9978 Email: dkowalik@townofnewstead.com
NFIP Floodplain Administrator	
Name/Title: Michael Borth, Code Enforcement Officer Address: 21 Main Street Akron, NY 14001 Phone Number: 716-225-3929 Email: CodeEnforcement@adkronvillage.us	
Additional Contributors	
Name/Title: Jon Cummings, Public Works Manager Method of Participation: Provided information on completed past mitigation measures	

9.3.2 Municipal Profile

The Village of Akron is located approximately 25 miles east of downtown Buffalo. Native Americans had a long residence in the Akron area; the Great Iroquois Indian Trail passed through the area. White settlers arrived around 1829 to Akron Falls, which were harnessed for waterpower. Akron became an incorporated village in 1849 and is entirely contained within the Town of Newstead (Town of Akron 2020). The village gradually absorbed the community of Fallkirk as it grew. In 1880, the population of Akron was approximately 1,050 persons.



Early industries in the village included lumbering, barrel making, blacksmithing, flour and cement milling, gypsum processing, and cigar making. The West Shore Railroad was extended to the village in 1884 and later Akron was chosen as the site for the Buffalo Arms plant. Akron Airport is a reliever airport to the Buffalo Airport. Perry's Ice Cream is a major ice cream manufacturer and distributor that is based in the village. Main Street is the commercial and civic center of the community. Blizzards in 1966 and 1977 were notoriously fierce (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Village of Akron was 2,868. The estimated 2019 population, 2,871 was a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.3 percent of the population is 5 years of age or younger and 19 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.3.3 Jurisdictional Capability Assessment and Integration

The Village of Akron performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.3.3). The Village of Akron’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Akron. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.3-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 71, Building Construction and Fire Prevention	Local	Building Department
Comment: Building Department enforcement of the Building Code increases hazard preparedness.					
Zoning Code	Yes	No	LL1-1971, Village of Akron – Chapter 165, 1971	Local	Building/Zoning, Mayor



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: § 165-35. L-C Land Conservation District. [Added 3-31-1975 by L.L. No. 3-1975] The Land Conservation District is hereby established primarily to allow Murder Creek to carry or store its maximum amount of water without restrictions, to prevent encroachments on its floodplains which would increase floodwater levels and to prevent the threat to health, safety, and property in the immediate area, as well as downstream.					
Subdivision Ordinance	Yes	No	LL1-2007, Chapter 142, Village of Akron subdivision, 2007	Local	Building/Zoning, Mayor
Comment: The purpose of street construction specifications is to detail the requirements as set forth briefly in § 142-5, Improvements, § 142-6C(4), Construction detail sheet, and other sections of Article I of this chapter prior to dedicating to the village streets, rights-of-way, etc., as directed in Article I of this chapter. Site plans must include Existing topography of the site and immediately adjacent property as revealed by contours or key elevations as may be required by the Planning Board and any proposed re-grading of the site, including water courses, wetlands, and flood plains with data sources; and Location of fire and other emergency zones.					
Stormwater Management Ordinance	Yes	Yes	Village Code Chapter 142-5, Stormwater	State and Local	Building Department
Comment: Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet. Uncontaminated industrial cooling water or unpolluted industrial process waters may be discharged on approval of the Superintendent and DEC to a storm sewer or natural outlet. Proactive management of stormwater will decrease flooding risk.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Village of Akron Chapter 142, Street Construction	Local	Planning Board/Building Department
Comment: Growth Management can help steer new development away from hazards.					
Site Plan Review	Yes	No	Village of Akron Chapter 142-2,3,4,6	Local	Planning and Building Departments
Comment: Site plan review can help steer new development away from hazard exposure. The historical development of the Village has placed commercial and industrial zones in proximity and development requires detailed review. The following site plan provisions are intended to secure compliance with the requirements of the Village Code regarding site development and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location, and dimension of buildings in proposed single parcel development.					
Environmental Protection Ordinance	Yes	Yes	Village of Akron Chapter 142-3	Local	Building Department
Comment: Environmental review encompasses site plan review and includes assessment of hazard exposure					
Flood Damage Prevention Ordinance	Yes	Yes	LL1-2019, Chapter 82 Flood Damage Prevention 2019 2019	Local	FPA
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program. <p>BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					



Section 9.3: Village of Akron

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					
Emergency Management Ordinance	Yes	Yes	Village of Akron Chapter 21-7 Hazardous Materials Response Plan, Emergency response agency responsibilities and Chapter 11 Disaster Preparedness Plan	Local	Emergency Manager
Comment: Proactive emergency management will help provide safety for residents and property during hazard events. This disaster preparedness Ordinance is intended to set forth all necessary information pertaining to operating procedures, material and human resource availability and political organization and responsibility for the Village of Akron for use by the village officials during a declared emergency.					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Newstead and Village of Akron Combined Comprehensive Plan	Local	Mayor, Village Board
Comment: The Plan seeks to establish a program to identify, prioritize and protect or preserve the locally and regionally important scenic and natural resources of the community. The Communities resources are to be promoted as part of a regional framework, such as the different watersheds that transect the communities. The Plan endorsed continued enforcement of erosion and sediment control measures.					
Capital Improvement Plan	Yes	No	Village of Akron Chapter 1-4, Chapter 165	Local	Planning/Zoning/Building
Comment: Mitigation projects can be regularly scheduled into the village CIP.					
Disaster Debris Management Plan	No	No		-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Village of Akron Chapter 165-35	Federal, State, County, Local	Floodplain Management Building Department
Comment: Management of water flows over a watershed scale helps to mitigate damage from flooding.					
Stormwater Plan	Yes	Yes	Village of Akron, Chapter 165-10, 11, 12, 13, 27	Local	Planning/Zoning/Building
Comment: The Stormwater Plan will facilitate proactive management of stormwater and help to mitigate flood risk.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Senior Transportation/CDBG	Local	Village Board
Comment: The Plan will help mitigate danger to seniors during disasters as contingencies for transportation during hazards has been addressed in the plan.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Comprehensive Emergency Management Plan	Local/ County	Emergency Services Coordinator
Comment: The CEMP facilitates effective emergency response during hazard events.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	No	Village of Akron Chapter 21-7, Hazardous Materials Response Plan	Local	Village Emergency Manager
Comment: The Hazardous Materials Response Plan directs effective response to hazardous materials spills					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Akron to oversee and track development.

Table 9.3-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning Board/Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Code Enforcement Officer
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	There are approximately 250 lots available for new home construction.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Akron and their current responsibilities which contribute to hazard mitigation.

Table 9.3-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	Yes	Planning and Zoning Board members are knowledgeable about natural hazards



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Public Works Department staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Village Police Department staff coordinate emergency response
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Fire Siren, Social Media, Akron Central School Notification System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Public Works Department staff trim tree branches and keep floodways clear.
Mutual aid agreements	Yes	Local, County, State
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Public Works Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Consultant engineer
Professionals trained in conducting damage assessments	Yes	Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Consultant engineer
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Village Emergency Manager coordinates response during hazard events
Grant writer(s)	Yes	Consultant
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Village approved Engineers William. Schutt & Association /Clark Patterson Lee

Fiscal Capability

The table below summarizes financial resources available to the Village of Akron.





Table 9.3-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes, Green Space fees
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Akron.

Table 9.3-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk
Personnel skilled or trained in website development	Yes	Village Clerk
Hazard mitigation information available on your website	Yes	Village Clerk
Social media for hazard mitigation education and outreach	Yes	Planning Board, Hazardous Mitigation Committee
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning Board, Hazardous Mitigation Committee
Other programs already in place that could be used to communicate hazard-related information	Yes	E-Plan, County Local Emergency Planning Committee
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Akron.



Table 9.3-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Pending	TBD	TBD
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	05-5Y	Sept 2016
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Fire wise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.3-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.3.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Borth, Code Enforcement Officer





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Akron.

Table 9.3-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Akron	1	4	\$8,104	0	1

Source: FEMA 2020a and FEMA 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village did not identify any areas that are prone to flooding. There are not any Risk MAP projects currently underway in the village. The village did not identify how many (if any) properties have been mitigated. The village flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Village of Akron does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in October 2010. The Building Department and the Code Enforcement Officer are responsible for floodplain administration. There are no Certified Floodplain Managers on staff. The village does not have access to resources to determine possible future flooding conditions from climate change. The village stated that floodplain management staff need assistance or training now. The village applies the regulations of the Building Code when making Substantial Damage determinations. The village floodplain management program meets minimum requirements and offers NFIP administration services such as permit review and inspections, and public education about floodplain management practices and ordinances.

9.3.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Akron has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 93 - Starts at Route 5 going north thru the town and village up to the Niagara County line. This is a north-south route and is owned and plowed by NYSDOT.
- Hunts Corner Road starting at Route 93 west to the Town of Clarence line close to Salt Road. This is an east to west county route owned by Erie County & plowed by the Town of Newstead DPW.
- Route 5 From Genesee County line going east to the Town of Clarence line at Davison Road. This is an east to west route.
- North Millgrove Rd from Route 5 going south to Route 33 in the Town of Alden. This is a north to south route and is owned by the County Highway Department.



Notification will be given to residents through local media, radio, & TV stations or a message through the public-school Emergency Broadcast system on which routes will be open to use. The village will coordinate with the County Emergency Managers as appropriate.

Sheltering

The Village of Akron has identified the following designated emergency shelters within the village.

Table 9.3-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Akron Fire Hall	1 Main Street Akron N.Y. 14001	275	Yes	No	Yes	Basic First Aid	Food, Heat, Air Conditioning, . Sleeping Area

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Akron has identified the following sites suitable for placing temporary housing units.

Table 9.3-11. Temporary Housing Locations

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Property	Eckerson Avenue & Clinton Street	Water, Electric.	15 Trailers on a site 20' x 50'	Open Mowed Field Off Edge of Street	Permits & Inspections
Village Property	43 East Avenue, Old DPW Site	Water, Electric.	25 Trailers on a site 20' x 50'	Open Stone Parking Lot	Permits & Inspections

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Akron has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.3-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will work with the county to identify potential permanent housing locations per Action # 2022-VAkron-008					



9.3.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.3-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.3-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	0	1	0	3	0	1	0	3	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	147	0	130	0	138	0	145	0	94	0	147	0
Total Permits Issued	149	0	131	0	141	0	146	0	97	0	149	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.3.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Akron’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Akron has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.3-1. Village of Akron Hazard Area Extent and Location Map 1

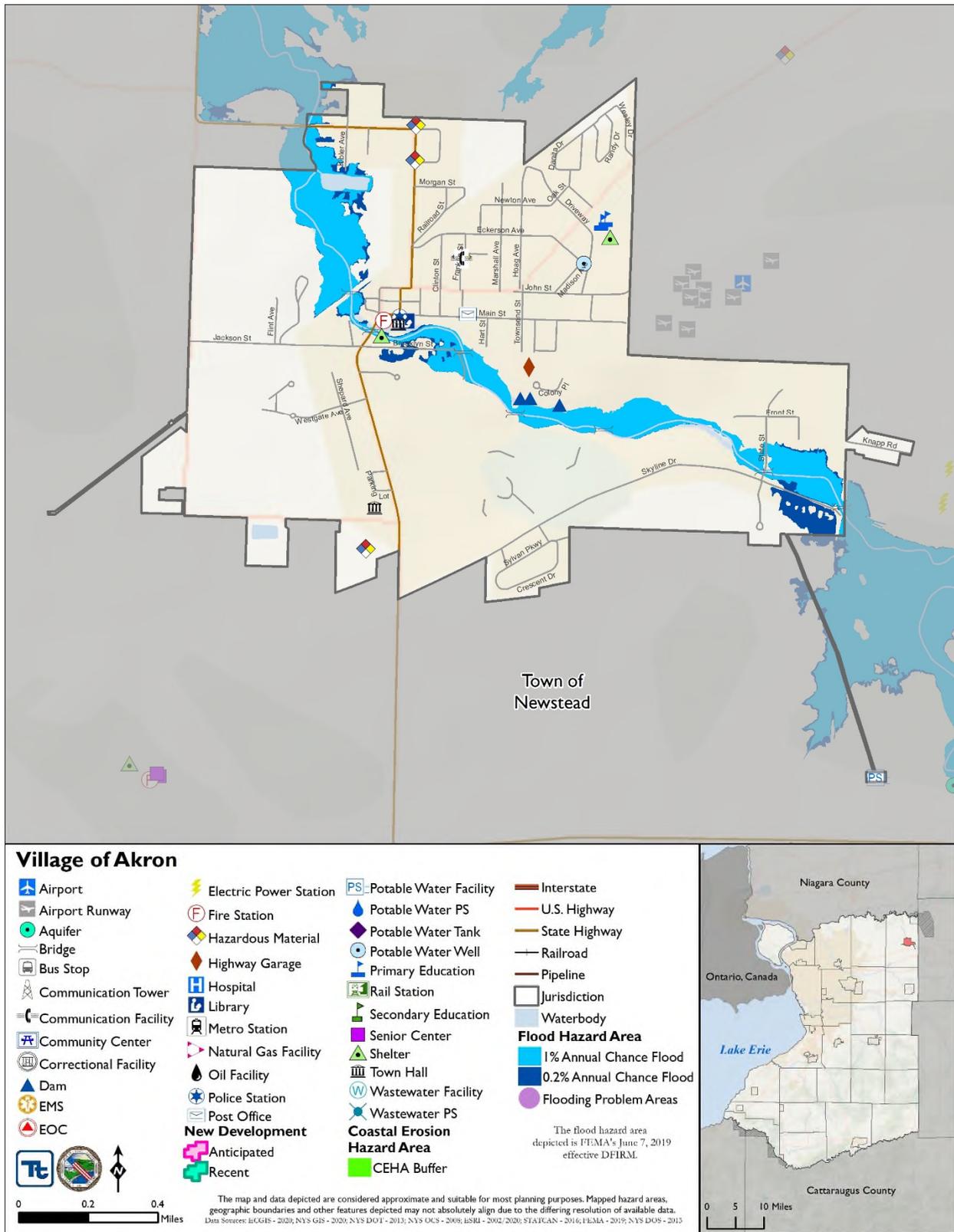




Figure 9.3-2. Village of Akron Hazard Area Extent and Location Map 2

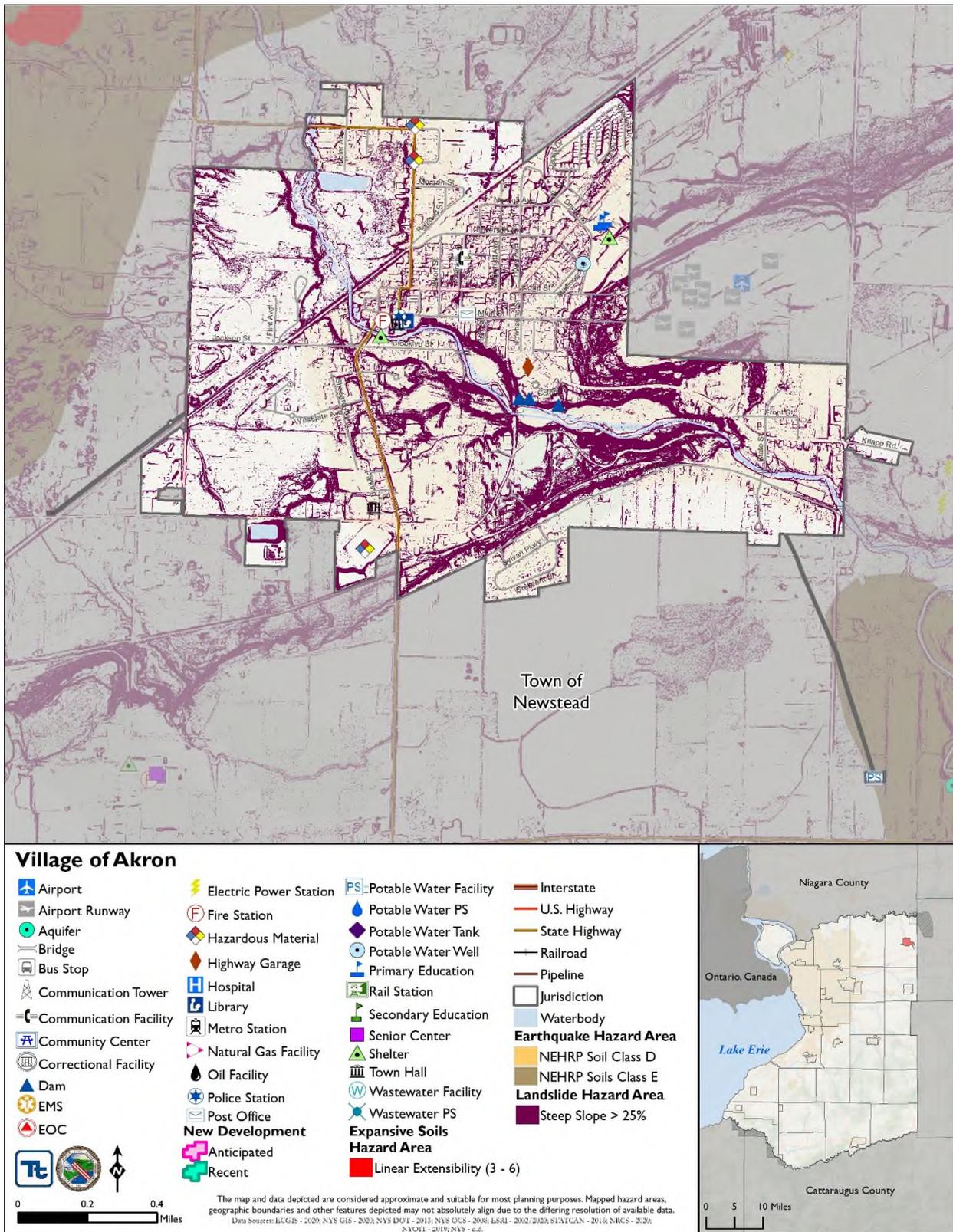
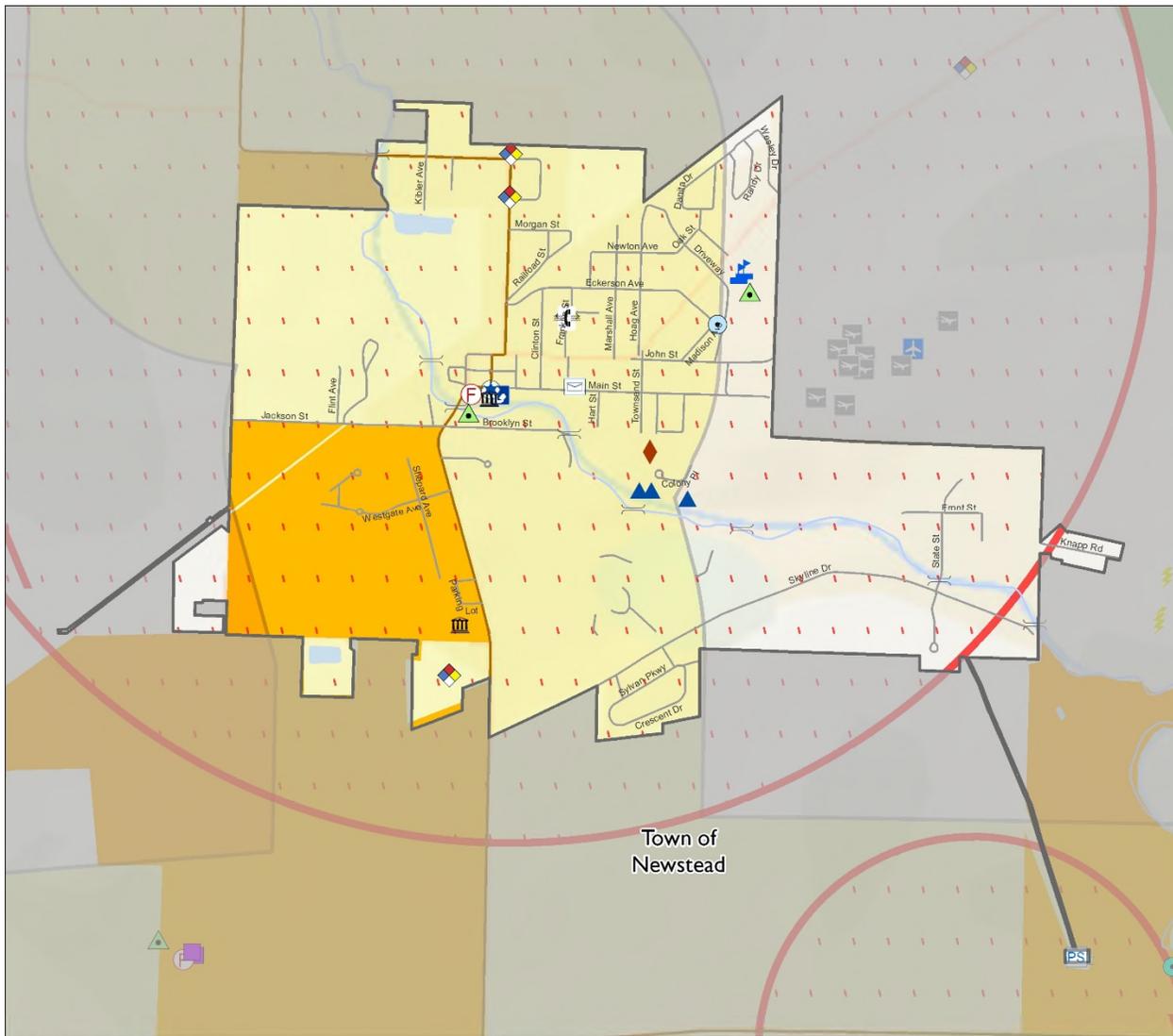




Figure 9.3-3. Village of Akron Hazard Area Extent and Location Map 3



Town of Newstead

Village of Akron

- | | | | |
|------------------------|------------------------|--------------------------------------|--------------------------|
| Airport | Electric Power Station | Potable Water Facility | Interstate |
| Airport Runway | Fire Station | Potable Water PS | U.S. Highway |
| Aquifer | Hazardous Material | Potable Water Tank | State Highway |
| Bridge | Highway Garage | Potable Water Well | Railroad |
| Bus Stop | Hospital | Primary Education | Pipeline |
| Communication Tower | Library | Rail Station | Jurisdiction |
| Communication Facility | Metro Station | Secondary Education | Waterbody |
| Community Center | Natural Gas Facility | Senior Center | Wildfire Hazard Area |
| Correctional Facility | Oil Facility | Shelter | Wildland-Urban Intermix |
| Dam | Police Station | Town Hall | Wildland-Urban Interface |
| EMS | Post Office | Wastewater Facility | |
| EOC | New Development | Wastewater PS | |
| | Anticipated | HazMat Hazard Area | |
| | Recent | SARA Site Radius | |
| | | 1/2 Mile from HazMat Rail/Road Route | |

The map and data depicted are considered approximate and suitable for most planning purposes. Mapped hazard areas, geographic boundaries and other features depicted may not absolutely align due to the differing resolution of available data. Data Sources: ECGIS - 2020; NYS GIS - 2020; NYS DOT - 2015; NYS OCS - 2008; ESRJ - 2002/2020; STATCAN - 2016; U/Wireless - 2010; EIA - 2020; ERI - 2018





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Akron’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.3-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.3-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated ?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 28-29, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 12, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 18, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 11, 2017	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
March 8, 2017	High Wind	No	Yes, minor power outages, Trees, and power lines down, No major cost to the Village DPW
March 13, 2017	Winter Storm	No	Although the county experienced damage from this hazard event, the village did not report any damage
July 20, 2017	Tornado	No	Although the county experienced damage from this hazard event, the village did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 2, 2018	Blizzard	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 6, 2018	Lightning	No	Although the county experienced damage from this hazard event, the village did not report any damage
February 24, 2019	High Wind	No	Yes, minor power outages, trees, and power lines down, no major cost to the Village DPW Gas Station roof blew off the canopy.
February 24, 2019	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county experienced damage from this hazard event, the village did not report any damage
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county experienced damage from this hazard event, the village did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated ?	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
March 2020-present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Akron’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Akron. The Village of Akron has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated agreement with the derived hazard ranking as shown in the table below.

Table 9.3-15. Hazard Event History

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.3-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Akron Fire Hall	Shelter	Yes	No	2022-V Akron-003

Source: FEMA 2021

Identified Issues

After review of the Village of Akron’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Akron has identified the following vulnerabilities within their community:

- The village municipal facility lacks backup power. This facility houses emergency management functions and the Police Department conducts arrests and bookings in the building.
- Flooding can impact certain properties multiple times.
- The village should have stockpiles of sandbags and other flood response materials.
- Drainage infrastructure has become clogged.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The village water facilities and water treatment plant are vulnerable to earthquake damage and flooding.
- Numerous storm water channels are blocked and create local flooding.
- The Village waterline is vulnerable to disruption that could affect the entire village.
- The Akron Fire Hall is in the SFHA, exposed to the flood hazard.
- A potable water facility on Crittendon Road is located within the earthquake hazard zone
- The village was not able to identify locations for permanent housing.
- Several homes on Brooklyn Street are threatened by erosion from Murder Creek.
- Village electrical facilities are vulnerable to cyber-attack or other malicious attack.
- The Wastewater Treatment Plant is vulnerable to flooding.

9.3.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.





Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.3-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
	Installation of backup generators at 2 key lift stations in Akron Village Wastewater System	Storm	Power Outage	Akron DPW	Complete			<ol style="list-style-type: none"> Discontinue Backup generator has been installed at the Leisure wood Lift Station. The Jackson Street lift station has an overflow system set up that alleviates the need for a backup generator.
	Installation of backup generator at Village of Akron/Town of Newstead Joint DPW Facility	Storm	Power Outage	Akron Village Board	Complete			<ol style="list-style-type: none"> Discontinue Back-up generator was hard wire installed when the building was built.
	Installation of protective dyke/berm system to protect Akron Village Wastewater Treatment Plant	Flooding	Not Identified	Akron DPW	No Progress			<ol style="list-style-type: none"> Include in 2020 HMP
	Capacity improvements/ rerouting of key storm drainage corridor in central part of village (Newton Ave/West Shore Drainage Corridor)	Flooding	Not Identified	Akron Village Board	Complete	Cost \$10010.40		<ol style="list-style-type: none"> Discontinue Village replaced drainage pipe in the central part of the village as a part of an addition project for Akron Rule in 2017 which help with the drainage flow coming from Bloomingdale Ave.
	Open storm water channels and culverts and remove debris from key drainage waterways within village to better accommodate storm water/flooding capacities	Flooding	Not Identified	Akron DPW	In Progress	Cost \$9236.00		<ol style="list-style-type: none"> Include in 2020 HMP Addressed by Proposed Mitigation Action #2022-V Akron-011
	State St Bridge Improvements - Abutment	Flooding	Not Identified	Akron Village Board	In Progress	Cost		<ol style="list-style-type: none"> Include in 2020 HMP



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Strengthening, Improve Drainage Capacity					Damages Avoided; Evidence of Success		<ol style="list-style-type: none"> Still waiting on a grant for funding of the reconstruction of the bridge. It is only used at this point for pedestrian crossing.
	Hardening of primary Akron Village electric substation access (bollards, access, etc.)	Malicious Acts, Terrorism	Not Identified	Akron DPW	In Progress	Cost		<ol style="list-style-type: none"> Include in 2020 HMP Addressed by Proposed Mitigation Action #2022-V Akron-012 Pending and Electric Substation upgrade within the next three years.
Level of Protection								
Damages Avoided; Evidence of Success								
	Update/revise floodplain management ordinances to comply with latest FEMA Regulations	Flooding	Not Identified	Akron Village Board	Complete	Cost		<ol style="list-style-type: none"> Discontinue Code Enforcement Mike Borth attended the 2019 NYS Floodplain and Stormwater Manager Association Annual Conference in April 2019. Board Resolution approved on April 1, 2019 the Intermunicipal Floodplain Management Agreement with Erie County.
Level of Protection								
Damages Avoided; Evidence of Success								
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Building Dept. and Code Enforcement	Complete	Cost		<ol style="list-style-type: none"> Discontinue Code Enforcement Mike Borth attended the 2019 NYS Floodplain and Stormwater Manager Association Annual Conference in April 2019. Board Resolution approved on April 1, 2019 the Intermunicipal Floodplain Management Agreement with Erie County.
Level of Protection								
Damages Avoided; Evidence of Success								



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Akron has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Department of Public Works continues to maintain tree growth, removal and trimming limbs surrounding all electrical lines and utility poles in the Village of Akron.
- In 2019, Public Works completed a large project to update an aging part of the Electrical Distribution System.
- 1. Applied for CDBG Grant funds in 2020 to complete a waterline upgrade. This project would give redundancy in the water system in the Skyline Drive and Main Street areas. The DPW led a major Wastewater Treatment Plant upgrade combine the infrastructure work with the road reconstruction with Erie County DPW.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Akron participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (FEMA 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.3-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	X	X	X	-	-	-	X
Cyber Attack	-	X	-	X	X	X	-	-	-	X
Earthquake	-	X	-	X	X	X	-	-	-	X
Expansive Soils	-	X	-	X	X	X	-	-	-	X
Extreme Temperature	-	X	-	X	X	X	-	-	-	X
Flood	X	X	-	X	X	X	-	-	-	X
Hazardous Materials	-	X	-	X	X	X	-	-	-	X
Landslide	-	X	-	X	X	X	-	-	-	X
Pandemic	-	X	-	X	X	X	-	-	-	X
Severe Storm	-	X	-	X	X	X	-	-	-	X
Severe Winter Storm	-	X	-	X	X	X	-	-	-	X
Utility Failure	-	X	-	X	X	X	-	-	-	X
Wildfire	-	X	-	X	X	X	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.3-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Akron would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.



Table 9.3-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Akron-001	Protect the village municipal building by installing a backup generator.	1,2	All Hazards	<p>Problem: Village Hall lacks backup generator power. The Police Department is housed in the Hall and does bookings and arrests in the Hall. The facility houses emergency management functions.</p> <p>Solution: The village will conduct an engineering analysis to determine the correct generator. The DPW will purchase and install the backup generator.</p>	Yes	No	Within 2 years	Village Public Works Department	TBD per engineer's feasibility assessment/ \$50,000 estimate	Ensure continuity of services at the Village Hall/Police Department	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-V Akron-002	Floodplain Administrator to attend training on floodplain management	3	Flood	<p>Problem: Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.</p> <p>Solution: Obtain/host training and certification for floodplain managers.</p>	No	No	Within 5 years	ECDHSES, FPA	\$3,000	Certified floodplain managers trained, and floodplain management improved.	County and village budget	High	LPR	PR



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Akron-003	Protect the Akron Fire Hall to the 0.2% annual chance flood event.	2	Flood	<p>Problem: The Akron Fire Hall is in the SFHA, exposed to the flood hazard.</p> <p>Solution: The village will conduct a feasibility study to determine and implement best action to protect the Akron Village Fire Hall. Coordinate with USACE regarding creekbank erosion.</p>	Yes	Yes	Within 2 years	Village Fire Company, Village Board	\$50,000 estimate	Protect facility from flooding and ensure continuity of emergency operations	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-V Akron-004	Protect village water facility from earthquake threat	1	Earthquake	<p>Problem: A potable water facility on Crittendon Road is located within the earthquake hazard zone.</p> <p>Solution: Determine which mitigation measures would best protect the facility from the earthquake threat. Village DPW will then implement these measures.</p>	Yes	Yes	Within 5 years	Village DPW, Village Board	TBD by feasibility study/	Preserve continued service from this critical facility.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-V Akron-005	Protect Village Waste Water Treatment Plant from flood hazard	1	Flood	<p>Problem: The Village Waste Water Treatment Plant is at risk from flooding.</p> <p>Solution: Installation of protective dyke/berm system to protect Akron</p>	Yes	No	Within 3 years	Village DPW	TBD by engineering analysis	Preserve continued service from this critical facility.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Village Wastewater Treatment Plant.										
2022-V Akron-006	Protect homes along Brooklyn Street	1	Flood	<p>Problem: Several homes are threatened by erosion from Murder Creek.</p> <p>Solution: Arrange for buyout of selected properties along Murder Creek in the Brooklyn Street neighborhood.</p>	No	No	Within 3 years	Village Board	TBD per cost of acquiring specified properties	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP
2022-V Akron-007	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information</p>	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share with homeowners	High	SIP	PP



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).										
2022-V Akron-008	Identify locations for permanent housing	1,2	All Hazards	<p>Problem: There are no identified locations for permanent housing in the village for use in case of disaster.</p> <p>Solution: The village will work with the county to identify locations for permanent housing.</p>	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	EAP	ES
2022-V Akron-009	Complete infrastructure and waterworks projects	1	Flood, Severe Storm	<p>Problem: Village water and other infrastructure is vulnerable to the impacts of natural hazards on segments of East Avenue, Main Street and Skyline Avenue.</p> <p>Solution: Village has secured funding and/or progressed infrastructure and water projects that</p>	No	No	Within 2 years	Village Department of Public Works	Staff time, DPW resources	Ensure safe travel	Municipal budget, secured funding sources	High	SIP	PP



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				will protect residents against flooding and severe storm impacts. DPW should ensure that these projects progress to completion.										
2022-V Akron-010	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	Flood, HazMat	<p>Problem: Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron.</p> <p>Solution: Stockpile sand piles, bags, and associated equipment. Share cost and maintenance and access to material with Village Akron.</p>	No	No	Within 1 year	Town Emergency Management, and Village of Akron Board	\$100,000	Protect life and property from flooding and Hazmat danger	Town budget, EMPG	High	SIP	ES
2022-V Akron-011	Clear debris from drainage waterways	2	Flood, Severe Storm	<p>Problem: Numerous storm water channels are blocked and create local flooding.</p> <p>Solution: The DPW will open storm water channels and culverts and remove debris from key drainage waterways within village to better accommodate storm</p>	No	No	Within 2 years	Village DPW	\$20,000/year	Clear drainage ways will allow for proper drainage of water	Municipal budget	High	NSP, SIP	PR



Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				water/flooding capacities.										
2022-V Akron-012	Protect village electrical facilities	1	Cyber Attack/Terrorism	<p>Problem: Village electrical facilities are vulnerable to cyber-attack or other malicious attack.</p> <p>Solution: Hardening of primary Akron Village electric substation access (bollards, access, etc.)</p>	Yes	No	Within 2 years	Village DPW	TBD by engineering feasibility	Ensure continued electrical service to the village.	BRIC, HMGP, EMPG, municipal budget	High	SIP	PR
2022-V Akron-013	Waterline upgrade	1	All Hazards	<p>Problem: The Village waterline is vulnerable to disruption that could affect the entire village.</p> <p>Solution: The Village applied for CDBG Grant funds in 2020 to complete a waterline upgrade. This project would give redundancy in the water system in the Skyline Drive and Main Street areas.</p>	No	No	Within 2 years	Village DPW	TBD by engineering feasibility	Ensure continued water service to the Village	BRIC, HMGP, municipal budget	High	SIP	PR

Notes:

Not all acronyms and abbreviations defined below are included in the table.





Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.3-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Akron-001	Protect the village municipal building by installing a backup generator.	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V Akron-002	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-V Akron-003	Protect the Akron Fire Hall to the 0.2% annual chance flood event.	1	1	1	0	1	1	0	1	1	1	0	1	1	0	10	High
2022-V Akron-004	Protect Village water facility from earthquake threat	1	1	1	1	1	1	0	1	1	0	0	1	1	0	10	High
2022-V Akron-2005	Protect Village Waste Water Treatment Plant from flood hazard	0	1	1	1	1	1	0	1	1	1	0	1	1	0	10	High
2022-V Akron-2006	Protect homes along Brooklyn Street	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High
2022-V Akron-007	Residential Property Flood Mitigation.	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High
2022-V Akron-008	Identify locations for permanent housing	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2022-V Akron-009	Complete infrastructure and waterworks projects	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2022-V Akron-010	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	1	1	1	1	0	0	1	1	1	0	1	1	0	11	High
2022-V Akron-011	Clear debris from drainage waterways	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High



Table 9.3-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Akron-012	Protect village electrical facilities																
2022-V Akron-013	Waterline upgrade	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.3.9 Action Worksheets

The following action worksheets have been developed by the Village of Akron to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Akron Action Worksheet			
Project Name:	Protect the village municipal building by installing a backup generator.		
Project Number:	2022-V Akron-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. Village Hall lacks backup generator power. The Police Department is housed in the Hall and does bookings and arrests in the Hall. The facility houses emergency management functions.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will research what size generator is necessary to supply backup power to the Village Hall. The village will then install a backup power generator and necessary electrical components.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protection from power failures	Estimated Benefits (losses avoided):	Ensures continuity of operations of critical facilities from the village facilities
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	TBD per engineer's feasibility assessment/\$50,000 estimate	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Immediately after funding received
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Village DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the village municipal building by installing a backup generator.	
Project Number:	2022-V Akron-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of the Village Hall
Property Protection	1	Project will protect Village Hall from power loss
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	1 year
Agency Champion	1	Village Public Works Department, Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Akron Action Worksheet			
Project Name:	Protect the Village Fire Hall to the 0.2% annual chance flood event		
Project Number:	2022-V Akron-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Akron Fire Hall is in the SFHA, exposed to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will conduct a feasibility study to determine and implement best action to protect the Akron Village Fire Hall. The Fire Department will then implement these mitigation measures. The Fire Department will coordinate with the USACE regarding creekbank erosion.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations of the Fire Hall
Useful Life:	20 years	Goals Met:	2
Estimated Cost:	\$50,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Immediately after funding received
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Village Fire Company, Village Board,	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Village Fire Hall by installing a backup generator.	
Project Number:	2022-V Akron-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of the Village Fire Department
Property Protection	1	Project will protect Village Fire Department from power loss
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	Village Public Works Department, Fire Department, Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.4 Town of Alden

This section presents the jurisdictional annex for the Town of Alden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Alden’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.4.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Alden’s hazard mitigation plan primary and alternate points of contact. The Town of Alden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: the supervisor and code enforcement official. The supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.4-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Dean Adamski, Town Supervisor Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x3 Email: aldensuper@yahoo.com	Name/Title: Colleen Rogers, Deputy Supervisor Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x3 Email: aldensuper@yahoo.com
NFIP Floodplain Administrator	
Name/Title: Christopher Snyder, Code Enforcement Officer Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x4 Email: building@erie.gov	

9.4.2 Municipal Profile

The Town of Alden is located on the eastern border of Erie County and was formed from the larger Town of Clarence. The town incorporated in 1823. The Town of Newstead forms the town’s northern boundary. The Town of Darien (Genesee County) lies to the east and the Town of Marilla and a portion of the Town of Bennington in Wyoming County form the town’s southern border. Within the Town of Alden is the Village of Alden which incorporated in 1869. The town contains several unincorporated hamlets and remains a mostly rural community. The town’s surface topography is nearly flat in northern portions while the south portion is gently undulating. Ellicott Creek and Cayuga Creek flow through the town.

The town and village were once famous for the “black water” baths. Mineral rich "black water" was discovered while drilling for natural gas in 1891. Many of the earliest patrons of these "black water baths" were immigrants





from Europe. According to the U.S. Census, the 2010 population for the Town of Alden was 8,260. The estimated 2019 population was 7,418, a 9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 2.8 percent of the population is 5 years of age or younger and 16.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.4.3 Jurisdictional Capability Assessment and Integration

The Town of Alden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.4.3). The Town of Alden’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Alden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.4-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 109 (Building Code Administration)	Local	Building Department
<i>Comment: This chapter is adopted in order to promote the health, safety and the general welfare of the inhabitants of the Town of Alden by regulating the occupancy and maintenance of homes.</i>					
Zoning Code	Yes	No	Chapter 365 (Zoning)	Local	Building Department
<i>Comment: Goals: 1) Promote and protect to the fullest extent permissible the environment of Alden and its public health, safety, convenience, comfort, prosperity and the general welfare. 2) The purpose of the Wellhead Protection Area (WPA) is, in the interest of public health, safety and general welfare, to preserve the quality and quantity of groundwater resources in order to ensure a safe and healthy drinking water supply. Actions: 1) All individual lots shall be graded in a manner which will avoid surface water runoff on adjacent lots, divert water away from buildings, and prevent standing water and soil saturation detrimental to structures and lot use. E. Conform to the general storm drainage pattern for the area. 2) Site plan shall include a detailed description of the proposed development's impact on groundwater quality.</i>					
Subdivision Ordinance	Yes	No	Chapter 365 (Zoning), Article VI (Subdivision Clusters); Chapter	Local	Planning Board



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
			A374 (Land Subdivision Regulations)		
<p>Comment: This article of the zoning code is intended to promote imaginative, well-designed subdivisions which preserve open space, respect the physical qualities of the land and reduce overall development costs. It is municipal policy to consider the subdivision of land and the subsequent development of the subdivided plat as subject to the control of the municipality pursuant to the official Master Plan of the municipality for the orderly, planned, efficient, and economical development of the municipality.</p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 300 (Stormwater Management and Erosion and Sediment Control)	Local	Town of Alden DPW
<p>Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within the town. The objectives of this chapter include:</p> <ul style="list-style-type: none"> • Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-15-003, or as amended or revised; • Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-0-15-002, or as amended or revised • Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; • Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	-	-	-	-
<p>Comment</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</p>					
Growth Management	No	-	-	-	-
<p>Comment:</p>					
Site Plan Review	Yes	No	Updated in 2018 365-68	Local	Town Engineer
<p>Comment: The purpose of these supplemental regulations is to promote the health, safety and general welfare of the residents of the Town, to provide standards for the safe provision of telecommunications consistent with applicable federal and state regulations and to protect the natural features and aesthetic character of the Town of Alden.</p>					
Environmental Protection Ordinance	Yes	Yes	2018 A374-8 Chapter 198.	Local	Town Engineer
<p>Comment: The preservation and improvement of the quality of the natural and man-made environment within the Town and Village of Alden, in the face of population growth, urbanization and technological change with their accompanying demands on natural resources, are found to be of increasing and vital importance to the health, welfare and economic well-being of present and future inhabitants and require forthright action by the governing body of the Town of Alden. It is recognized that the biologic integrity of the natural environment of which man is dependent for survival and the natural and functional beauty of our surroundings which condition the quality of our life experience cannot be protected without the full cooperation and participation of all of the people of the Town of Alden, working in partnership with local and state officials and with various public and private institutions, agencies and organizations. Establishment of the Commission for Conservation of the Environment is a necessary step in fostering unified action on environmental problems.</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 198 (Flood Damage Prevention)	Local	Town Building officer
<p><i>Comment: The purpose of this chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <ul style="list-style-type: none"> • <i>Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i> • <i>Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i> • <i>Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i> • <i>Control filling, grading, dredging and other development which may increase erosion or flood damages;</i> • <i>Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i> • <i>Qualify for and maintain participation in the National Flood Insurance Program.</i> <p><i>The Code Enforcement Officer is identified as the local administrator to administer and implement this chapter. Responsibilities include: permit application review; use of flood data; notifications; construction inspections; issuing certificate of compliance; and retaining information.</i></p> <p><i>Any development within the floodplain must apply for a floodplain development permit. The chapter requires all new development or substantial improvements of structures in the floodplain be elevated to BFE+2 feet.</i></p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Ch. 293-2 Updated 2018	Local	Town of Alden DPW
<p><i>Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Alden through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems.</i></p>					
Emergency Management Ordinance	No	-	-	-	-
<p><i>Comment:</i></p>					
Climate Change Ordinance	No	-	-	-	-
<p><i>Comment:</i></p>					
Disaster Recovery Ordinance	No	-	-	-	-
<p><i>Comment:</i></p>					
Disaster Reconstruction Ordinance	No	-	-	-	-
<p><i>Comment:</i></p>					
Other	No	-	-	-	-
<p><i>Comment:</i></p>					
<p>Planning Documents</p>					
Comprehensive Plan	Yes	No	Reviewed and updated 2018	Local	Alden Town Board
<p><i>Comment: The Comprehensive Plan includes the following statements guiding the municipal plan.</i></p> <p><i>1) Promote the protection of floodplains and environmentally significant wetland areas, minimize negative impacts of erosion, sedimentation and storm drainage on natural resources. 2) Create an Aquifer overlay district to focus on protection of groundwater resources. 3) Promote programs to identify and mitigate failing septic systems and explore potential grant opportunities to assist local residents in remedying failing systems. 4) Work with the Cooperative Extension and Erie County Soil and Water District to educate and promote the minimization of non-point source pollution. 5) Support and sponsor educational opportunities on groundwater protection and septic system maintenance.</i></p>					
Capital Improvement Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Disaster Debris Management Plan	No	-	-	-	-
Comment:					
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No	-	-	-	-
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	No	-	-	-	-
Comment:					
Shoreline Management Plan	No	-	-	-	-
Comment:					
Community Wildfire Protection Plan	No	-	-	-	-
Comment:					
Forest Management Plan	No	-	-	-	-
Comment:					
Transportation Plan	No	-	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment:					
Agriculture Plan	No	-	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Emergency Plan	Local	Emergency Management Coordinator
Comment: The County maintains an emergency management plan that includes the town of Alden.					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment:					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Alden to oversee and track development.

Table 9.4-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Tracked by floodplain
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Alden and their current responsibilities which contribute to hazard mitigation.



Table 9.4-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Zoning Board	Yes	Zoning Board of Appeals conducts oversight of development. The Zoning Board of Appeals is a quasi-judicial body comprised of local citizens appointed by the Alden Town Board. The function of the Board is to hear appeals and grant relief from the strict application of the Town of Alden zoning regulations.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Economic Development Committee of Planning - The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Public Works/Highway Department	Yes	Highway Department - The Highway Department is the most visible service agency in town government. From snowplowing in the winter, to street paving, brush removal, leaf collection, park maintenance and drainage projects during the remainder of the year, this department is deeply involved and committed to the lives of Alden residents.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/ Building Officer
Emergency Management/Public Safety Department	Yes	<p>Emergency Manager - The Alden Office of Emergency Management (OEM) provides emergency mitigation, preparedness, response and recovery services to the Town & Village of Alden. OEM leads the development and maintenance of the Comprehensive Emergency Management Plan, which encompasses all natural and man-made disasters and provides a basis for the development of programs and procedures to save lives and minimize disaster damage.</p> <p>Alden OEM manages the town & village Emergency Operations Center (EOC) during large scale disasters and events. During a disaster the EOC coordinates all response activities within the Town and Village, including Governmental Operations, Public Works/Highway, Fire/EMS. All of this is done through a Unified Command Network. Following a disaster or large-scale event OEM coordinates all recovery activities.</p> <p>Alden OEM actively participates in many preparedness programs such as, hazards analysis studies, maintaining a special needs registry, emergency planning for the Town & Village including all special events, training drills/exercises. OEM staff is also available to give presentations on emergency preparedness to your association, civic group, business or faith community.</p>
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Ready Erie
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Highway Department is responsible for snow clearing, street paving, removing brush, collecting leaves, and completing drainage projects.
Mutual aid agreements	Yes	Fire Department



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board - The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Management Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Alden.

Table 9.4-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Alden.

Table 9.4-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor
Personnel skilled or trained in website development	Yes	Clerk – as needed
Hazard mitigation information available on your website	Yes	Office of Emergency Management Page
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Alden

Table 9.4-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	3/7/2020
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,





future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.4-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Strong
Flood	Strong
Hazardous Materials	Strong – plan in place
Landslide	Strong
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.4.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Christopher Snyder, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Alden.

Table 9.4-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Alden	9	19	\$187,358	4	0

Source: July and September, 2021 NFIP Data.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Southern portions of the town have in recent years previously experienced flooding due to ice melt. In general, the town is not prone to flooding. The town does not maintain a list of properties interested in flood mitigation but works with individual property owners as needed. There are no RiskMAP projects underway at this time. Building/ code inspector is designated to determine substantial damage determinations. No properties have been mitigated or elevated over the years and the town is thus not significantly prone to flooding. The flood maps are an accurate representation of existing floodplains.



NFIP Compliance

The building/code inspector and town engineer are responsible for floodplain management. No certified floodplain managers are on staff within the town. The town has limited resources to address conditions to climate change. The town does not need any assistance for training or support at this time due to limited concerns around flooding in the community. The NFIP administrator reviews permits and conducts inspections as needed to reduce risk to building in hazard areas. The assessor and building inspector determine improvement value to determine substantial improvements. The town does not have any outstanding NFIP violations. The Town of Alden had a Community Assistance Call (CAC) on May 11, 2010 and a Community Assistance Visit (CAV) on September 11, 2020. The Flood Damage Prevention Ordinance is Chapter 198 local law #2 last updated in 2019.

9.4.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Alden has identified the following routes and procedures to evacuate residents prior to and during an event.

- Broadway St., Genesee Street, Walden Avenue

Sheltering

The Town of Alden has identified the following designated emergency shelters within the town.

Table 9.4-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Line Church	1159 Town Line Rd, Alden, NY	100	Unknown	Yes	Yes	First AID kit, AED	Food/ Beverage Service

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Alden has identified the following sites suitable for placing temporary housing units.

Table 9.4-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Hall Parking Lot	3311 Wende	50 acres	Parking Lot/ Open Space	All	None
Fire Company Parking Lot	Various Locations	100 acres	Parking Lot/ Open Space	All	None



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Alden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.4-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Alden Town Park	Along Rt. 20	30	Park	All	Acquisition

9.4.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.4-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.4-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	6	0	6	0	5	0	8	0	7	0	12	0
Multi-Family	0	0	0	0	0	0	1	0	1	0	3	0
Other (commercial, mixed-use, etc.)	0	0	0	0	1	0	0	0	0	0	0	0
Total Permits Issued	6	0	6	0	6	0	9	0	8	0	15	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None identified												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.4.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Alden’s risk assessment results and data used to determine the hazard ranking discussed later in this section.





Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Alden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.4-1. Town of Alden Hazard Area Extent and Location Map 1

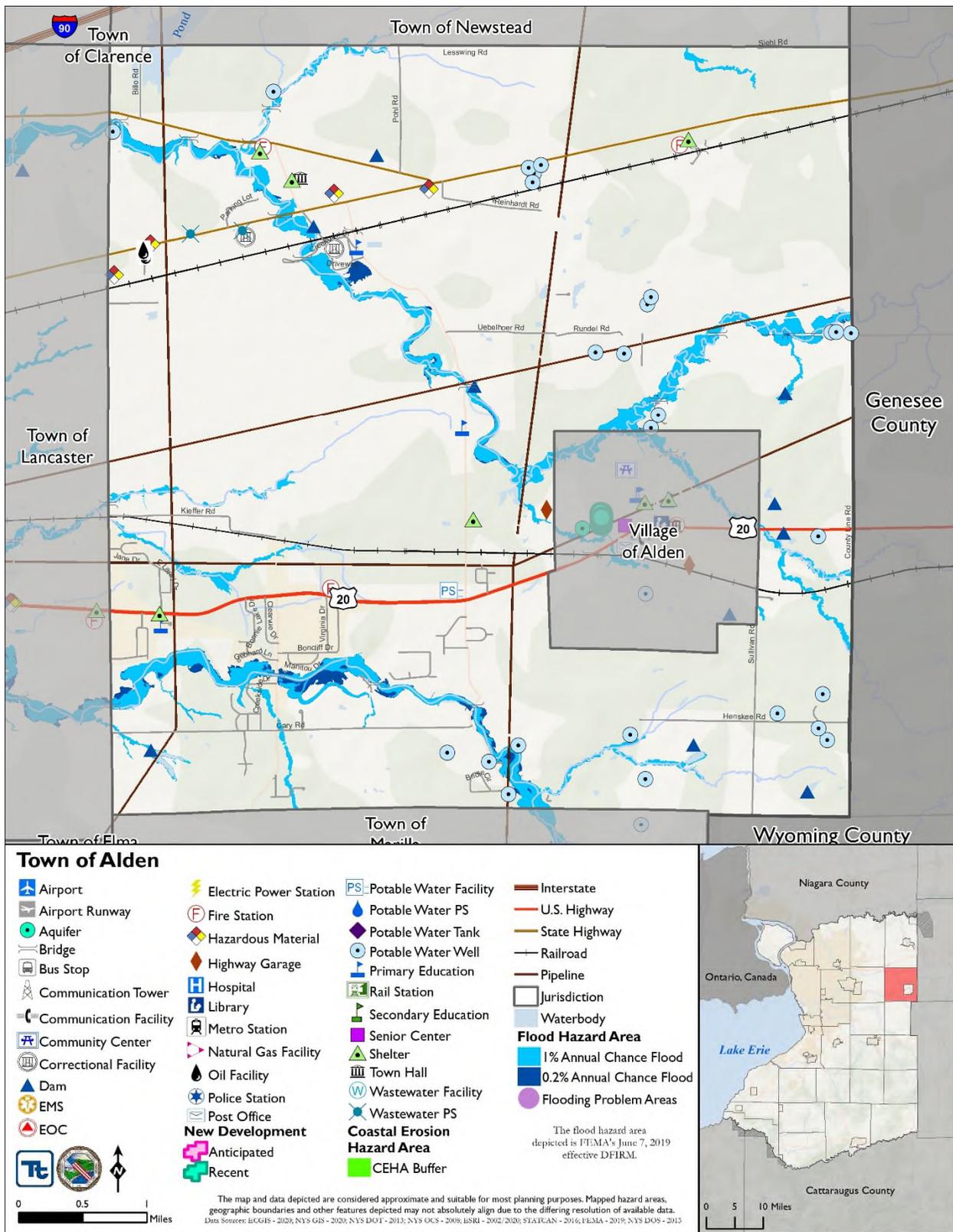




Figure 9.4-2. Town of Alden Hazard Area Extent and Location Map 2

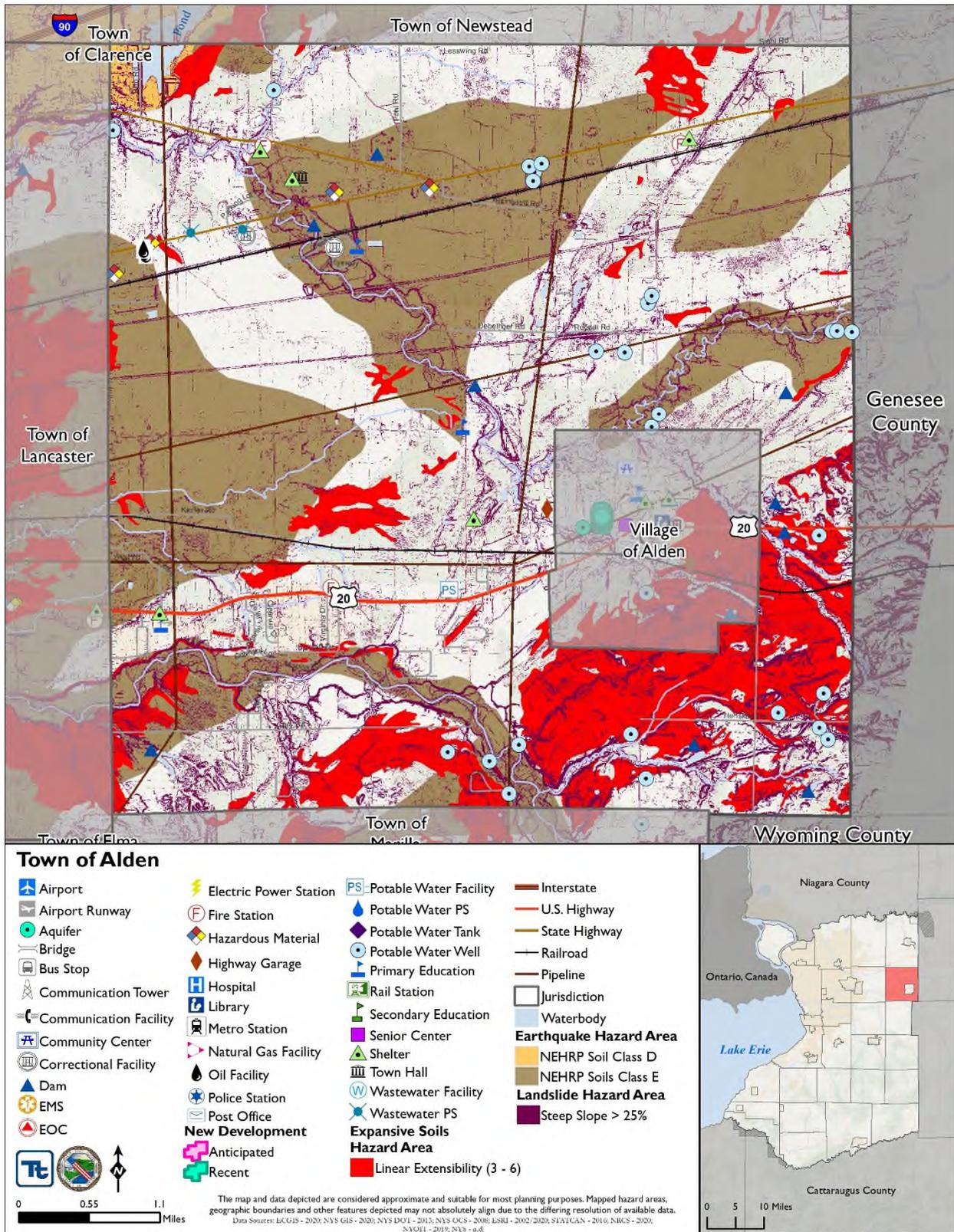
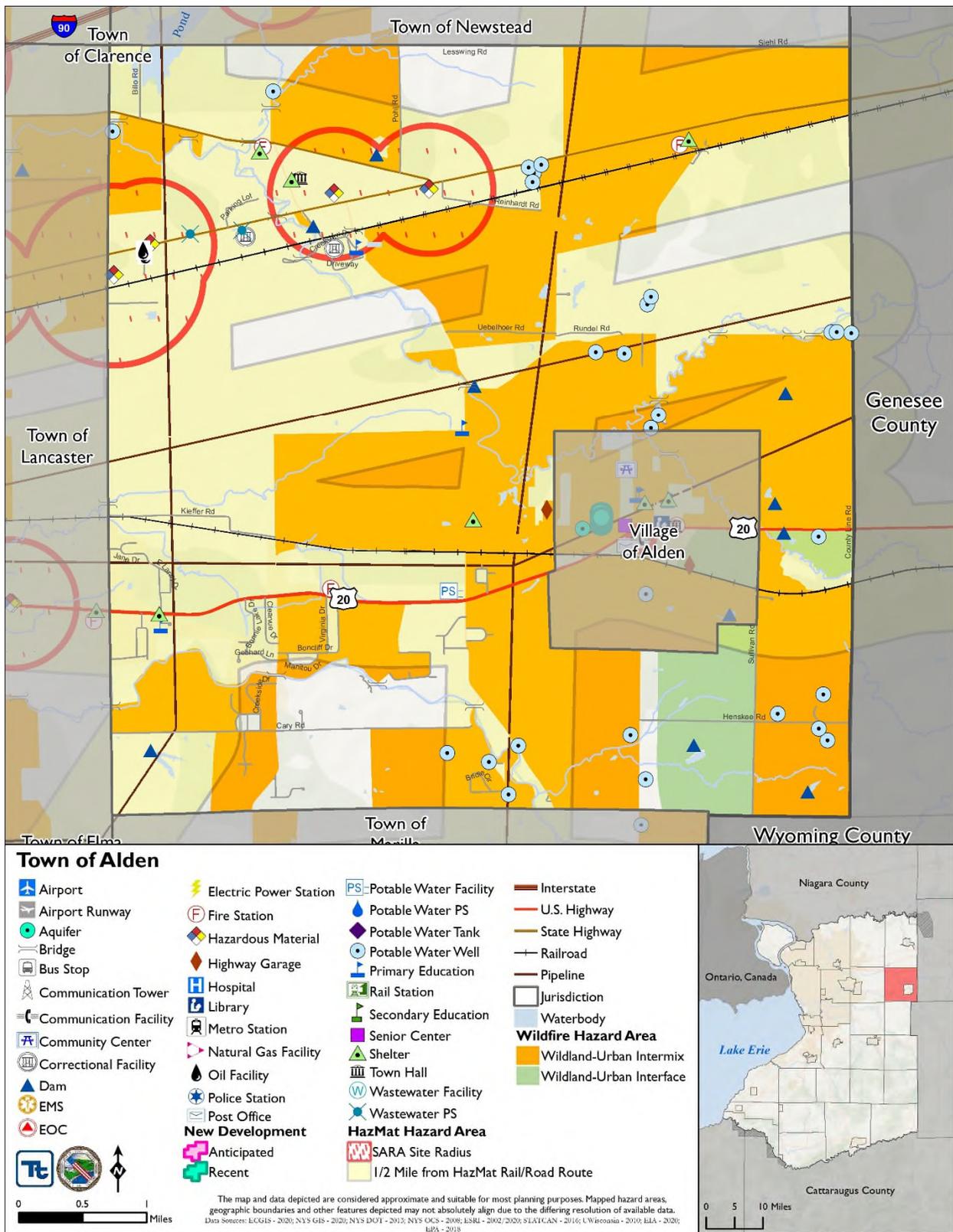




Figure 9.4-3. Town of Alden Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Alden’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.4-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.4-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Flooding from ice accumulation
December 24-29, 2017	Lake-effect Snow	No	Flooding from ice accumulation
January 2, 2018	Blizzard	No	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
2020-21	COVID 19	Yes	Various Losses

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Alden’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Alden. The Town of Alden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town agreed with the following hazard rankings.

- The town indicated that earthquakes are a rare occurrence and thus should be re-ranked from high to low.
- Flooding, given its common issues across the region has been reranked from low to medium.
- Severe storm and Utility Failure are all interconnected and thus have been ranked based on frequency of events from high to medium.
- Severe winter storms are especially common and have been re-ranked as high.
- Wildfires do not occur in the town and thus have been re-ranked from high to low.

Table 9.4-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Medium	Low





Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	High	Medium	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.4-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Vranic Dam	Dam	X	X	2022-Town of Alden-001

Source: 2021 GIS

Identified Issues

After review of the Town of Alden’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Alden has identified the following vulnerabilities within their community:

- The Vranic Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Hugenschmidt Marsh Dam, NY Central Railroad Company Dam, Warren Bippert Pond Dam, 7-Eleven Store #35254, Alden HazMat Facility, United Precious Metal Refining, Inc., Griffith Energy Inc., and Saint John the Baptist School are in the earthquake hazard area.
- The Alden Rod & Gun Club Dam, Fr Strate Pond Dam, Hugenschmidt Marsh Dam, Nathan Sweet Marsh Dam, Vranic Dam, Walden Roberts Dam, and the Alden Mennonite Church are located in the wildfire hazard area.
- The Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall may be at risk of being exposed to hazardous materials incidents.
- Public and private facilities may be at risk from off-site hazardous materials incidents.
- The Hugenschmidt Marsh Dam, Bippert Pond Dam are located on steep slopes and may be at risk of landslides.
- The Fr Strate Pond Dam and Nathan Sweet Marsh Dam (public) may be at risk of experiencing damages caused by expansive soils.



- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The Town Highway Department has a generator that is under capacity for the facility. The Town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event.
- The town will designate the town hall as an additional emergency shelter as the existing church facility might not meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- Lack of resources to address impacts from climate change.

9.4.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.4-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
1	Meeting with NYSEG about possibility of adding second transmission line to local substation	All Hazards	Not Identified	Emergency Management	Complete	Low	High	<ol style="list-style-type: none"> Discontinue Complete.
2	Support and fund CERT programs that include a mitigation component	All Hazards	Not Identified	Emergency Management	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing.
3	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	All Hazards	Not Identified	Emergency Management	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing.
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Code Enforcement	Complete	Low	High	<ol style="list-style-type: none"> Discontinue Complete
5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Code Enforcement	No Progress	-	-	<ol style="list-style-type: none"> Discontinue Not relevant.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Alden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Various culvert rightsizing projects across the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Alden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.4-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	-	-	-	-	X	X
Cyber Attack	-	X	-	-	-	-	-	-	X	X
Earthquake	-	X	-	X	X	-	X	-	X	X
Expansive Soils	-	X	-	-	-	-	-	-	X	X
Extreme Temperature	-	X	-	-	-	-	-	-	X	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	-	X	-	X	-	-	X	-	X	X
Landslide	-	X	-	X	-	-	X	-	X	X
Pandemic	-	X	-	-	-	-	-	-	X	X
Severe Storm	-	X	-	-	-	-	-	-	X	X
Severe Winter Storm	-	X	-	-	-	-	-	-	X	X
Utility Failure	-	X	-	-	-	-	-	-	X	X
Wildfire	-	X	-	X	-	-	X	-	X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Error! Reference source not found. summarizes the comprehensive range of specific mitigation initiatives the Town of Alden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.4-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-001	Dam Flood Control	All	Flood	<p>Problem: The Vranic Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of Alden-002	Earthquake Structure Evaluation	All	Earthquake	<p>Problem: The Huginschmidt Marsh Dam, NY Central Railroad Company Dam, Warren Bippert Pond Dam, 7-Eleven Store #35254, Alden HazMat Facility, United Precious Metal Refining, Inc., Griffith Energy Inc., and Saint John the Baptist School are in the earthquake hazard area.</p> <p>Solution: Conduct outreach and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.</p>	Yes	None	Within 6 months for outreach	Town of Alden	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential earthquake damage	Town Budget	High	EAP	PI



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-003	Work with the private facility owners to protect the facilities from wildfires	All	Wildfire	<p>Problem: The Alden Rod & Gun Club Dam, Fr Strate Pond Dam, Hugenschmidt Marsh Dam, Nathan Sweet Marsh Dam, Vranic Dam, Walden Roberts Dam, and the Alden Mennonite Church are located in the wildfire hazard area.</p> <p>Solution: Work with property owners and conduct outreach to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities.</p>	Yes 💧	None	Within 6 months for outreach	Town Budget	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Alden-004	Protect the following facilities from HazMat incidents: Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall	1,2	Hazardous Materials Incidents	<p>Problem: The Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.</p>	Yes 💧	None	Within 6 months for outreach	Town of Alden	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	SIP	SP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-005	Protect public and private facilities from off-site hazardous materials incidents	1,2	Hazardous Materials Incidents	<p>Problem: Public and private facilities may be at risk from off-site hazardous materials incidents.</p> <p>Solution: Work with public and private organizations in the town to develop emergency plans for responding to an off-site hazardous materials incident.</p>	Yes 💧	None	Within 6 months for outreach	Town of Alden	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	SIP	SP
2022-Town of Alden-006	Work with Hugenschmidt Marsh Dam, Warren Bippert Pond Dam, and Alden Mennonite Church to protect them from landslides	All	Landslide	<p>Problem: The Hugenschmidt Marsh Dam, Bippert Pond Dam are located on steep slopes and may be at risk of landslides.</p> <p>Solution: Conduct outreach and Work with the facility owner to determine if landslide risk exists and to assess the structure and determine necessary mitigation measures to protect it from landslides.</p>	Yes 💧	None	Within 6 months for outreach	Town of Alden	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential landslide damage	Town Budget	High	EAP	PI
2022-Town of Alden-007	Protect the following facilities from expansive soils: Fr Strate Pond Dam and Nathan Sweet Marsh Dam	1,2	Expansive Soils	<p>Problem: The Fr Strate Pond Dam and Nathan Sweet Marsh Dam (public) may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: Conduct outreach and work with the facility owners to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.</p>	Yes 💧	None	Within 6 months for outreach	Town of Alden	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the dams from expansive soils	Town Budget	High	EAP	PI



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-008	Floodplain Management Training	3	Flood	Problem: Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Solution: Obtain/host training and certification for floodplain managers.	No	None	Within 5 years	Erie County Emergency Management	\$3,000	Certified floodplain managers trained Floodplain management improved.	County budget	High	LPR	PR
2022-Town of Alden-009	Generator installation for Highway Building	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Failure	Problem: The Town Highway Department has a generator that is under capacity for the facility. The Town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event. Solution: The town will install a new generator that meets energy requirements of town. The town engineer will determine the needs of the facility and provide guidance as to what type of generator the town would purchase and where the equipment would be installed by the municipal engineer and maintained by the DPW, accordingly.	Yes 💧	No	Within 2 years	Town of Alden Engineer	\$100k	Continued operation of facility at all times	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Town of Alden-010	Emergency Shelter Designation	1,2	All	Problem: The town will designate the town hall as an additional emergency shelter as the existing church facility might not	Yes 💧	No	5 years	Town Board	\$100k-1 million	Meet emergency shelter needs of town	HMGP, FEMA HMGP and BRIC, USDA Community Facilities Grant Program,	High	SIP	SP, ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter.</p> <p>Solution: The town shall conduct a feasibility study to determine the needs of the existing facility to initiate the process of redeveloping the new town hall. This study shall address, backup power needs, heating/ cooling/ existing infrastructure, utility vulnerability, supply needs and storage, and medical supply needs. The facility will also need to be structurally examined and redesigned to safely accommodate residents during hazard events. Ultimately, these finding will be implemented over the following years.</p>							Emergency Management Performance Grants (EMPG) Program, Municipal Budget			
2022-Town of Alden-011	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners,</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:





- *Local Plans and Regulations (LPR)* – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.4-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Alden-001	Work with the Vranic Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2022-Town of Alden-002	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	0	1	1	1	0	0	1	1	1	11	High
2022-Town of Alden-003	Work with the private facility owners to protect the facilities from wildfires	1	1	1	1	1	0	1	1	1	0	0	1	1	1	11	High
2022-Town of Alden-004	Protect the following facilities from HazMat incidents: Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall	1	1	1	1	1	1	-1	1	1	1	0	0	0	1	9	High
2022-Town of Alden-005	Protect public and private facilities from off-site hazardous materials incidents	1	1	1	1	1	1	-1	1	1	1	0	0	0	1	9	High
2022-Town of Alden-006	Work with Hugenschmidt Marsh Dam, Warren Bippert Pond Dam, and Alden Mennonite Church to	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High



Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	protect them from landslides																
2022-Town of Alden-007	Protect the following facilities from expansive soils: Fr Strate Pond Dam and Nathan Sweet Marsh Dam	1	1	1	1	1	1	-1	1	1	1	1	0	0	1	10	High
2022-Town of Alden-008	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Town of Alden-009	Generator installation for Highway Building	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Alden-010	Emergency Shelter Designation	1	1	1	0	0	0	-1	1	1	1	1	1	1	1	9	High
2022-Town of Alden-011	Residential Property Flood Mitigation.	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.4.9 Action Worksheets

The following action worksheets have been developed by the Town of Alden to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Generator installation for Highway Building		
Project Number:	2022-Town of Alden-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	Town Highway Department has a generator that is under capacity for the facility. The town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install a new generator that meets energy requirements of town. The town engineer would need to determine the needs of the facility and provide guidance as to what type of generator the town would purchase and where the equipment would be installed.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$100,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program, Add in Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Generator installation for Highway Building	
Project Number:	2022-Town of Alden-009	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm, Utility Failure
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Emergency Shelter Designation.		
Project Number:	2022-Town of Alden-010		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The town would like to designate the town hall as an additional emergency shelter as the existing church facility might not meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter.		
Action or Project Intended for Implementation			
Description of the Solution:	The town shall conduct a feasibility study to determine the needs of the existing facility to initiate the process of redeveloping the new town hall. This study shall address, backup power needs, heating/ cooling/ existing infrastructure, utility vulnerability, supply needs and storage, and medical supply needs. The facility will also need to be structurally examined and redesigned to safely accommodate residents during hazard events. Ultimately, these finding will be implemented over the following years.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Development of new emergency facility
Useful Life:	35 years	Goals Met:	1, 2
Estimated Cost:	1 million dollars	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP
Responsible Organization:	Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation and preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Designate City of Buffalo shelters as town shelters	Low	Too far away
	Develop emergency shelter	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Emergency Shelter Designation.	
Project Number:	2022-Town of Alden-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project saves lives
Property Protection	1	This project can protect property
Cost-Effectiveness	1	This is cost effective in the long run
Technical	0	Technical issues have not yet been determined
Political	0	Political issues have not been identified
Legal	0	There can be some unclear legal issues
Fiscal	-1	There are inadequate financial resources
Environmental	1	There are no environmental issues with this project
Social	1	This has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses all hazards of concern
Timeline	1	This timeline is feasible
Agency Champion	1	The town board
Other Community Objectives	1	This contributes to the community's goal to become a safer place
Total	9	
Priority (High/Med/Low)	High	



9.5 Village of Alden

This section presents the jurisdictional annex for the Village of Alden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Alden’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.5.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Alden’s hazard mitigation plan primary and alternate points of contact. The Village of Alden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Office of Emergency Management, Mayor, and Code Enforcement. The Office of Emergency Management Coordinator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.5-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark Pruitt, Office of Emergency Management Coordinator Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 380-1593 Email: map1sultan@aol.com	Name/Title: Michael Manicki, Mayor Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 937-9216 x112 Email: aldenmayor@rochester.rr.com
NFIP Floodplain Administrator	
Name/Title: Joseph Czechowski, Code Enforcement Officer Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 937-9216 x121 Email: ceojoe@rochester.rr.com	

9.5.2 Municipal Profile

The Village of Alden is located approximately 15 miles east of downtown Buffalo and is 2.5 square miles in area. The village incorporated in 1869 and is located entirely within the Town of Alden. Residential and commercial development in the village is concentrated around the central business district, with open space remaining in the north and south portions of the village (Village of Alden 2021). Ellicott Creek runs through the village.

The Village of Alden was once famous for its black water baths. Mineral rich "black water" was discovered while drilling for natural gas in 1891. Many of the earliest patrons of these "black water baths" were immigrants from Europe who knew about "the waters" of Europe.



According to the U.S. Census, the 2010 population for the Village of Alden was 2,605. The estimated 2019 population was 2,577, a one percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 17.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.5.3 Jurisdictional Capability Assessment and Integration

The Village of Alden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.5.3). The Village of Alden’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Alden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.5-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 78 (Building Construction and Fire Prevention); adopted 2003	Local	Village Code Enforcement
Comment: <i>The goal and purpose for the building code are as stated: the protection of property, the preservation of property values and the elimination of fire, safety and health hazards. It is the purpose of this chapter to provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Alden. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.</i>					
Zoning Code	Yes	No	Chapter 210 and 211 (Zoning); adopted 2003	Local	Village Planning
Comment: <i>The goal and purpose for the building code are as stated: 1) Promote and protect to the fullest extent permissible the environment of the village and its public health, safety, convenience, comfort, prosperity and the general welfare. 2) Limit development on flood-prone lands abutting Ellicott Creek and its tributaries in order to enable Ellicott Creek to carry and store its maximum amount of water without restrictions; prevent encroachments on its floodplain; prevent any increased threat to health, safety and property to the immediate area as well as to those downstream; and protect the water quality and general ecology. 3) Allow for Planned Unit Developments (PUD) in the</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>zoning code in order to conserve land, permit more usable open space for recreation, community activities and the preserve natural features including such features as trees or outstanding or unique natural topography, including marshlands and other geological features.</i></p> <p><i>1) No structure, fill, deposit, obstruction, excavation, storage of materials or other use shall be permitted in the conservation district which would adversely affect the efficiency or storage capacity of the floodplain or which would tend to increase flood heights. 2) No structure for human habitation shall be permitted in the conservation district. 3) A PUD plan must include the existing site conditions, including property lines, contours at five-foot intervals, watercourses, drainage ditches in the village storm drainage system, 100-year floodplains, unique natural features, wetlands, tree cover, soil information and evaluation for the uses proposed, and the existing and proposed major storm drainage system including direction and quantity of flow. 4) A PUD must include a tracing overlay showing all soil areas and their stratification and those areas, if any, with moderate to high susceptibility to ponding or flooding and moderate to high susceptibility to erosion. For areas with potential erosion problems, the overlay shall also include an outline and description of existing vegetation and the program to be undertaken to correct potential erosion problems.</i></p>					
Subdivision Ordinance	Yes	No	Chapter 181 (Subdivision of Land); adopted 2003	Local	Village Board
<p><i>Comment: The goal and purpose for the building code are as stated: 1) Preliminary plat approval for a major subdivision: Particular attention shall be given to the arrangement, location and width of streets and their relation to the topography of the land, water supply, sewage disposal, drainage, lot sizes and arrangement, and the future development of adjoining lands as yet unsubdivided. Each element must adhere to the requirements of the Master Plan, the Official Map11 and zoning regulations, if such exist. 2) Subdivider must install sanitary sewer lines, storm sewer lines, water mains and fire hydrants, aboveground drainage facilities, i.e., ditch, swale, sluiceway, etc.</i></p>					
Stormwater Management Ordinance	Yes	Yes	Chapters 175 and 176 (Stormwater Management); adopted 2007	Local	Village Board
<p><i>Comment: The goal and purpose for the building code are as stated: 1) Establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. 2) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels. 3) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality. 4) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable. 5) Reduce stormwater runoff rates and volumes, soil erosion, and nonpoint source pollution through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. A Site map/construction drawing(s) for the project will include a general location map; show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent offsite surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s).</i></p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p><i>Comment:</i></p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p><i>Comment: The goal and purpose for the building code are as stated: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	Yes	-	-	-
<p><i>Comment:</i></p>					
Site Plan Review	Yes	No	Local Law No. 1-2012	Local	Village Board
<p><i>Comment: The purpose of these supplemental regulations is to promote the health, safety and general welfare of the residents of the Village, to provide standards for the safe provision of telecommunications consistent with applicable federal and state regulations and to protect the natural features and aesthetic character of the Village of Alden.</i></p>					
Environmental Protection Ordinance	Yes	Yes	Local Law No. 1-2012	Local	Environmental Conservation Commission
<p><i>Comment: The goal and purpose for the building code are as stated:</i></p> <p><i>1) Establish a commission for conservation of the environment that will advise the Board of Trustees and the Mayor on matters affecting the preservation, development, and use of the natural and man-made features and conditions of the Village of Alden. 2) Maintain an up-to-date inventory or index of all open spaces in public and private ownership within the municipality, including but not limited to natural landmarks,</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<i>glacial and other geomorphic or physiographic features, streams and their floodplains, swamps, marshland and other wetlands, unique biotic communities, scenic and other open areas of natural or ecological value, and of the ownership, present use and proposed use of such open areas, so as to provide a base of information for recommendations by the Commission for their preservation and/or use.</i>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 105 (Flood Damage Prevention)	Local	Building Code Enforcement
<i>Comment: The Board of Trustees of the Village of Alden finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Village of Alden and that such damages may include destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages, this chapter is adopted. BFE+2 feet for all construction in the SFHA (residential and non-residential)</i>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 176 (Stormwater Management – Illicit Discharge)	County	County SWCD
<i>Comment: 1) To prohibit Illicit Connections, Activities and Discharges to the MS4. 2) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.</i>					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	Yes	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other: Building Construction and Fire Prevention	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Village of Alden 2015 Comprehensive Plan	Local	Planning
<i>Comment: 1) Preserve and protect lands that serve as important natural drainage channels, maintain a quality infrastructure system and a safe and efficient transportation network that appropriately serves the needs of the community. Promote intra-community cooperation to protect the quality of the sole source groundwater aquifer. 2) Participate in watershed protection programs that affect the village. 3) Minimize the use of road salt and utilize alternatives for roadway de-icing to protect surface and groundwater quality. 4) Identify Ellicott Creek as part of a stream corridor of regional significance and identify means to preserve and enhance this stream corridor. 5) Limit the amount and type of development that can occur within floodplains. 6) Minimize the negative impacts of erosion, sedimentation, and storm drainage on natural resources. 7) Upgrade storm drainage in areas that experience flooding problems. 8) Develop a contingency plan to provide for future inter-municipal connections with the Erie County Water Authority to enhance public safety options in the event such emergency need should arise. 9) Ensure proper maintenance of storm drainage appurtenances to prevent recurrent flooding under the viaduct on Broadway.</i>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment:					
Response/Recovery Planning					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	Yes	Alden Comprehensive Emergency Management Plan	Local	OEM Coordinator
Comment: <i>The Alden Office of Emergency Management (OEM) provides emergency mitigation, preparedness, response and recovery services to the Town & Village of Alden. OEM leads the development and maintenance of the Comprehensive Emergency Management Plan, which encompasses all natural and man-made disasters and provides a basis for the development of programs and procedures to save life's and minimize disaster damage.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Alden to oversee and track development.

Table 9.5-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The Building Department and Code Enforcement Officer are responsible for reviewing building permit applications and approving.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Alden and their current responsibilities which contribute to hazard mitigation.



Table 9.5-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Village of Alden Planning Board is responsible for the review and approval of all applicable subdivisions of land within the Village of Alden. The Planning Board reviews applications for site plan approval, special permits, and rezoning requests. The Planning Board provides recommendations to the Village of Alden Board of Trustees for these types of projects. The Planning Board reviews and maintains the Village of Alden Master Plan.
Zoning Board of Adjustments	Yes	The Village of Alden Zoning Board of Appeals is responsible for hearing area and use variance requests. Typically, a variance is sought from an applicant who cannot meet the requirements of the Zoning Code of the Village of Alden.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	<p>Recognizing the need to address the subject of economic development and its role in helping the Alden community deal with growth pressures, the Alden Economic Development Committee was formed in 2004. The Committee is represented by members of both Town and Village Boards, the Alden Chamber of Commerce, Alden School District and local business and civic leaders. Funding for the operation of the Committee is shared by the Town of Alden, Village of Alden and the Chamber of Commerce, based upon a mutually agreed upon budget.</p> <p>Pursuant to the obvious need to be proactive in embracing economic growth issues, the Alden Economic Development Committee has been formed to aid the committee and its leaders in addressing pertinent alternatives, as they arise. Also in progress, are several new programs designed to enable Town and Village officials to play the significant leadership roles and guidance needed to balance the need for economic growth with the equal emphasis on the character and tradition of the Alden community.</p> <p>Interested parties and potential project sponsors for the economic development future of Alden are encouraged to contact the village/town or chamber to begin the process.</p>
Public Works/Highway Department	Yes	The Village of Alden Department of Public Works started in 1897 with the organization of a Board of Water Commissioners. From that beginning, the department has expanded to provide a wide variety of services to the Village. Currently the Department of Public Works is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees.
Construction/Building/Code Enforcement Department	No	The Village of Alden Building Department, under the direction of the Code Enforcement Officer, is responsible for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code, as well as Zoning, Subdivision, and other laws and ordinances provided for in the Code of the Village of Alden.
Emergency Management/Public Safety Department	Yes	Presently 50 plus members serve in the Alden H&L FC and the company operates three pumpers, a 75' aerial - pumper, one rescue



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		truck, two ambulances and a water rescue truck complete with a 15' rescue boat and trailer. The members are led by a Fire Chief and three Assistant Chiefs.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW staff – the department is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	DPW staff - The Village of Alden Department of Public Works started in 1897 with the organization of a Board of Water Commissioners. From that beginning, the department has expanded to provide a wide variety of services to the Village. Currently the Department of Public Works is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees.
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	OEM Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Alden.



Table 9.5-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Alden.

Table 9.5-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	The village maintains a website
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The village operates a Facebook page where they post upcoming events, meetings, news, and notifications.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Alden.



Table 9.5-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.5-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak - NA
Cyber Attack	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	High
Flood	Medium
Hazardous Materials	Medium
Landslide	High
Pandemic	High
Severe Storm	High
Severe Winter Storm	High
Utility Failure	Medium
Wildfire	High

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.5.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Joseph Czechowski, Code Enforcement Officer.



National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Alden.

Table 9.5-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Alden	0	5	\$4,711	0	0

Source: FEMA July 2020 and FEMA September 2020
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village identified the intersection of Route 20 and Kellogg Street that is prone to flooding. The village does not maintain a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the village. The village makes Substantial Damage determinations by using their Village Code Chapter 105 which states “substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.” No properties have been mitigated in the jurisdiction. The village flood maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Village of Alden Building Department/ Code Enforcement is responsible for floodplain management. There are not any certified floodplain managers on staff, or access to resources to determine possible future flooding conditions from climate change. The village does not need additional assistance at this time. The NFIP administration services the village provides include permit review, review subdivision and other proposed development, inspections, and stop-work orders. The NFIP floodplain administrator determines if proposed development would qualify as substantial improvement by verifying the construction materials and utility equipment is resistant to flood damage and constructed using methods and practices that minimize flood damage. The substantial improvements should have the lowest floor elevated at least three feet above the highest adjacent grade.

The village does not have any barriers to running an effective NFIP program and the village does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) June 6, 1989. The local law number of the flood prevention ordinance is Village Code Chapter 198, revisions adopted April, 2019. The floodplain management program meets the minimum requirements. There are no other local ordinances, plans, or programs that support the floodplain management and the village does not participate in the CRS.

9.5.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Alden has identified the following routes and procedures to evacuate residents prior to and during an event.



- Route 20 – Broadway (East/ West)
- Exchange St. (South) Crittenden (North)

Sheltering

The Village of Alden has identified the following designated emergency shelters within the village.

Table 9.5-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Municipal Building	13336 Broadway	145	Yes	Yes	Yes	House fire and EMS Department	Full kitchen
Alden Station 2	11856 Broadway	75	Yes	Yes	Yes	House fire and EMS Dept	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Alden has identified the following sites suitable for placing temporary housing units.

Table 9.5-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Alden Town Park	W Main St.	Unknown	Park	Water, Electric, and Septic	None
Darien Lakes State Park	Rt 20	Unknown	Park	Water and Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Alden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.5-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
3311 Wende Rd, Alden, NY 14004	3311 Wende Rd, Alden, NY 14004	TBD	Lot	None	Unknown



9.5.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.5-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.5-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	3	0	4	0	6	0	5	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	2	0	0	0	1	0	0	0	0	0
Total Permits Issued	0	0	5	0	4	0	7	0	5	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Ledge Stone Apartments	Residential	Two 4 Units Four 6 Units Club House		11290 Broadway Street		None		In progress				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None												

SFHA Special Flood Hazard Area (1% flood event)
 * Only location-specific hazard zones or vulnerabilities identified.

9.5.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Alden’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Alden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.5-1. Village of Alden Hazard Area Extent and Location Map 1

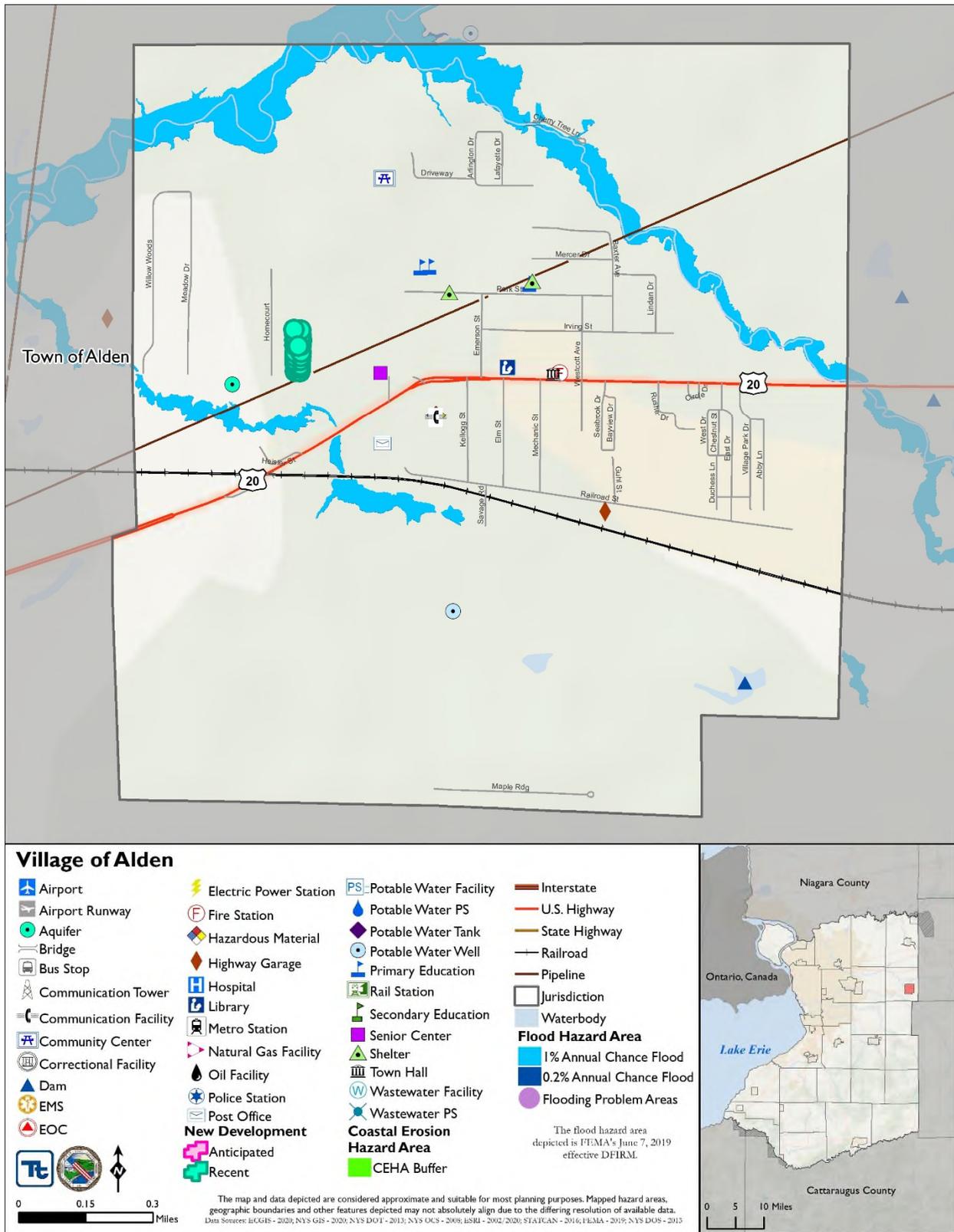




Figure 9.5-2. Village of Alden Hazard Area Extent and Location Map 2

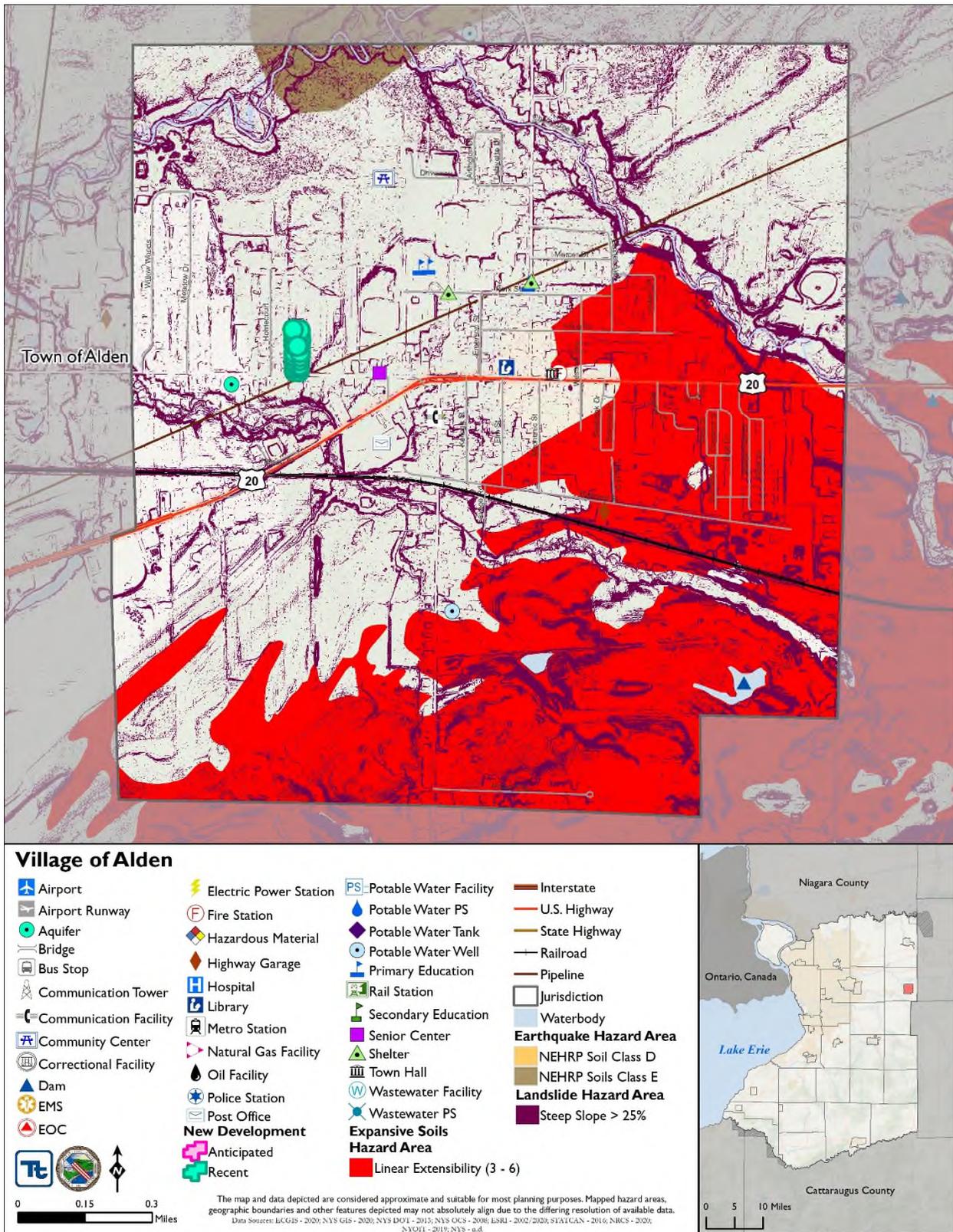
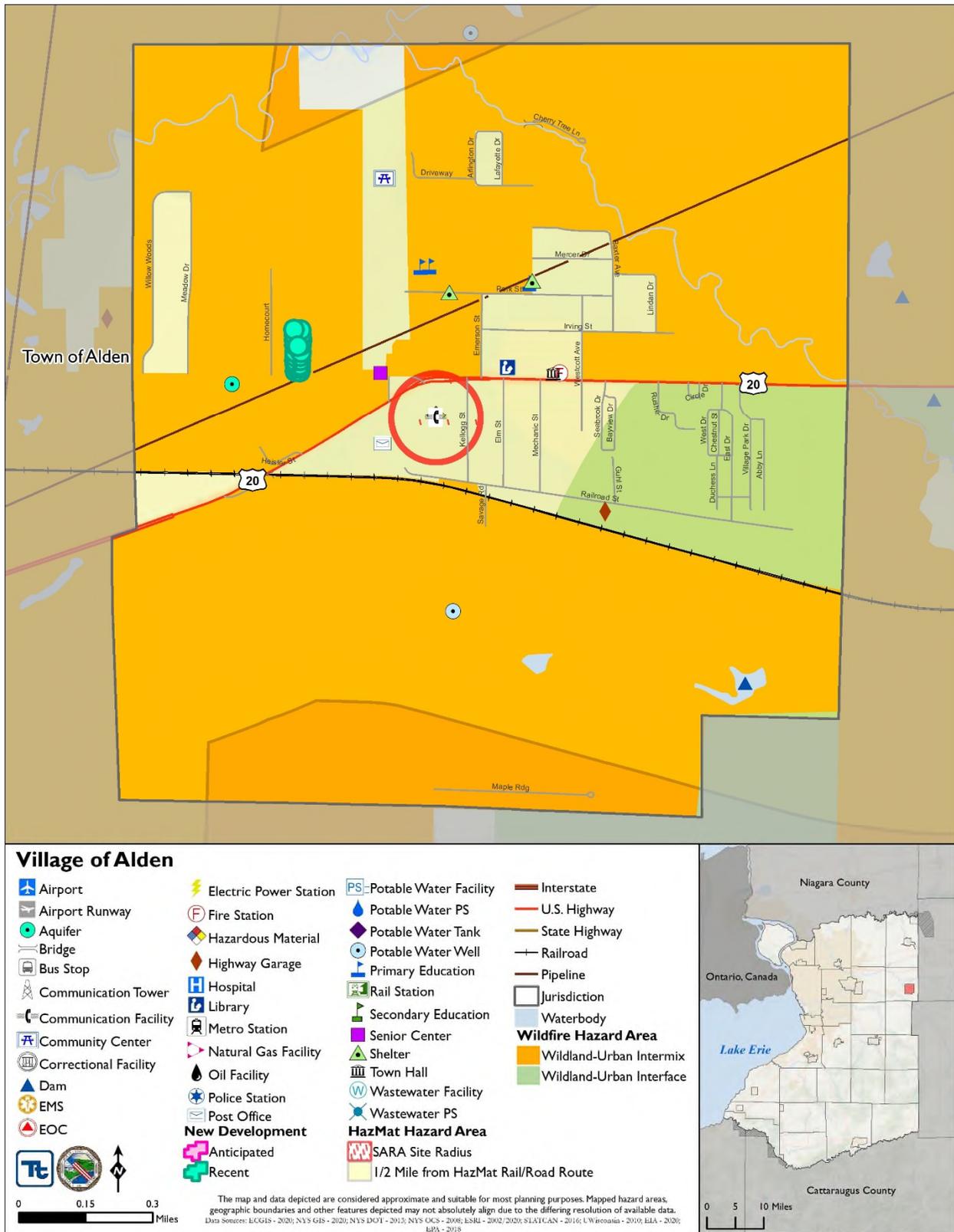




Figure 9.5-3. Village of Alden Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Alden’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.5-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.5-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	No damages were reported for the Village of Alden
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	No damages were reported for the Village of Alden
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	No damages were reported for the Village of Alden
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	No damages were reported for the Village of Alden



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	No damages were reported for the Village of Alden
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	No damages were reported for the Village of Alden
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	No damages were reported for the Village of Alden
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	No damages were reported for the Village of Alden



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	No damages were reported for the Village of Alden
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	No damages were reported for the Village of Alden
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	No damages were reported for the Village of Alden
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	No damages were reported for the Village of Alden
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	No damages were reported for the Village of Alden



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	No damages were reported for the Village of Alden
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	No damages were reported for the Village of Alden
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	No damages were reported for the Village of Alden
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	No damages were reported for the Village of Alden
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	No damages were reported for the Village of Alden
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	No damages were reported for the Village of Alden



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	No damages were reported for the Village of Alden
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	No damages were reported for the Village of Alden
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	No damages were reported for the Village of Alden
2020-21	Covid 19	Yes	Pandemic	Various losses including facility closures and social distancing requirements/enforcements.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)





N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Alden’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Alden. The Village of Alden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village made the following changes.

- No expansive soil issues have been identified. Thus will be re-ranked low from high.
- The village has rail and Route 20 that carry hazardous material, thus should be ranked medium from low.
- The village is rural and is not vulnerable to pandemic and will be re-ranked from medium to low.
- Severe storms are not a significant threat and will be re-ranked from high to medium.
- The village does not identify wildfires as a major concern and will reranked from high to low.

Table 9.5-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Medium
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Low	Medium	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance





flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.5-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Highway Garage 1-1	Highway Garage	Yes	No	006

Source: 2021 GIS

Identified Issues

After review of the Village of Alden’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Alden has identified the following vulnerabilities within their community:

- The village does not receive adequate snow removal services, especially during snow emergencies. The village would need the county to expand its existing capabilities/ facilities to adequately respond to future snow storms. Proposed DPW Actions will address this.
- The village has been experiencing freight trains disrupting traffic. The village is concerned with the potential derailment of the trains and the resulting damage that could occur. The village has experienced a previous derailment in the 1960s which caused major disruption to the village services and connection to external emergency services. The village would like to have the county/ external municipalities to coordinate emergency service planning in case of a future derailment. Proposed in action number 3.
- The Raymond May Pond Dam and Alden Senior Center are located in the wildfire hazard area.
- The Highway Garage ID: 119.08-2-14, Alden Post Office, Potable Water Well ID: E3846, and Village of Alden Hall may be exposed to hazardous materials incidents.
- Public and private facilities may be at risk from off-site hazardous materials incidents.
- The Highway Garage may be at risk of experiencing damages caused by expansive soils.
- The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village’s services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed.
- The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.
- The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village’s services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed.
- The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.



- Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage.
- The village does not have emergency backup water supply during water facility failure. With potential risk to drought and past historical events when the village water facility did not have adequate water supply for the entire village, the municipality identified this as a critical issue that needed to be addressed to reduce vulnerability to drought and utility failure.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.5.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.5-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection / Damages Avoided; Evidence of Success	
1	Meeting with NYSEG about possibility of adding second transmission line to local substation	All Hazards	Emergency Management	Meeting with NYSEG about possibility of adding second transmission line to local substation	No progress	Cost	-	1. Discontinue 2. 3. no longer applicable
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Support and fund CERT programs that include a mitigation component	All Hazards	Emergency Management	Support and fund CERT programs that include a mitigation component	No Progress	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	All Hazards	Emergency Management	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	No Progress	Cost	-	1. Discontinue 2. 3. No longer applicable
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood		Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Compliance	
5	Require staff involved in floodplain management and ordinance enforcement to	Flood		Require staff involved in floodplain management and ordinance enforcement to	No Progress	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	become Certified Floodplain Managers (CFMs)			become Certified Floodplain Managers (CFMs)				



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Alden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Alden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.5-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils				X			X			
Extreme Temperature										
Flood		X				X			X	X
Hazardous Materials	X			X			X			X
Landslide										
Pandemic										
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X							X	X
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.5-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Alden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.5-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.5-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-001	Alden Senior Center Mitigation	All	Wildfire	Problem: The Raymond May Pond Dam and Alden Senior Center are located in the wildfire hazard area. Solution: Conduct outreach to property owners to determine the risk from wildfires and identify property maintenance actions, if needed, to help protect the facilities.	Yes	None	Within 6 months for outreach	Village Board	<\$100 for outreach	The facility owners are aware of options to protect the facilities from potential wildfire damage	Village Budget	High	EAP	PI
2022-Village of Alden-002	Critical Facilities and Hazardous Material Incidents	All	Hazardous Materials Incidents	Problem: The Highway Garage ID: 119.08-2-14, Alden Post Office, Potable Water Well ID: E3846, and Village of Alden Hall may be exposed to hazardous materials incidents. Solution: Develop an education/ outreach plan to ensure that the facilities can safely continue operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	Village of Alden	<\$100 for outreach	Continuity of operations in place	Village Budget	High	LPR	ES
2022-Village of Alden-003	Hazardous Material Facility Mitigation	All	Hazardous Materials Incidents	Problem: Public and private facilities may be at risk from off-site hazardous materials incidents. Solution: Work with County and public and private organizations in the village to develop emergency plans for responding to an off-site hazardous materials incident.	Yes	None	Within 6 months for outreach	Village of Alden Board of Trustees	<\$100 for outreach	Continuity of operations in place	Village Budget	High	EAP	PI



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-004	Protect the Highway Garage ID: 119.08-2-14 from expansive soils	All	Expansive Soils	<p>Problem: The Highway Garage may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: The village will work with the facility owner to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.</p>	Yes	None	Within 6 months for outreach	Highway Department	<\$100 for outreach, TBD if mitigation is needed	The facility owner is aware of options to protect the Highway Garage from expansive soils	Village Budget	High	EAP	PI
2022-Village of Alden-005	Highway Garage Generator	1,2	Severe Storms, Severe Winter Storms, Utility Failure	<p>Problem: The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village's services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed.</p> <p>Solution: The village will conduct an assessment of the existing facility to determine the energy needs of the building. Once this is determined, the village will purchase an appropriate generator that will be placed in an area that is safe from flooding (as the facility is located in a 100-year flood zone).</p>	Yes	Yes	1 year	Village DPW	\$100,000	Continuity of Operations	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-006	Highway Garage Retrofitting and Expansion	1,2	Flood	<p>Problem: The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.</p> <p>Solution: This will be a multi-phased project. The first phase will be floodproofing the existing garage. This will include sealing the walls of the building and elevating utilities above the BFE. The second phase will include expanding the existing facility. The addition will be done in accordance with municipal, state and any federal guidelines. Additionally, the addition will also be floodproofed including sealing walls and elevating equipment.</p>	Yes ♦	Yes	3 years	Village DPW	High	Continuity of Operations	HMGP, FMA, BRIC, USDA Community Facilities Grant Program	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	GRS Category
2022-Village of Alden-007	Generator Installation at Lift Stations	1, 2	Severe Storms, Severe Winter Storms, Flood, Utility Failure	<p>Problem: Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage.</p> <p>Solution: Install generator at three (four total within the village) locations. The village does not have necessary information to determine the energy need of these facilities and would need to conduct a full assessment of the existing facilities and their needs. Once each facility has been identified and energy demand has been determined, the village would need to purchase three separate generators that would be installed at each facility. Each generator would need to be installed in a way that protects it from flooding as well as other natural elements that could cause harm to the generator.</p>	No	Yes	2 years	Village DPW	Up to \$500,000	Continued Operations	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-008	Expansion of Erie County Water System to Village system.	1,2	Utility Failure	<p>Problem: The village does not have emergency backup water supply during water facility failure. With potential risk to drought and past historical events when the village water facility did not have adequate water supply for the entire village, the municipality identified this as a critical issue that needed to be addressed to reduce vulnerability to drought and utility failure.</p> <p>Solution: The village has identified a solution to work with the county water department and connect with the existing county water supply system. The project would entail connection of the municipal water system with the county water system and thus entail the collaboration between the village and the county. Additional agreements might also be needed with neighboring municipalities like the Town of Alden. Once the two water systems are connected, the village would continue to use its existing water system but would rely on the county water system in case of localized emergency water shortages.</p>	No	Yes	2 years	Erie County Water Department/Village DPW	\$40k	Reliable water supply	Municipal Budget, County Water Department Funding	High	SIP	SP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022 Village of Alden-009	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





NFIP National Flood Insurance Program
OEM Office of Emergency Management

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR)* – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.5-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Alden-001	Protect the following facilities from wildfires: Raymond May Pond Dam and Alden Senior Center	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Alden-002	Critical Facilities and Hazardous Material Incidents	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Alden-003	Hazardous Material Facility Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Alden-004	Protect the Highway Garage ID: 119.08-2-14 from expansive soils	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Alden-005	Highway Garage Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Alden-006	Highway Garage Retrofitting and Expansion	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Alden-007	Generator Installation at Lift Stations	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Alden-008	Expansion of Erie County Water System to Village system.	1	1	1	1	1	1	-1	0	1	0	0	1	1	1	9	High
2022 Village of Alden-009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.5.9 Action Worksheets

The following action worksheets have been developed by the Village of Alden to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Generator Installation at Lift Stations		
Project Number:	2022-Village of Alden-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storms, Severe Winter Storms, Flood, Utility Failure		
Description of the Problem:	Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage.		
Action or Project Intended for Implementation			
Description of the Solution:	Install generator at three (four locations total within the village). The village does not have necessary information to determine the energy need of these facilities and would need to conduct a full assessment of the existing facilities and their needs. Once each facility has been identified and energy demand has been determined, the village would need to purchase three separate generators that would be installed at each facility. Each generator would need to be installed in a way that protects it from flooding as well as other natural elements that could cause harm to the generator.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Continued Operations
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	Up to \$500,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Unsteady power source
	Generators	High	Most feasible option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Generator Installation at Lift Stations	
Project Number:	2022-Village of Alden-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	-
Property Protection	1	Allows facility to operate during power outages
Cost-Effectiveness	1	This is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	-
Legal	1	-
Fiscal	-1	Need grant funding to complete project
Environmental	0	-
Social	1	Positive social impact
Administrative	1	Municipal DPW
Multi-Hazard	1	Severe Storms, Severe Winter Storms, Flood, Utility Failure
Timeline	1	To be completed within 2 years
Agency Champion	1	-
Other Community Objectives	1	-
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Highway Garage Retrofitting and Expansion		
Project Number:	2022-Village of Alden-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.		
Action or Project Intended for Implementation			
Description of the Solution:	This will be a multi-phased project. The first phase will be floodproofing the existing garage. This will include sealing the walls of the building and elevating utilities above the BFE. The second phase will include expanding the existing facility. The addition will be done in accordance with municipal, state and any federal guidelines. Additionally, the addition will also be floodproofed including sealing walls and elevating equipment.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operations
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	High	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, FMA, BRIC, USDA Community Facilities Grant Program
Responsible Organization:	Village DPW	Local Planning Mechanisms to be Used in Implementation if any:	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Rebuild new facility	High	No land available
	Retrofit existing facility	High	Most realistic solution
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Highway Garage Retrofitting and Expansion	
Project Number:	2022-Village of Alden-006	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	-
Property Protection	1	Highway Garage will be protect from future flood events
Cost-Effectiveness	1	Benefits outweigh the costs
Technical	1	-
Political	1	-
Legal	1	-
Fiscal	-1	Village needs grant funding to complete this project
Environmental	0	-
Social	1	-
Administrative	1	Municipal DPW
Multi-Hazard	0	Flood
Timeline	1	To be completed within 3 years once funding is obtained
Agency Champion	1	-
Other Community Objectives	1	-
Total	10	
Priority (High/Med/Low)	High	



9.6 Town of Amherst

This section presents the jurisdictional annex for the Town of Amherst. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Amherst’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.6.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Amherst’s hazard mitigation plan primary and alternate points of contact. The Town of Amherst followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including Code Enforcement and Emergency Services. The Department of Emergency Services represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.6-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Zymanek, Director of Emergency Services and Safety Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7121 Email: jzymanek@apdny.org	Name/Title: Brandon Peters, Emergency Services and Safety Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7133 Email: bpeters@apdny.org
NFIP Floodplain Administrator	
Name/Title: Mark Berke, Commissioner of Building Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7080 Email: mberke@amherst.ny.us	
Additional Contributors	
Name/Title: Laurie Stillwell, Community Development Director Method of Participation: Completed capabilities and additional worksheets	
Name/Title: Dan Ulatowski, Town Planner Method of Participation: Completed capabilities worksheets	
Name/Title: Mark Berke, Commissioner of Building Department Method of Participation: Completed NFIP worksheet	

9.6.2 Municipal Profile

Amherst is the most populous town in western New York and is an inner ring suburb of Buffalo. Amherst is 54 square miles, making it the second largest town by area in Erie County. Amherst was formed in 1818 from part



of the Town (later City) of Buffalo. The Village of Williamsville is located entirely within the Town of Amherst. The town is bordered on the north by Tonawanda Creek and the Erie Canal which comprise the border here between Niagara and Erie counties. The Town of Tonawanda borders on the east, the Town of Clarence on the west and the City of Buffalo and Town of Cheektowaga on the south. Ellicott Creek flows through the town.

The opening of the Erie Canal in 1825 spurred growth in Amherst, bringing new settlers and increased commerce. German farming immigrants settled in the northern part of the town, attracted by its fertile land. The town's water resources encouraged development of grist mills, saw mills, and other manufacturers along Ellicott Creek. Several hamlets that are still in existence started to develop around this time: Williamsville (1810s), Eggertsville and Snyder (1830s) East Amherst and Swormville (1850s and Getzville (1860s). Education is central to Amherst's character. The town is home to the University at Buffalo's north campus, the graduate campus of Medaille College, a satellite campus of Bryant & Stratton College, and also Daemen College (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Town of Amherst was 117,066. The estimated 2019 population was 120,276, a 2.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.0 percent of the population is 5 years of age or younger and 13.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 Jurisdictional Capability Assessment and Integration

The Town of Amherst performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.6.3). The Town of Amherst's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Amherst. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.6-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL1-2009, Chapter 83 Building Construction Administration	Local	Building and Zoning/Town Supervisor
Comment: The Code requires that all parking lots shall be so graded that stormwater will flow away from any building and will not drain upon abutting properties, sidewalks, and pavements. Yards and areas must always be properly drained and connected to a storm sewer or other approved outfall. 4) Front, side, and rear yards of lots upon which a structure is to be constructed shall be drained by a stormwater drainage system designed to drain a minimum ten-year, six-hour event storm.					
Zoning Code	Yes	No	Part. II Chapter 203 Zoning	Local	Planning Department
Comment: The Zoning Code requires that review of proposed developments in the town must consider exposure to natural hazards and their impact.					
Subdivision Ordinance	Yes	No	LL2-2009, Town of Amherst Subdivision Code, 2009	Local	Building Department
Comment: The Town's Subdivision code establishes a process by which the Building Department and the Planning Board review and approve subdivision proposals.					
Stormwater Management Ordinance	Yes	Yes	Part II Chapter. 172 Stormwater and Erosion Control; Illicit Discharges, LL2-2007	Local	Engineering Department
Comment: The Stormwater and Erosion Control ordinance mandates that the municipality must provide protection from accidental discharge of prohibited materials or other wastes.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Comprehensive Plan Section 7.2 7.3 & 7.4 Goals & Policies	Local	Planning Department
Comment: No ordinance, but the Comprehensive Plan has goals and policies that speak to limiting sanitary sewer expansion over repairs to existing infrastructure, etc. Amherst Bicentennial Comprehensive Plan Inventory and Analysis Report (2001). Amended 2014 & 2019.					
Site Plan Review	Yes	No	Part II Chapter 203 Sec. 8-7 Site Plan Review	Local	Planning Department
Comment: Site Plan review incorporates consideration of hazard exposure					
Environmental Protection Ordinance	Yes	Yes	LL3-1982, Environmental Protection	Local	Planning Board and Planning Department
Comment: Permit applications require submission of an Environmental Assessment Form describing the proposed action and the effect it may have on the environment.					
Flood Damage Prevention Ordinance	Yes	Yes	Part II Chapter 203 Part 7 Section 7-7 Provisions for Flood Hazard Reduction	Local	Floodplain Administrator
<p>Comment: Amended 6/3/2019. BFE+2 feet for all construction in the SFHA (residential and non-residential). It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities. B. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; D. control filling, grading, dredging and other development which may increase erosion or flood damages; E. regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and 					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
F. qualify and maintain for participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Part II Chapter 172 Stormwater and Erosion Control; Illicit Discharges	Local	Engineering Department
Comment: The Stormwater and Erosion Control ordinance mandates that the municipality must provide protection from accidental discharge of prohibited materials or other wastes.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Amherst Bicentennial Comprehensive Plan, 2011	Local	Supervisor, Town Board
Comment: The Plan recommends incentivizing retention of open space in private developments, and the use of “best management practices” to reduce water quality impacts of development. The Plan recommends development of flooding and other stormwater management mitigation measures. Maintain habitat and drainage patterns. The Plan looks to improve the hydraulic efficiency of the creek and ditch channels in the lower reaches to drain storm water from the local watersheds more quickly.					
Capital Improvement Plan	Yes	No	Amherst 2021-2026 Capital Improvement Plan	Local	Planning Department
Comment: The town’ Capital Improvement Program is a means to fund hazard mitigation projects.					
Disaster Debris Management Plan	Yes	No	Debris Management component of the Comprehensive Emergency Management Plan	Local	Emergency Services
Comment: The Debris Management Plan is a component of the Comprehensive Emergency Management Plan					
Floodplain or Watershed Plan	Yes	No	Floodplain or Watershed Plan Regional Plan. Healthy Niagara - Regional Niagara River/Lake Erie Watershed Management Plan – Phase 1 & 2 (2014 & 2019) County & State Comment:	Local/County/State	-
Comment: This is a regional Erie County Watershed Management Plan that includes Amherst’s watersheds.					
Stormwater Plan	Yes	No	2018 Stormwater Management Plan	Local	Engineering Department
Comment: Proactive management of stormwater					
Open Space Plan	Yes	No	Town of Amherst Parks and Recreation Master Plan (2018)	Local	Youth and Recreation Department



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Protection of open space can, among other positive, allow for unobstructed flow of flood waters.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	Regional Plan	No	Buffalo and Niagara River Habitat Strategy	County	Department of Environment and Planning
Comment: The Habitat Strategy provides a means for agencies and municipalities and other stakeholders to protect habitat along the Buffalo and Niagara Rivers.					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	Drafting LWRP	Yes	See Comments	Local	Planning Department
Comment: Local Waterfront Revitalization Plan is under development currently, anticipated adoption December 2021. WRA Boundary is in draft form and currently at DOS awaiting approval.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Draft in development	No	Under development	Local	Highway
Comment: Currently under development, anticipated completion date 2022. Town's Tree Law was also updated/adopted March 2020. Tree Law can be found at Chapter 179 in Town Code.					
Transportation Plan	No	No	See Comments	-	-
Comment: The Town does not have a separate Transportation plan per say, but transportation elements are addressed as a chapter in the Bicentennial Comprehensive Plan.					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	Drafting	No	See Comments	Local	Planning Department
Comment: Currently under development and anticipated to be completed in 2021.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Amherst Comprehensive Emergency Management Plan	Local	Department of Emergency Services
Comment: The Town's Comprehensive Emergency Management Plan contains a Flood Response Action Plan.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification &	No	Yes	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Risk Assessment (THIRA)					
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	Under Development	No	-	Local	Planning Committee
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Amherst to oversee and track development.

Table 9.6-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Building Department
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	No, the town does not maintain a buildable land inventory. Amherst is primarily built out in its southern two-thirds of town, with a few select areas expecting redevelopment and in-fill development over the next decade: Boulevard Mall Area/Census Tract 92 area. The northern 1/3 of town, is primarily underdeveloped and zoned rural Suburban Agriculture and while rezoning may be applied for to allow development beyond single-family residential and agricultural uses there may be other constraints that limit growth on specific lots, such as wetlands, floodplain, and infrastructure access/connectivity. Because of this, this area of town has developed at a slower pace than the rest of Amherst.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Amherst and their current responsibilities which contribute to hazard mitigation.



Table 9.6-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven Person Planning Board, two Planning Department Staff assigned to administer the Zoning Code. The powers of the Amherst Planning Board are: <ul style="list-style-type: none"> • Review and approval of site plans • Review and approval of subdivision applications • Review and approval of coordinated sign plans • Review of rezoning applications and recommendation to the Town Board • Participation in the development of Comprehensive Plans • Review of any matter referred by the Town Board and report to the Town Board
Zoning Board of Adjustments	Yes	Five Person Zoning Board of Appeals, with two Planning Department staff assigned to administer the Zoning Code. The Zoning Board of Appeals is authorized to grant relief from any provision of the Town of Amherst Zoning Ordinance, or any decision of an administrative official charged with the enforcement of that ordinance. In addition, the Board is empowered to grant special use permits in certain instances as spelled out in the Zoning Ordinance. Town Law specifies the grounds and criteria that the Zoning Board of Appeals must use to grant a variance.
Planning Department	Yes	The Amherst Planning Department has four primary responsibilities: <ul style="list-style-type: none"> • development plan review; • long-range planning; • community development and housing program administration; and program implementation. Nine Planners, one Landscape Architect, five support staff among the Planning Board and Building Department staff.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Amherst Conservation Advisory Council advises the Planning Board and Town Board about land conservation.
Open Space Board/Committee	Yes	The Town’s Open Space Committee advises the Planning Board and Town Board about open space conservation opportunities which can help mitigate flooding risk.
Economic Development Commission/Committee	No	The town’s Economic Development Office staff assist with economic development initiatives. https://www.amherst.ny.us/content/departments.php?dept_id=dept_29
Public Works/Highway Department	Yes	The Town Highway Department manages culverts, highways, ditches, mosquito control, tree removal and trimming, and maintenance of other assets impacted by natural hazards.
Construction/Building/Code Enforcement Department	Yes	The primary purpose of the Building Department is to ensure building safety through the enforcement of municipal, state, and federal regulations and codes. All plans for development are first reviewed by the department for adherence to regulatory statutes. Upon approval of proposed plans, permits are issued that allow for the construction and alteration of structures. Throughout the building process, field inspectors visit active work sites reviewing work and approving various stages of construction. Final inspections signal the end of the review process with new or renovated buildings receiving a formal certificate of occupancy, which allows the structure to become occupied. The primary Divisions of the Building Department are:



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<ul style="list-style-type: none"> • Building Code Enforcement • Plumbing Code Enforcement • Electrical Code Enforcement • Fire Safety Code Enforcement • Property Maintenance Code Enforcement • Building Maintenance of Town Owned Facilities
Emergency Management/Public Safety Department	Yes	The Department of Emergency Services and Safety coordinates the town's response to emergency needs.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Town warning systems are operational and in use.
Maintenance programs to reduce hazard (stormwater maintenance, tree trimming, etc.)	Yes	The Town Highway Department manages culverts, highways, ditches, and other assets impacted by natural hazards. This includes tree trimming.
Mutual aid agreements	Yes	The Town maintains mutual aid agreements with neighboring jurisdictions for Fire and Department of Public Works/Highway Department operations
Other		Committee on Disabilities, Clean Energy Community Committee, Invasive Plant Species Committee, Recreation and Waste Committee, Tree Board.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	9 Planners by training with various levels of experience, volunteer members of the Planning Board.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Two town staff understand natural hazards.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Office of Emergency Management, Building and Engineering Departments
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning has eight planning staff/board members who may be skilled in GIS, none have used HAZUS
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	The floodplain administration activities are housed in the Town Building Department
Surveyor(s)	No	-
Emergency Manager	Yes	The OEM coordinates the town's response to emergency needs
Grant writer(s)	Yes	Three staff members
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-



Fiscal Capability

The table below summarizes financial resources available to the Town of Amherst.

Table 9.6-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Applicable CFA's, EPF, DOS, DEC grants
Open Space Acquisition funding programs	Department of State or Agriculture & Markets Conservation Easements or the Buffalo Erie Niagara Land Improvement Corp (BENLIC) – Land Bank
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Applicable grants, if awarded

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Amherst.

Table 9.6-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Department of Information Technology
Hazard mitigation information available on your website	No	Note: website is being overhauled and will soon include hazard mitigation information.
Social media for hazard mitigation education and outreach	Yes	The town employs Facebook and Twitter as social media outreach including messaging about hazard mitigation. The town's website is also being updated and will include information.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Amherst Traffic Safety Board, Amherst Conservation Advisory Commission, Tree Board, Invasive Plant Species Committee
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-



Community Classifications

The table below summarizes classifications for community programs available to the Town of Amherst.

Table 9.6-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	Yes	Class 8	10/2015
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	None	Registered for program 5/2012
Storm Ready Certification	Yes	N/A	6/2014
Fire wise Communities classification	No	-	
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.6-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement



9.6.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Mark Berke, CFM, Commissioner of Building Department

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Amherst.

Table 9.6-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Amherst	846	448	\$1,417,565	23	353

Source: FEMA 2020a and FEMA 2020b

Notes:

RL Repetitive Loss; SRL

Flood Vulnerability Summary

Areas prone to flooding in the town are in the northeast portion of the town in a lying area where Gott Creek, Ransom Creek and Black Creek run into the Tonawanda Creek. The town maintains a list of properties that have been damaged by flooding but does not maintain such a list for owners interested in mitigating their properties. Per the town’s data, there have been 1,224 properties that have been mitigated by elevation measures. Annually, the town sends a letter to all property owners within the floodplain. All property owners interested in flood mitigation are provided pertinent information. There are no Risk MAP projects currently underway in the town. The town indicated that no properties have been mitigated and that a list of property owners interested in mitigation is not maintained. The town’s flood hazard maps adequately address the flood risk within the jurisdiction. The town does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Town of Amherst does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in June 2020. The Building Inspector is responsible for floodplain administration and this individual is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town Building Department includes two staff who are Certified Floodplain Managers. The town stated its staff would benefit from training about the revised Community Rating System requirements. The town makes Substantial Determination’s following FEMA guidelines. Any property where damage is 50 percent or greater than the value of the property is classified as substantial damage. The town’s floodplain management meets minimum requirements. The town requires floodplain development permits for any work to occur in a floodplain/floodway and provides review and approvals to process LOMA’s and LOMR-Fs. Additionally, we provide education and outreach as well as inspection for work being completed within the floodplain. The town does not participate in the Community Rating System.



9.6.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Amherst did not identify evacuation routes and procedures as part of this plan update. The Town will coordinate with county and state agencies as needed.

Sheltering

The town shelter is located at the Amherst Senior Center at 370 John James Audubon Parkway, Amherst, NY 14228. The town also maintains a list of regional shelters approved by the American Red Cross (ARC) in its CEMP; the town would work with the Erie County Department of Homeland Security and Emergency Services and ARC to open and operate a shelter at one of these locations.

Table 9.6-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town of Amherst Senior Center	370 John James Audubon Parkway	100	Yes	Yes	Yes	Emergency medical	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Amherst has identified the following sites suitable for placing temporary housing units.

Table 9.6-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
University at Buffalo North Campus	12 Capen Hall, Buffalo NY 14260	TBD	University campus facility	Water, sewer, electric, ample external parking lots for placement of trailers	Locate temporary housing on existing asphalt and appropriately spaced
ECC North Campus	6205 Main St, Williamsville NY	TBD	College facility	Water, sewer, electric, external sports fields for placement	Locate temporary housing on existing sports fields

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning



requirements and floodplain laws. The Town of Amherst has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.6-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Boulevard Mall Site/Census Tract 92	Niagara Boulevard	DGEIS planned for 5,000 residential units over 20 years	Multistory/Mixed-use, Town Houses/Condos New construction, infill development	Water, electric (adequate sewer upgrades in planning stages)	Zoning amendments implemented, DGEIS completed, awaiting development applications

9.6.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.6-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.6-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	11	8	76	5	66	15	83	25	76	22	145	14
Multi-Family	36	2	26	3	1	1	12	4	21	0	3	2
Other (commercial, mixed-use, etc.)	31	2	31	1	25	3	24	2	25	2	41	2
Total Permits Issued	78	12	133	9	92	19	119	31	122	24	189	18
Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
The town estimates that as many as 5,000 units could be constructed in the town within the next 20 years												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.6.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Amherst’s risk assessment results and data used to determine the hazard ranking discussed later in this section.



Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Amherst has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.6-1. Town of Amherst Hazard Area Extent and Location Map 1

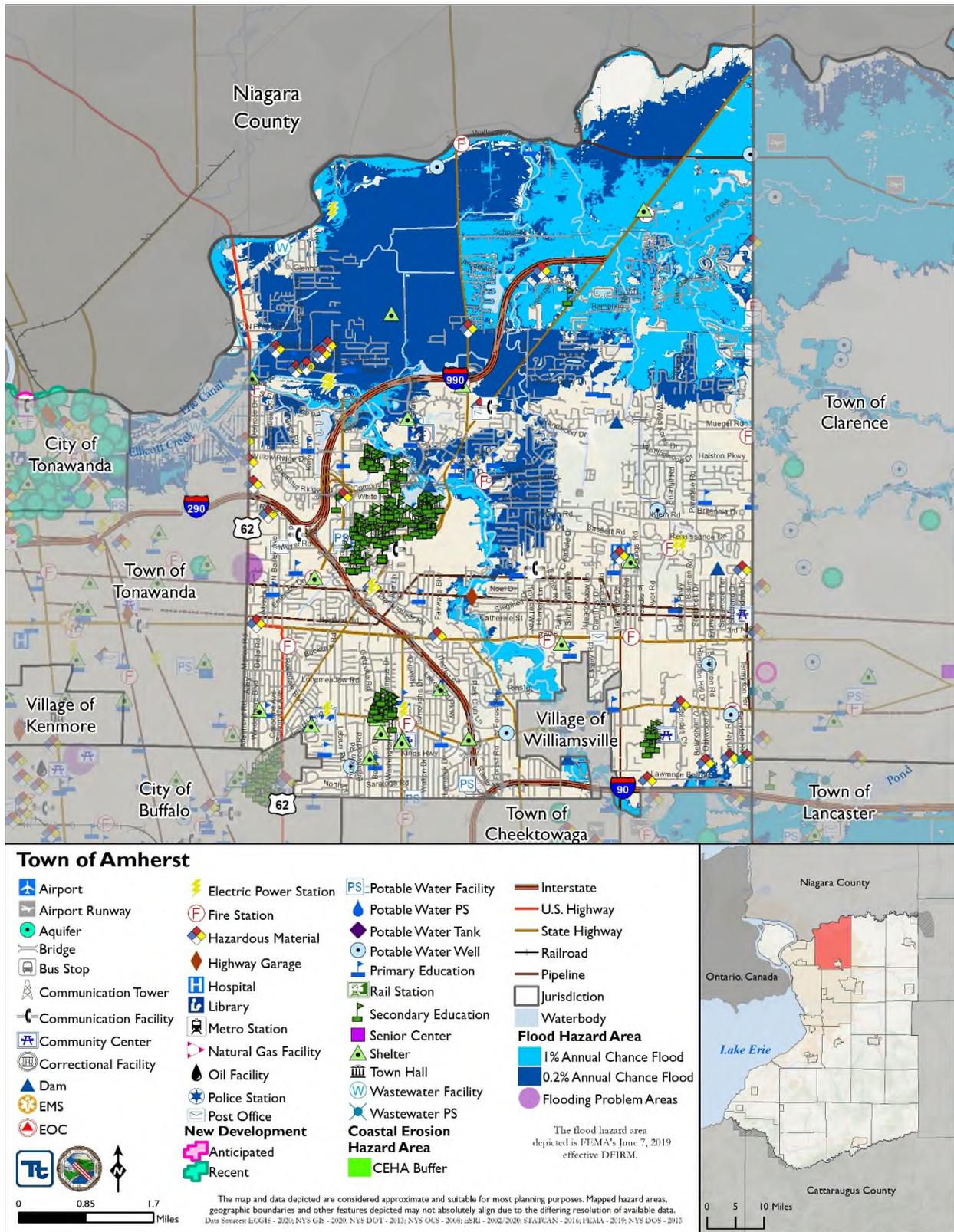




Figure 9.6-2. Town of Amherst Hazard Area Extent and Location Map 2

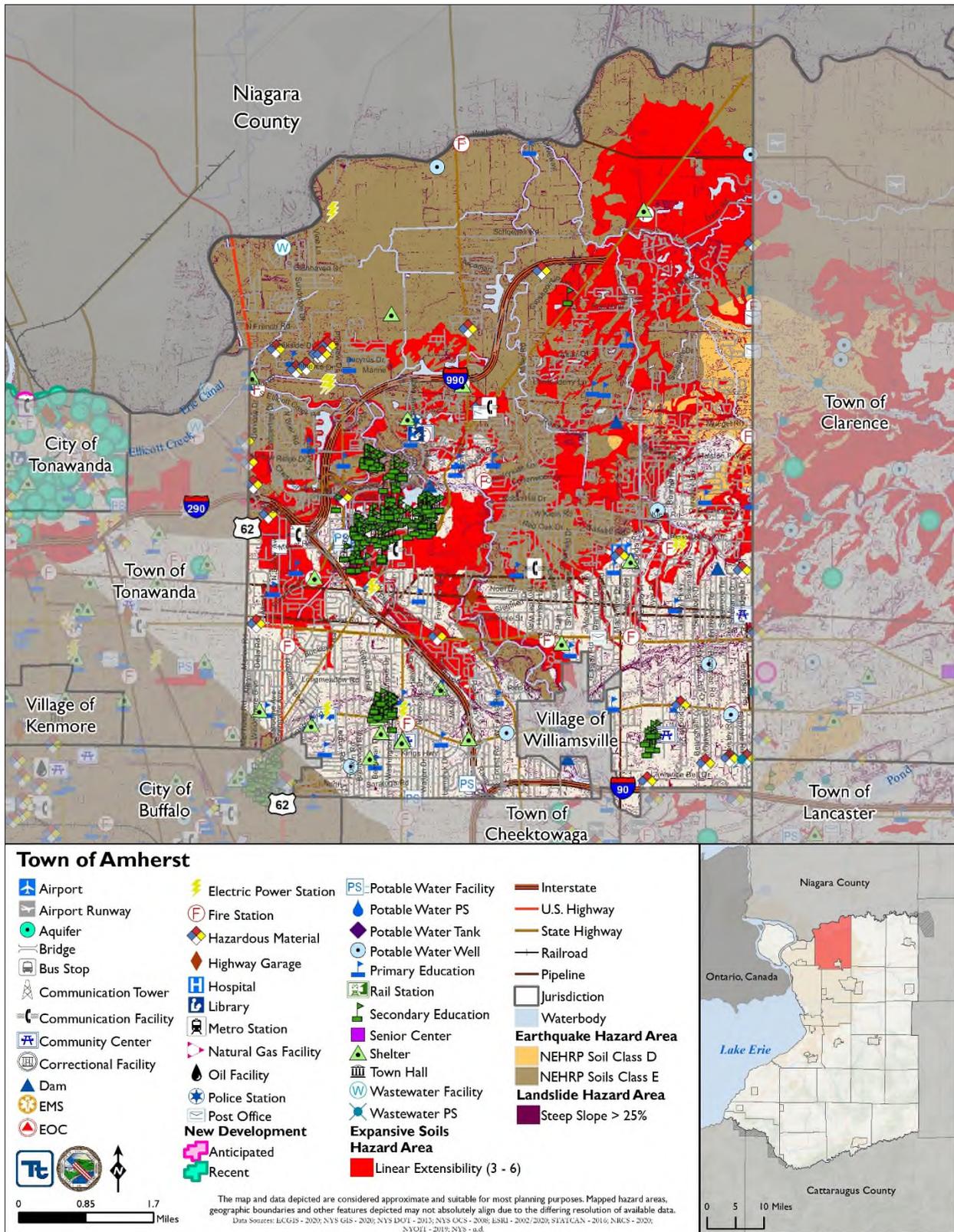
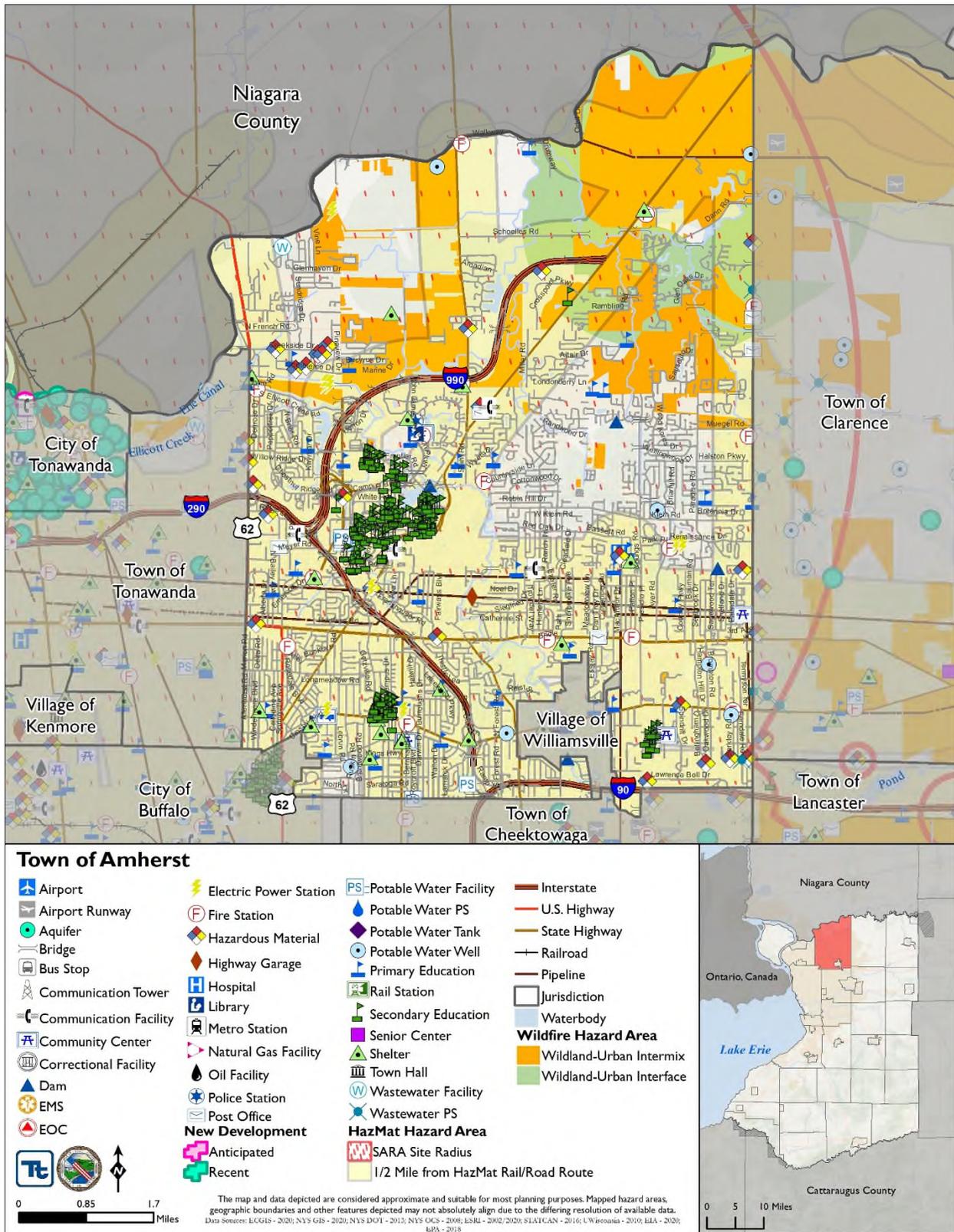




Figure 9.6-3. Town of Amherst Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Amherst’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.6-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.6-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the town did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the town did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the town did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the town did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, the town did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, the town did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, the town did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, the town did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the town did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, the town did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the town did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the town did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, the town did not report any damages.
February 24, 2019	High Wind, Lakeshore Flooding	No	Although the county was impacted, the town did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the town did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report any damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
March 2020 to present	Public Health, Pandemic, COVID-19, DR 4480	Yes	Global pandemic has killed and sickened many hundred Erie County residents.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Amherst’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Amherst. The Town of Amherst has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the Pandemic, Earthquake, Severe Storm, Utility Failure and Severe Winter Storm rankings be changed from High to Medium because of a relative low rate of occurrence or exposure to these hazards.

Table 9.6-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	Medium	Medium	Medium	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.6-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Lang’s Brewing Company Dam	Dam	X	X	#2022-T Amherst-002
Amherst Fire Training Facility, County owned	Fire Station	X	X	#2022-T Amherst-014
North Amherst Fire Station	Fire Station	X	X	#2022-T Amherst-019
BLK Buffalo	Hazardous Material	X	X	#2022-T Amherst-007
Potable Water Well E2424 on Tonawanda Creek Road	Potable Water Well	-	X	#2022-T Amherst-009
Wastewater Pump Station on Transit Road	Wastewater Pump Station	X	X	#2022-T Amherst-003
Potable Water Well E3466 on Transit Road	Potable Water Well	X	X	2022-T Amherst-013

Identified Issues

After review of the Town of Amherst’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the town has identified the following vulnerabilities:

- Floodplain administration staff could benefit from additional training.
- Additional flood gauges are needed on certain streams.
- There are Repetitive Loss flood properties located in the town.
- The Lang Brewery Dam is in the Special Flood Hazard Area.
- A town wastewater pump station is in the Special Flood Hazard Area.
- Debris, including trees and limbs, block the flow of storm waters through the floodway. The blockages can contribute to localized flooding.
- There are locations along Gott Creek, Ellicott and Ransom Creeks that experience localized flooding.
- The BLK Buffalo facility stores hazardous materials and is in the SFHA.
- Municipal and non-municipal potable water wells are located within the Special Flood Hazard Area.
- Two Fire Stations are located within the 0.2 percent annual chance flood area.
- The Skinnersville Dam needs protection from flooding
- The town lacks an urban water management plan
- Nine facilities are located within the 0.2 percent annual chance flood area that store hazardous materials, which could be dangerous if flooding impacts the facility.
- There are several privately owned critical facilities located upon earthquake vulnerable soils.



- The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding.
- The town should define the capacity of temporary housing locations
- The town is developing several important plans that related to hazard mitigation.

9.6.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.6-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Flood Mitigation Efforts to include the continued aggressive stream and creek debris removal program that has been implemented. This will also continue our program of working with Erie county Public works personnel.	Flooding	The town highway department has crews out year round checking local creeks and stream performing mitigation activities by removing debris as necessary in accordance with State and federal regulations.	Highway Department	Choose an item.			<ol style="list-style-type: none"> Discontinue completed
	CRS continuation, outreach education efforts, and add additional information to our website, through mailers along with making this information available through our Emergency Services Facebook, LinkedIn, and Twitter accounts.	Flooding	Not Identified	Building and Emergency Services	Choose an item.			<ol style="list-style-type: none"> Discontinue ongoing
	Active participants in the NOAA programs. We are active on the NWS Chat site, just renewed our Storm Ready designation in 2011 and promote the storm watcher program and NOAA website	Winter driving, extreme weather events, winter storms, flooding, numerous natural events	Not Identified	Emergency Services	Choose an item.			<ol style="list-style-type: none"> Discontinue ongoing



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	programs to our community and through our local CERT trained residents.							
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Building/ Planning Department	Choose an item.	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. ongoing



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Amherst did not identify any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Amherst participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.6-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	-	-	-	X	-	-	-	-	X
Cyber Attack	X	-	-	-	X	-	-	-	-	X
Earthquake	X	X	-	-	X	X	-	-	-	X
Expansive Soils	X	-	-	-	X	-	-	-	-	X
Extreme Temperature	X	-	-	-	X	-	-	-	-	X
Flood	X	X	X	X	X	X	X	X	-	X
Hazardous Materials	X	X	-	-	X	-	-	-	-	X
Landslide	X	-	-	-	X	-	-	-	-	X
Pandemic	X	-	-	-	X	-	-	-	-	X
Severe Storm	X	X	-	-	X	-	-	X	-	X
Severe Winter Storm	X	-	-	-	X	-	-	-	-	X
Utility Failure	X	-	-	-	X	-	-	-	-	X
Wildfire	X	-	-	-	X	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.6-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Amherst would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.6-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Amherst -001	Floodplain Administrator to attend training on floodplain management	3	Flood	Problem: Floodplain Managers require training to fully implement the NFIP program within the town.	No	No	Within 2 years	ECDHSES, FPA	\$3,000	Certified floodplain managers are trained to implement an effective floodplain management program	County and town budgets	High	LPR	PR
				Solution: Obtain/host training and certification for floodplain managers										
2022-T Amherst -002	Protect Lang Brewery Dam to the 0.2% annual chance flood event	1,2	Flood	Problem: The Lang Brewery Dam is in the Special Flood Hazard Area.	Yes	No	Within 5 years	Town Highway Department	<\$500 for outreach, Project cost TBD by engineering for county owned dams	Ensure facility remains in service, protected from flood risk.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
				Solution: The town will contact the facility managers of privately owned dams and discuss options for protecting the dams to the 0.2% annual chance flood event.										
2022-T Amherst -003	Protect the town's wastewater pump station to the 0.2% annual chance flood.	1	Flood	Problem: A town wastewater pump station is in the Special Flood Hazard Area. The pump station is on Transit Road, near Lapp Road.	Yes	Yes	Within 5 years	Town Highway Department	TBD by feasibility assessment	Ensure continued operation of this critical infrastructure facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
				Solution: The town will conduct an engineering study to determine most appropriate measures to protect the town's wastewater pump to the 0.2% annual chance flood event.										
2022-T Amherst -004	Clear debris from Ellicott Creek	2	Flood	Problem: Debris, including trees and limbs, block the flow of storm waters through the floodway. This blockage can	No	No	Within 2 years	Town Highway Department	\$50,000	Maintain the flow of the Ellicott Creek to	HMGP, BRIC	High	NSP	NR



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				contribute to localized flooding. Solution: Purchase equipment to maintain and regularly clear the Ellicott Creek bed.						carry storm waters and to mitigate future flooding				
2022-T Amherst -005	Implement flood mitigation measures along Ransom Creek	1,2	Flood	Problem: There are locations along Ransom Creek that experience localized flooding Solution: In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Ransom Creek. Resilient New York Flood Mitigation Initiative: Ransom Creek The town should pursue completion of mitigation measures including removal of flood prone facilities, adaptation to flood resilience, remove repetitive damage properties, among other options.	No	No	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Ransom Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -006	Implement flood mitigation measures along Gott Creek	1	Flood	Problem: There are locations along Gott Creek that experience localized flooding Solution: In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek The town should pursue	No	No	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Gott Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				completion of these mitigation measures. The town should pursue completion of mitigation measures including removal of flood prone facilities, adaptation to flood resilience, remove repetitive damage properties, among other options.										
2022-T Amherst -007	Protect the BLK Buffalo facility to the 0.2% annual chance flood event.	1	Flood	<p>Problem: The BLK Buffalo facility stores hazardous materials and is in the SFHA</p> <p>Solution: The town will work the facility owner to conduct a feasibility study to determine and implement best mitigation actions to protect the BLK Buffalo facility from flooding</p>	Yes	Yes	Within 2 years	Town Highway Department	TBD by feasibility study	Protect facility from flooding and potential release of hazardous material	Municipal Budget, staff time	High	EAP	PI
2022-T Amherst -008	Protect the Skinnerville Dam from exposure to the flood hazard.	1	Flood	<p>Problem: The dam is located within the 0.2% annual floodplain, exposed to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes	No	Within 5 years	Engineer Town Public Works	TBD by feasibility assessment	Ensure continuity of critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program	High	SIP	PP



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Amherst -009	Protect Potable water well ID: E2424	1, 2	Flood	<p>Problem: Potable well is vulnerable to flooding from the 0.2% annual chance flood.</p> <p>Solution: Fire Department will ensure that facility is assessed for best mitigation measures to protect against flooding and will implement these measures.</p>	Yes	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -010	Protect the Getzville Fire Station and Ellicott Creek Vol. Fire Co., to the 0.2% annual chance flood event	1,2	Flood	<p>Problem: These two Fire Stations are located within the 0.2% annual chance flood area</p> <p>Solution: The town will assess the flood risk at the facilities and take mitigation action as needed</p>	Yes	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -011	There are nine critical facilities located in the town that are vulnerable to the HazMat hazard risk	1,2	HazMat	<p>Problem: Nine facilities are located within the 0.2% annual chance flood area that store Hazardous materials which could be dangerous if flooding impacts facility.</p> <p>Solution: The town will coordinate with facility owners to assess the risk of facilities to the hazardous materials hazard</p>	Yes	Yes	Within 5 years	Town engineer, private facility managers	TBD by feasibility assessment	Ensure continuity of operations at these critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-T Amherst -012	Protect critical facilities within the	1	Earthquake	<p>Problem: There are several privately owned critical facilities located upon earthquake vulnerable soils</p>	Yes	Yes	Within 5 years	Town engineer, private	TBD by feasibility assessment	Ensure continuity of operations at	FEMA HMGP, BRIC, USDA	High	SIP	PP



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	town that are exposed to the earthquake hazard			Solution: Work with property owners to ensure that properties are protected against the earthquake hazard.				facility managers		these critical facility	Community Facilities Grant Program, EMPG			
2022-T Amherst -013	Potable water well located on Transit Road is located within the SFHA	1	Flood	<p>Problem: The potable water well is vulnerable to the flood risk due to location within the SFHA.</p> <p>Solution: The town will conduct an engineering study to determine most appropriate measures to protect the town’s well to the 0.2% annual chance flood event.</p>	Yes 💧	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -014	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	1	Flood	<p>Problem: The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will encourage the county to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Training Facility to protect it to the 0.2% annual chance flood event. Options include: <ul style="list-style-type: none"> •Elevation of facility </p>	Yes 💧	Yes	Within 5 years	Engineer, Town Fire Department	TBD by feasibility assessment	Ensures continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<ul style="list-style-type: none"> Floodproofing of facility Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-T Amherst -015	Repetitive Loss Properties	1	Flood	<p>Problem: There may be numerous homes and other buildings that have flooded. These should be considered for purchase and removal.</p> <p>Solution: Work with local homeowners of repetitively flooded properties to determine interest in inclusion in a grant application to FEMA for mitigation project funding (floodproof/elevate/acquire) and apply to FEMA on homeowner behalf.</p>	No	No	Within 5 years	FPA	TBD per property acquisition	Protect life and property at properties vulnerable to flooding.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -016	Install flood gauges	1	Flood, Severe Storm	<p>Problem: More timely and accurate data about creek levels is needed to improve flood readiness</p> <p>Solution: Install creek gauging stations. Conduct annual flood channel inspections/clearing.</p>	No	No	Within 1 year	FPA	TBD by cost of flood gauge installation.	Improve emergency response	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	NR
2022-T Amherst -017	Develop Urban Water Management Plan	1	Flood, Severe Storm	Problem: The town's LWRP recommends development of an Urban Water Management Plan.	No	No	Within 3 years	Town Highway Department and FPA	\$100,000	Protect community from flooding and	FEMA HMGP, BRIC,	High	LPR	PR



Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The Town Board will dedicate adequate funding or seek external funding to develop an Urban Water Management Plan that mitigates against natural hazards impacts.						storm damage	municipal budget			
2022-T Amherst -018	Complete plans that are under development	2	All Hazards	<p>Problem: The town is in the process of updating the Local Waterfront Revitalization Plan, the Forest Management Plan and the town’s Agricultural Plan</p> <p>Solution: The town will complete the Local Waterfront Revitalization Plan. the Forest Management Plan and the town’s Agricultural Plan. Ensure that hazardous materials risk reduction is included into these plans.</p>	No	No	Within 3 years	Town Board	Staff time/consultant time	Protect shoreline in the town from erosion, substandard development	NYS DOS	High	LPR	PR
2022-T Amherst -019	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	1, 2	Flood	<p>Problem: The North Amherst Fire Station is in the SFHA, exposed to the flood hazard.</p> <p>Solution: The town will conduct a feasibility study to determine and implement best action to protect the fire station.</p>	Yes	Yes	Within 3 years	North Amherst Fire Company, Town Board	\$50,000 estimate	Protect facility from flooding and ensure continuity of emergency operations	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.





Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
ECDHSES	Erie County Dept. of Homeland Security and Emergency Services
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-001	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T Amherst-002	Protect Lang Brewery Dam to the 0.2% annual chance flood even	1	1	1	0	1	0	0	1	1	1	0	1	1	1	12	High
2022-T Amherst-003	Protect the town's wastewater pump station to the 0.2% annual chance flood.	1	1	1	1	1	1	0	1	1	1	0	1	1	0	12	High
2022-T Amherst-004	Clear debris from Ellicott Creek	1	1	0	0	0	1	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-005	Implement flood mitigation measures along Ransom Creek	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T Amherst-006	Implement flood mitigation measures along Gott Creek	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-T Amherst-007	Protect the BLK Buffalo facility to the 0.2% annual chance flood event.	1	1	1	1	1	1	0	1	0	0	0	1	1	1	10	High
2022-T Amherst-008	Protect the Skinnerville Dam from exposure to the flood hazard.	1	1	1	0	0	0	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-009	Protect Potable water well ID: E2424	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High



Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-010	Protect the Getzville Fire Station and Ellicott Creek Vol. Fire Co., to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-T Amherst-011	There are nine critical facilities located in the town that are vulnerable to the HazMat hazard risk	1	1	0	0	0	1	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-012	Protect critical facilities within the town that are exposed to the earthquake hazard	1	1	1	1	0	0	0	1	1	1	1	1	1	1	11	High
2022-T Amherst-013	Potable Water well located on Transit Road is located within the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-014	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	0	0	10	High
2022-T Amherst-015	Repetitive Loss Properties	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-016	Install flood gauges	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High



Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-017	Develop Urban Water Management Plan	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-018	Complete plans that are under development	1	1	1	1	1	1	1	0	0	0	1	1	1	1	11	High
2022-T Amherst-019	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	1	1	1	1	1	1	0	1	1	1	0	1	0	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.6.9 Action Worksheets

The following action worksheets have been developed by the Town of Amherst to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Amherst Action Worksheet			
Project Name:	Protect the town's wastewater pump station to the 0.2% annual chance flood.		
Project Number:	2022-T Amherst-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	A town wastewater pump station is in the Special Flood Hazard Area. The pump station is vulnerable to the flood hazard. The pump station is in East Amherst on Transit Road, near Lapp Road.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct an engineering study to determine most appropriate measures to protect the town's wastewater pump to the 0.2% annual chance flood event.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Engineer, Town Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new wastewater pump station	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Town of Amherst Action Worksheet		
Project Name:	Protect the town's wastewater pump station to the 0.2% annual chance flood. The pump station is in East Amherst on Transit Road, near Lapp Road.	
Project Number:	2022-T Amherst-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the wastewater pump
Property Protection	1	Project will protect a wastewater pump from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	Town Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Amherst Action Worksheet			
Project Name:	Protect Potable water well ID: E2424		
Project Number:	2022-T Amherst-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	A town potable water well is vulnerable to flooding from the 0.2% annual chance flood.		
Action or Project Intended for Implementation			
Description of the Solution:	Fire Department will ensure that facility is assessed for best mitigation measures to protect against flooding and will implement these measures.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Fire Departments and Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new potable water well	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Town of Amherst Action Worksheet		
Project Name:	Protect Potable water well ID: E2424	
Project Number:	2022-T Amherst-009	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the well
Property Protection	1	Project will protect a well from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 5 years
Agency Champion	1	Town Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



Town of Amherst Action Worksheet			
Project Name:	Potable water well located on Transit Road is located within the SFHA		
Project Number:	2022-T Amherst-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The potable water well is vulnerable to the flood risk due to location within the SFHA.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct an engineering study to determine most appropriate measures to protect the town's well to the 0.2% annual chance flood event.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Fire Departments and Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new potable water well	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Town of Amherst Action Worksheet		
Project Name:	Potable water well located on Transit Road is located within the SFHA	
Project Number:	2022-T Amherst-013	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the well
Property Protection	1	Project will protect a well from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 5 years
Agency Champion	1	Town Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



Town of Amherst Action Worksheet			
Project Name:	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event		
Project Number:	2022-T Amherst-014		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Training Facility to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations and protection of assets at the Amherst Fire Training Facility
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	5 year
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Engineer, Town Fire Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Shutdown the Fire Training Facility	Medium	Loss of facility for training of critical emergency personnel
	Construct new Fire Training Facility outside the flood hazard area	High	Expensive, likely less expensive to mitigate
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Town of Amherst Action Worksheet		
Project Name:	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	
Project Number:	2022-T Amherst-014	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the fire training facility
Property Protection	1	Project will protect the important fire training facility
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	5 year
Agency Champion	1	Town Engineer/Fire Department
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



Town of Amherst Action Worksheet			
Project Name:	Protect the North Amherst Fire Station to the 0.2% annual chance flood level		
Project Number:	2022-T Amherst-019		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The North Amherst Fire Station is in the SFHA, exposed to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility study to determine and implement best action to protect the fire station.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	Estimated Benefits (losses avoided):	Ensures continuity of operations and protection of assets at the Amherst Fire Training Facility
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	\$50,000 estimate	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	5 year
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	North Amherst Fire Company, Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Shutdown the Fire Station	Medium	Loss of emergency response capability
	Construct new fire station outside the flood hazard area	High	Expensive, likely less expensive to mitigate
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Town of Amherst Action Worksheet		
Project Name:	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	
Project Number:	2022-T Amherst-019	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the fire station
Property Protection	1	Project will protect the important fire station
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	3 years
Agency Champion	1	North Amherst Fire Company, Town Board
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



9.7 Village of Angola

This section presents the jurisdictional annex for the Village of Angola. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Angola’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.7.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Angola’s hazard mitigation plan primary and alternate points of contact. The Village of Angola followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: The Clerk-Treasurer, the Mayor’s Office, Code Enforcement, and the Department of Public Works. The Clerk-Treasurer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.7-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mayor Howard Frawley Address: 41 Commercial St Angola, NY 14006 Email: angolamayor@verizon.net	Name/Title: Nicole Milks, Clerk-Treasurer Address: 41 Commercial St Angola, NY 14006 Phone Number: 716-549-1126 Email: angolaclerk@verizon.net
NFIP Floodplain Administrator	
Name/Title: Phil Tremblay, Code Enforcement Officer Address: 41 Commercial St Angola, NY 14006 Phone Number: 716-548-2372	

9.7.2 Municipal Profile

The Village of Angola has a long rich history as a waterfront and railroad community. The village is one square mile in size is entirely located within the Town of Evans and is approximately 22 miles south of downtown Buffalo.

In 1804, Joel Harvey was the first white person to settle in Angola on the west side of Eighteen Mile Creek. Immigration increased significantly after the War of 1812. Eighteen Mile Creek and other waterbodies spurred development of grist and sawmills which stimulated development. The arrival of a railroad in 1852 was another economic boost. The village incorporated in 1873. During the 1900’s shifts from railroads to personal automobiles resulted in a decline in village commercial activity, though seasonal residences continued to thrive.



The latter half of the 20th Century saw several major employers in the village shut down. In June 2004, an attempt to dissolve the village was unsuccessful (Village of Angola website 2020).

According to the U.S. Census, the 2010 population for the Village of Angola was 2,127. The estimated 2019 population was 2,373, a 12 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.4 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.7.3 Jurisdictional Capability Assessment and Integration

The Village of Angola performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.7.3). The Village of Angola’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Angola. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.7-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	1974 Village Code	Local	Mayor
Comments: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the “2015 I-Codes”), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	1974 Village Code	Local	Mayor
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken “in accord with a well-considered plan” ¹¹ or “in accordance with a comprehensive plan.” ¹² Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general “comprehensive plan”					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level					
Subdivision Ordinance	Yes	Yes	1974 Village Code	Local	Mayor
Comment: Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified in a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).					
Stormwater Management Ordinance	Yes	Yes	2007 Village Code	Local	Mayor
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System (SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department.					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	No	-	-	-	-
Comment: None					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 108 - 2021	Local	Code Enforcement
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. <ul style="list-style-type: none"> It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation. 					
Municipal Separate Storm Sewer System (MS4)	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Evans/ Village of Angola Comprehensive Plan Update, 2013	Local	Supervisor/Mayor
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level.					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Angola to oversee and track development.

Table 9.7-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	SFHA (100-year floodplain)
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Angola and their current responsibilities which contribute to hazard mitigation.

Table 9.7-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	Yes	No Comment
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The village Building Department oversees Building Permits, Zoning Board of Appeals applications, rental permits for rental units, and operating permits for the use of manufacturing, storing, or handling hazardous materials and high-occupancy buildings.
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	The Village of Angola has a Volunteer Fire Department available, and uses shared services with the Town of Evnas Police Department.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	No Comment
Mutual aid agreements	Yes	Town of Evans
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	No Comment
Engineers or professionals trained in building or infrastructure construction practices	Yes	No Comment
Planners or engineers with an understanding of natural hazards	Yes	No Comment
Staff with expertise or training in benefit/cost analysis	Yes	No Comment
Professionals trained in conducting damage assessments	Yes	No Comment
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Angola.

Table 9.7-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Angola.

Table 9.7-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk-Treasurer
Personnel skilled or trained in website development	Yes	Clerk-Treasurer
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Village of Angola Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Village of Angola Facebook
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	Unknown	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Angola.

Table 9.7-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.7-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.7.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Phil Tremblay, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Angola.

Table 9.7-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Angola	1	18	\$83,162	5	0

Source: FEMA, 2019





Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Village of Angola has minimal areas prone to flooding and does not keep a list of properties that have been damaged by flooding. The flood hazard maps adequately address risk within the village. There are currently no RiskMAP projects underway.

NFIP Compliance

The Village Code Enforcement Officer is responsible for floodplain management. There are no CFMs on staff within the jurisdiction and the village does not need additional assistance or training to support floodplain management. The floodplain management program meets minimum requirements, and was last updated on May 10, 2021. The last CAC visit was on June 20, 2007, and the CAV was conducted on April 1, 1983. There are no outstanding compliance issues.

9.7.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Angola has identified the following routes and procedures to evacuate residents prior to and during an event.

- South Main Street Residents shall take South Main Street to Route 20
- Residents on the north side of the railroad tracks shall take Commercial Street to Route 5; Lake Street to Route 5; or North Main Street to Beach Road

Sheltering

The Village of Angola has identified the following designated emergency shelters within the Village.

Table 9.7-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
MPB	22 Prospect	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Fire Station 2	151 S. Main	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
JT Waugh School	100 High St.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Angola has identified the following sites suitable for placing temporary housing units.



Table 9.7-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Lake Shore Schools Athletic Fields	100 High St.	Unknown	Unknown	Unknown	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Angola has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.7-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify Permanent Housing Locations. See Mitigation Action 2022-V. Angola-#001.					

9.7.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.7-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.7-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	1	0	0	0	2	0	0	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	1	0	0	0	2	0	0	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												



Type of Development	2015	2016	2017	2018	2019	2020
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.7.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Angola’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Angola has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.7-1. Village of Angola Hazard Area Extent and Location Map 1

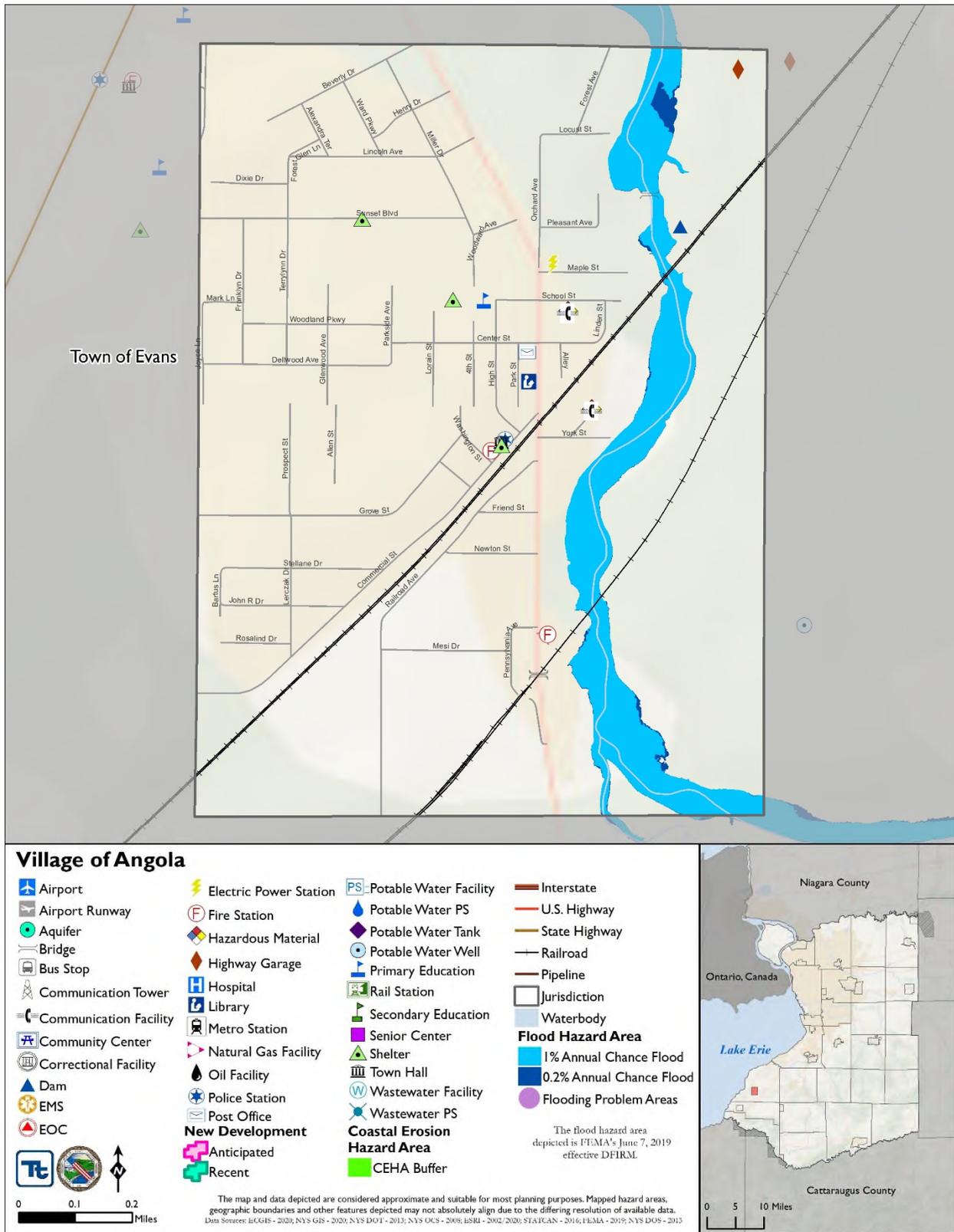




Figure 9.7-2. Village of Angola Hazard Area Extent and Location Map 2

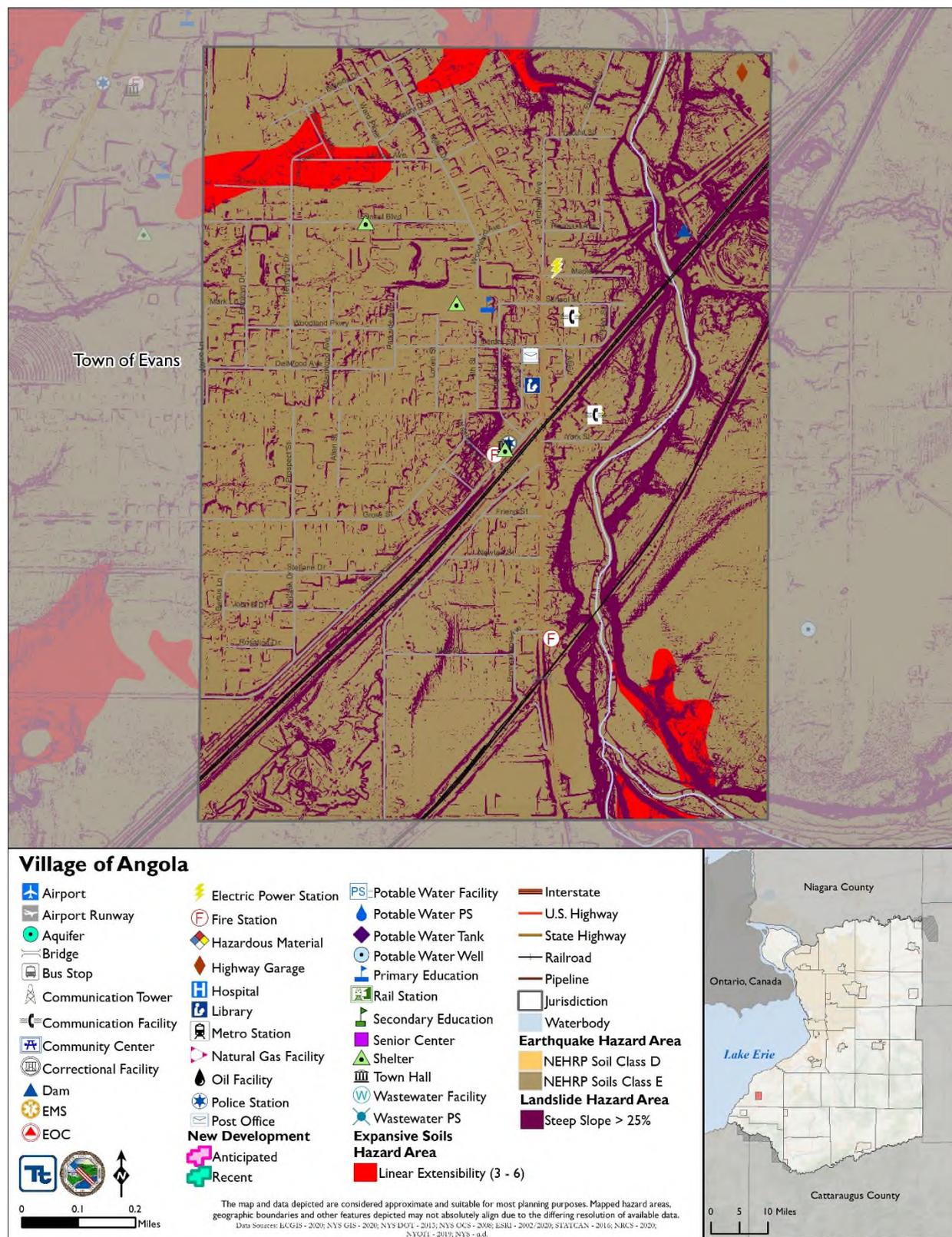
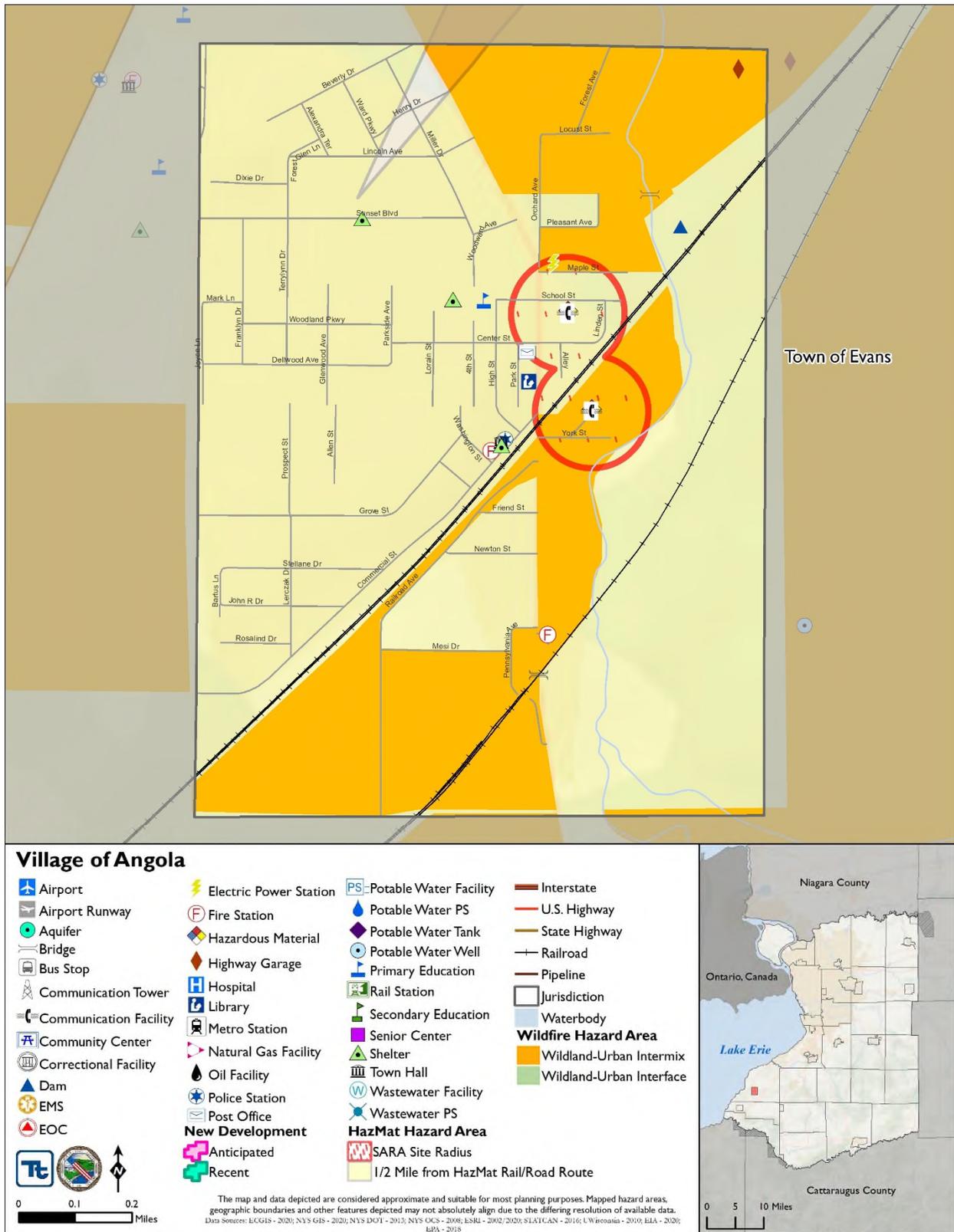




Figure 9.7-3. Village of Angola Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Angola’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.7-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.7-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	Seiche	No	A strong low-pressure system with persistent winds produced a seiche on Lake Erie. Water levels rose nearly six feet in a few hours with the water level crest in Buffalo reaching 9.15 feet.	Flooding was reported in Angola along Route 5. Route 5 was temporarily closed in areas multiple times due to high water and debris on the roadway.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 25 inches of snow was reported in Angola. The greatest snow accumulations of the event occurred in Angola.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or more and school busses were unable to bring students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	Four to five inches of snow per hour fell in Angola, bringing traffic to a standstill. Plows were unable to keep up with clearing the snow and people abandoned their cars on the New York Thruway and local roads. Total snowfall report in Angola amounted to 19 inches.
October 27- November 1, 2019	Lakeshore Flooding and High Winds	DR-4472-NY	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	More than 500 NYSEG customers lost power in Evans and Angola.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable





Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Angola’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Angola. The Village of Angola has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village indicated that an earthquake is unlikely in the area, and reduced the calculated risk to being Medium.

Table 9.7-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.





Table 9.7-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of Angola’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Angola has identified the following vulnerabilities within their community:

- The village has expressed interest in developing a plan for evacuation in the event of a train derailment.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- The availability of cleaning supplies, personal protective equipment, medical professionals, and having a Contingency/back-up plan for staffing has been an emerging issue for schools amid the Covid-19 Pandemic.

9.7.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.7-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
1	N/A	Flooding	Highway Department	Maintenance of creek bed to prevent flooding	Ongoing Capability	Cost	-	1. Complete 2. 3. Discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2		All Hazards	Fire Department/ Disaster Coordinator	Program to educate residents on what to do during and after a disaster	In Progress	Cost	-	1. Yes 2. To include in 2022 HMP to include preparedness information on website and notify media outlets. See Mitigation Action #003 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3		Winter Storms	Code Enforcement	Review and Revise the building codes for snow loads	No Progress	Cost	-	To include in 2022 HMP. See Mitigation Action #004
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4		Winter, Severe, Wind, and Ice Storms	Code Enforcement	Work with the electric company on trimming trees to reduce power line failures throughout the Village	Complete	Cost	Low	1. Complete 2. 3. Discontinue.
						Level of Protection	High	
						Damages Avoided; Evidence of Success	Yes	
5		Flooding	Code Enforcement	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Complete	Cost	Low	1. Complete 2. 3. Discontinue.
						Level of Protection	Medium	
						Damages Avoided; Evidence of Success	Yes	
6		Flooding	Code Enforcement	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Complete	Cost	Low	1.Complete 2. 3. Discontinue.
						Level of Protection	High	
						Damages Avoided;	Yes	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Evidence of Success		
7		Flooding	Code Enforcement	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	No Progress	Cost	-	1. Discontinue 2. 3. Floodplain risk to the Village is minimal.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Angola has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Disaster Coordinator/Emergency Manager organized evacuation efforts and emergency response plans for residents on how to evacuate the village in event of a train disaster/derailment.
- The DPW & Water Department provides notification of need to boil water and distributes water in the event of contamination.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Angola participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.7-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X	X	X	X			
Cyber Attack	X			X	X	X	X			
Earthquake	X			X	X	X	X			
Expansive Soils	X			X	X	X	X			
Extreme Temperature	X			X	X	X	X			
Flood	X		X	X	X	X	X	X		
Hazardous Materials	X			X	X	X	X			
Landslide	X			X	X	X	X			
Pandemic	X			X	X	X	X			
Severe Storm	X		X	X	X	X	X	X		
Severe Winter Storm	X		X	X	X	X	X	X		
Utility Failure	X			X	X	X	X			
Wildfire	X			X	X	X	X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.7-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Angola would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.7-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Angola-001	Permanent Housing Location Identification	1, 2, 3	All Hazards	<p>Problem: The village does not keep a buildable land inventory with locations to permanently relocate homes damaged by hazard events/flooding.</p>	No	No	Short	Planning Board/Building Department with support from County GIS and Planning	Low	High; Ensures land is available for permanent building relocation	Municipal Budget	Medium	LPR	PR, PP
				<p>Solution: The Village of Angola Planning Board and Building Department will work with County GIS and Planning to develop a list of municipal-owned land not exposed to hazard areas to keep as open space and as an opportunity to relocate and properties/buildings experiencing losses from repetitive hazard/flooding events. This buildable land inventory will be maintained on a regular basis as flood maps and new data and information is gathered.</p>										
2022-V. Angola-002	RL Homeowner Outreach	1, 2, 3	Flood	<p>Problem: There are 5 RL properties within the village.</p>	No	None	6 months	Floodplain Administrator	Low	High	City Budget	High	EAP	PI
				<p>Solution: The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>										
2022-V.	Resident Disaster Education	1, 2, 3	All Hazards	<p>Problem: The village does not have any personal disaster preparedness information</p>	No	No	Short;	Village Clerk-Treasurer	Low	High	Municipal Budget	High	EAP	PI



Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Angola-003				<p>available on the municipal website.</p> <p>Solution: The village will support and provide programming for residents about personal disaster preparedness and actions to take before, during, and after disasters on the Village Website and social media. Information from sources such as FEMA, New York State DHSES, the American Red Cross, and others should be leveraged to provide comprehensive educational resources about disaster readiness. The Village will support any County-led courses or programs for residents to receive additional disaster information.</p>			To being immediately							
2022-V. Angola-004	Building Code Revision	1, 2	Severe Winter Storm	<p>Problem: The Village Building Code is outdated and needs to account for heavy snow loads on roofs.</p> <p>Solution: The Village Code Enforcement Department will update the building code to account for heavier weights of snow on roofs to prevent property damages and losses.</p>	No	No	Short	Village Code Enforcement	Low	High	Municipal Budget	High	LPR	PR
2022-V. Angola-005	Emergency Management Ordinance	1, 2, 3	All Hazards	<p>Problem: The village does not have a specific Emergency Management Ordinance.</p> <p>Solution: The Disaster Coordinator will work with the village government to develop an Emergency Management Ordinance to include as part of</p>	No	No	Short	Disaster Coordinator and Village Board	Low	High	Municipal Budget	High	LPR	PR



Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the municipal code. The Ordinance will include a detailed plan for the deployment of emergency services before, during, and after a hazard event, and will include specifics about mitigation, preparedness, response, and recovery.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ♦ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.





- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.7-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Angola-001	Permanent Housing Location Identification	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-V. Angola-002	RL Property Outreach	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
2022-V. Angola-003	Resident Disaster Education	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-V. Angola-004	Building Code Revision	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-V. Angola-005	Emergency Management Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.7.9 Action Worksheets

The following action worksheets have been developed by the Village of Angola to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Resident Disaster Education		
Project Number:	2022-V. Angola-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The village does not have any personal disaster preparedness information available on the municipal website.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will support and provide programming for residents about personal disaster preparedness and actions to take before, during, and after disasters on the Village Website and social media. Information from sources such as FEMA, New York State DHSES, the American Red Cross, and others should be leveraged to provide comprehensive educational resources about disaster readiness. The Village will support any County-led courses or programs for residents to receive additional disaster information.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High
Useful Life:	N/A	Goals Met:	1, 2, 3
Estimated Cost:	Low	Mitigation Action Type:	EAP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	To begin immediately
Estimated Time Required for Project Implementation:	To begin immediately	Potential Funding Sources:	Municipal Budget
Responsible Organization:	Village Clerk-Treasurer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Send information by mail	\$1,000	Not cost effective, cannot be updated easily
	Call residents individually to warn about hazard events	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Resident Disaster Education	
Project Number:	2022-V. Angola-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provides valuable information to residents
Property Protection	0	
Cost-Effectiveness	1	Low to no costs
Technical	1	Clerk can update website
Political	1	Village supports
Legal	1	
Fiscal	1	Low costs
Environmental	1	
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Building Code Revision		
Project Number:	2022-V. Angola-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Winter Storm		
Description of the Problem:	The Village Building Code is outdated and needs to account for heavy snow loads on roofs.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Code Enforcement Department will update the building code to account for heavier weights of snow on roofs to prevent property damages and losses.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures property protection and aligns with state requirements
Useful Life:	10 years	Goals Met:	1, 2
Estimated Cost:	Low, staff time	Mitigation Action Type:	LPR
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	Municipal Budget
Responsible Organization:	Village Code Enforcement	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Eliminate Building Code/Standards	N/A	Not feasible, State Requirement
	Re-write entire code	N/A	Just an update of existing code is needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Building Code Revision	
Project Number:	2022-V. Angola-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures building safety
Property Protection	1	
Cost-Effectiveness	1	Low to no cost
Technical	1	
Political	1	Village supports
Legal	1	Village has jurisdiction
Fiscal	1	Low to no cost
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	13	
Priority (High/Med/Low)	High	



9.8 Town of Aurora

This section presents the jurisdictional annex for the Town of Aurora. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Aurora’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.8.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Aurora’s hazard mitigation plan primary and alternate points of contact. The Town of Aurora followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: clerk, engineer, building inspector, and disaster preparedness coordinator. The Clerk represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.8-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Bach/ Supervisor Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: 716-652-7590 Email: supervisor@townofaurora.com	Name/Title: Elizabeth Cassidy/ Code Enforcement Officer Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: (716) 652-7591 Email: building@townofaurora.com
NFIP Floodplain Administrator	
Name/Title: Elizabeth Cassidy/ Code Enforcement Officer Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: (716) 652-7591 Email: building@townofaurora.com	

9.8.2 Municipal Profile

The Town of Aurora was founded in 1818, The town is 36 square miles in size and includes the Village of East Aurora, plus the hamlets of Jewettville, Griffins Mills, West Falls and a portion of South Wales. The town is part of Buffalo’s “Southtowns” and is bordered on the north by the Town of Elma, on the east by the Town of Wales, on the south by the Town of Colden and on the west by the Town of Orchard Park. US Route 20A and New York State Route 240 are important transportation route through the southwest part of the town (Town of Aurora 2021).

One of the town’s earliest and most prominent settlers was a young Millard Fillmore; the President’s home is a National Historic Landmark. The town was a well-known center of horse racing in the late 1800s (Town of Aurora 2021). The town remains predominately rural in nature. Farming, once the predominant land use in the





region, has given way to open land and rural residential growth. Some scattered small-scale commercial and convenience retail uses have developed in the more rural areas of the town (Regional Comprehensive Plan, 2012).

According to the U.S. Census, the 2010 population for the Town of Aurora was 7,546. The estimated 2019 population was 7,599, a 0.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.8.3 Jurisdictional Capability Assessment and Integration

The Town of Aurora performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.8.3). The Town of Aurora’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Aurora. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.8-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	2020 NYS Building	Local	Code Enforcement
<p>Comment: The Town of Aurora Code Enforcement Officer is delegated the authority to issue building permits under the circumstances described in § 280-a of the Town Law, provided that the following conditions are met by each applicant:</p> <p>A. For ingress and egress, each applicant shall furnish proof of a fifty-foot permanent easement or right-of-way or title to an area at least 50 feet in width for ingress and egress, extending from the public street or highway to the building. [Amended 1-11-2010 by L.L. No. 1-2010]</p> <p>B. The front yard of the applicant's lot shall be that portion facing the public highway; and if more than one highway exists, the Code Enforcement Officer shall determine the front of the lot using the Zoning Map[1] and the Town records as a guide.</p> <p>C. The applicant shall install a culvert of a type approved by the Town Highway Superintendent.</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>D. Installation of culverts and excavation and backfill of pipe trenches shall be in accordance with the Standard Specifications and Details for Materials and Construction of the Town of Aurora.</i></p> <p><i>E. The applicant shall conform to all other zoning requirements as set forth in Chapter 116, Zoning, and the Table of District Regulations.</i></p>					
Zoning Code	Yes	No	Chapter 116 of Aurora Town Code	Local	Code Enforcement
<p><i>Comment: The zoning ordinance has the following guidance for municipal development. 1) Buildings may be erected or substantially altered in any area depicted as a floodway or special flood hazard area. 2) Future off-street parking areas must have adequate room for sanitation, snow removal, emergency and other public service vehicles. 3) Wind energy conservation systems shall provide a contour/topography map of the property and adjacent parcels of sufficient scale as to clearly indicate appropriate drainage and erosion impact on and off site as well as jurisdictional wetlands. 4) The wind energy conservation system applicant shall provide a certificate from a qualified licensed professional engineer certifying that the tower and its foundation meet applicable structural safety standards, including but not limited to wind loading and seismic effects due to soil conditions.</i></p>					
Subdivision Ordinance	Yes	No	Chapter 99 of Aurora Town Code	Local	Town Board
<p><i>Comment: 1) Sketch plan to include data showing how development may impact an adjoining property, the availability of utilities, the effect on drainage systems, natural watercourses, and other environmental concerns. 2) Where a subdivision or open development area is traversed by a watercourse, drainage way, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width or construction, or both, as will be adequate for the purpose. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard. 4) Surface water retention facilities shall be developed where required in order that the rate of stormwater runoff after construction is no greater than the rate of runoff prior to construction.</i></p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 96 of Aurora Town Code	Local	Stormwater Management Officer
<p><i>Comment: Stormwater Management Ordinance states the following:</i></p> <p><i>1) At a minimum, a development's site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the land development activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and the location(s) of the stormwater discharge(s). 2) A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff.</i></p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p><i>Comment:</i></p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p><i>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	Yes	-	-	-
<p><i>Comment:</i></p>					
Site Plan Review	Yes	No	Chapter 95 Aurora Town Code	Local	Planning Board
<p><i>Comment: 1) An applicant's site plan will include the following: legal data, impact on the environs, natural features, existing man-made features, proposed development, impact on stormwater pollution, and other information or materials. If a stormwater pollution prevention plan (SWPPP) is submitted pursuant to § 95-4B(6) of this chapter, such SWPPP shall be considered by the Town Board, Planning Board and others as part of an analysis of an applicant's site plan, and the site plan and SWPPP shall not be approved unless they comply with the performance and design criteria and standards in Chapter 96, Stormwater Management, of the Code. 2) Topographical features, including a map showing existing contour intervals of no more than five feet. Two-foot contour intervals will be required if the topography is relatively flat. Areas of steep slopes should be delineated as necessary. 3) Hydrologic features, which should include drainage and natural runoff patterns, flood zones, noted wetlands, vegetative cover and average depth to groundwater.</i></p>					
Environmental Protection Ordinance	No	Yes	-	-	-
<p><i>Comment:</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 68 of the Aurora Town Code	Local	Planning Board/ Code Enforcement
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <p><i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i></p> <p><i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i></p> <p><i>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i></p> <p><i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</i></p> <p><i>E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i></p> <p><i>F. Qualify and maintain for participation in the National Flood Insurance Program.</i></p> <p><i>*BFE+2 feet for all construction in the SFHA (residential and non-residential)</i></p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 96 of Aurora Town Code	Local	Town Highway Department
<p>Comment: <i>The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 97-1A of this chapter. This chapter seeks to meet those purposes by achieving the following objectives:</i></p> <p><i>(1) Meet the requirements of Minimum Measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised.</i></p> <p><i>(2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01, or as amended or revised.</i></p> <p><i>(3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.</i></p> <p><i>(4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality.</i></p> <p><i>(5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable.</i></p> <p><i>(6) Reduce stormwater runoff rates and volumes, soil erosion and non-point-source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.</i></p>					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	Yes	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: <i>The plan was drafted but not adopted.</i>					



Section 9.8: Town of Aurora

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	Yes	No	Open Space Plan 2008	Local	Town Board/Bldg Dept
Comment: <i>The mission of the open space committee is to inventory, evaluate and prioritize the Town of Aurora's open space resources and work with the community to develop and promote a plan for the protection of these resources. The plan is meant to add information to municipal planning process to encourage strategic development to promote sustainability, natural safety, and community resilience.</i>					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment: <i>The plan was drafted but not adopted.</i>					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism)	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
plan, business development plan, etc.)					
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Operations Plan	Local	Town Emergency Office
Comment: <i>The mission of the plan and emergency management office is to provide up-to-date communications to Town of Aurora residents during an emergency to protect lives and property.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Aurora to oversee and track development.

Table 9.8-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town Board approval
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits are required.
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Substantial fallow agricultural land throughout the Town is available for development.



Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Aurora and their current responsibilities which contribute to hazard mitigation.

Table 9.8-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Appointed volunteer Board – The Planning Board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development. This board also makes recommendations regarding proposed changes to the ordinance. Zoning and development issues are handled through the Building and Code Enforcement Department.
Zoning Board of Appeals	Yes	Appointed volunteer board – The Zoning Board of Appeals hears and deliberates applications for variances to the town ordinances. Applications to the Zoning Board of Appeals are handled through the Building and Code Enforcement Office.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Duty of Planning Bd. – The Planning Board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development. This board also makes recommendations regarding proposed changes to the ordinance. Zoning and development issues are handled through the Building and Code Enforcement Department.
Open Space Board/Committee	Yes	Appointed volunteer board - The Town Board created the Town of Aurora Open Space Committee in January 2007. The mission of the committee is to inventory, evaluate and prioritize the Town of Aurora’s open space resources and work with the community to develop and promote a plan for the protection of these resources.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department
Construction/Building/Code Enforcement Department	Yes	Building & Code Enforcement - provide all building and code enforcement services to the town and village. They ensure safety and code compliance through the implementation and enforcement of all local, state and federal codes, regulations and zoning ordinances.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Part of Highway Dept. - The Highway Department maintains 62 miles of town roads. Generally roads are repaired and paved in the spring and summer seasons. In the winter the Highway Department plows and salts all town roads and approximately 70 miles of Erie County roads per contract with the county.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<p>In the spring, summer and fall, our highway crews are out mowing roadsides, trimming and cutting down dead trees, cleaning out our ditches, installing new culvert pipe when needed, chipping branches and picking up chunk wood around town. The department does not pick up brush from land clearing and tree work done by private contractors. Four times per year crews pick up junk tires and car batteries and we have one electronics recycling pick up for residents (outside of the village) in the fall. Leaf pick up begins after Columbus Day. For more information on garbage and recycling see below.</p> <p>In May 2020 the Town of Aurora entered into a contract with the Town of Orchard Park to provide mulch and compost to Town of Aurora residents at the same rate as Orchard Park residents.</p> <p>Sewer districts in the Town of Aurora are handled by the Erie County Sewer Authority.</p>
Mutual aid agreements	Yes	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering firm on retainer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering firm on retainer
Planners or engineers with an understanding of natural hazards	Yes	Engineering firm on retainer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Dept. Personnel - All Town and Village building and code enforcement services are handled by this office. The purpose of the department is to ensure safety and code compliance through the implementation and enforcement of all local, state and federal codes, regulations and zoning ordinances.
Surveyor(s)	No	-
Emergency Manager	Yes	Appointed Emergency Management Director and Assistant
Grant writer(s)	Yes	Town Clerk and outside contractor – has various capabilities.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)		-

Fiscal Capability

The table below summarizes financial resources available to the Town of Aurora.

Table 9.8-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes*





Financial Resources	Accessible or Eligible to Use? (Yes/No)
Capital improvements project funding	Yes*
Authority to levy taxes for specific purposes	Yes*
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes*
Incur debt through special tax bonds	Yes*
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes*
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

* All would be administered by the Town Board and/or the Town Supervisor

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Aurora.

Table 9.8-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	None	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Aurora.

Table 9.8-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-



NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.8-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Low
Cyber Attack	Medium
Earthquake	Low
Expansive Soils	Medium
Extreme Temperature	High
Flood	Medium
Hazardous Materials	High
Landslide	High
Pandemic	High
Severe Storm	High
Severe Winter Storm	High
Utility Failure	High
Wildfire	Medium

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.8.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Elizabeth Cassidy, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Aurora.

Table 9.8-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Aurora	12	12	\$96,661	7	1

Source: July and September, 2021 NFIP Data.





RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Flood prone areas in the Town of Aurora include properties along Cazenovia Creek, East Branch South of the Village of East Aurora, Municipal boundary and Cazenovia Creek, and West branch south of West Falls. There is no list of properties that have been damaged, based on municipal records.

The town does not maintain a list of property owners interested in flood mitigation at this time and does not have any RiskMAP project underway. The town has not had any substantial damage determinations and has not mitigated any properties within the jurisdiction. Based on municipal knowledge, the existing flood maps adequately address the flood risk in the jurisdiction.

NFIP Compliance

The town of Aurora Code Enforcement office is responsible for NFIP compliance and does not have any certified floodplain managers on staff. The department also does not have adequate resources to determine future damage due to climate change and would need occasional training in basic floodplain management.

The municipal officer provides permit review as NFIP administration services and determines substantial improvement determination based on plan and code review of project.

The town does not have any barriers to running an effective NFIP program and does not have any NFIP compliance violations. The town's most recent Community Assistance Visit was March 18, 2008 and had a CAC visit on 05/04/2005 and is due for another visit soon. The local law number for the local flood damage prevention ordinance is Chapter 68 of the town Code and was last amended on April 8, 2019. Finally, the town does not exceed the floodplain requirements set by FEMA and does not have any other plans or ordinances that support the NFIP program. The town is not interested in participating in the FEMA CRS program due to their lack of knowledge of the program.

9.8.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability. Information for this section was provided by the town clerk with input from the engineer, building inspector, and disaster preparedness coordinator.

The Emergency Operations Center is available at the East Aurora Fire Department, 33 Center Street, East Aurora, New York 14052. The (alternate) Emergency Operations Center is located at the Town of Aurora Parks and Recreation Maintenance Facility Offices, 251 Quaker Rd. East Aurora New York 14052. Other EOC facilities will be utilized as necessary as determined by size, severity, and relocation due to disaster damage.

The following core functions shall be addressed prior to an emergency with warning or during an emergency without warning, to an incident or event: I. Direction and control II. Communications III. Warning IV. Emergency public information V. Evacuation VI. Mass care VII. Health and medical services VIII. Emergency response by local fire, rescue, EMS, and police IX. Resource management X. Protective measures.

The Emergency operations center (EOC) will prioritize resource acquisition based on the following criteria:

- Provide warning and support evacuations
- Support dissemination of emergency public information
- Reestablish communications to assist response actions



- Reestablish access to impacted areas and facilities
- Establishment of search and rescue operations, transport of victims, and medical care
- Support mass care operations including food, water, shelter
- Restoration of critical infrastructure
- Protection of public property and environment
- Initiation of short and long-term recovery programs

All response and recovery activities are detailed in department/division procedures and SOPs, and appropriate state and federal recovery guidelines. The process for collecting and analyzing data, developing objectives and action plans, and documenting critical incident information in the EOC, is guided by the Information and planning SOP.

Evacuation Routes and Procedures

The town would rely on the local Police, County Sheriffs, and the three volunteer fire companies, along with local, County, State and Federal emergency personnel to coordinate evacuation routes depending on the event/situation. There are several main transportation routes in the town, including but not limited to state roads: Route 20A, Route 400, Route 16; county roads: Mill Road, Center Street, Bowen Road, Porterville Road and Girdle Road.

Sheltering

The Town of Aurora has identified the following designated emergency shelters within the town.

Table 9.8-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Aurora Senior Center	101 King St., E. Aurora	100	No	Yes	Yes	None – local FD or EMT would be called	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Aurora has identified the following sites suitable for placing temporary housing units.

Table 9.8-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Parking lot/fields	1003 Center Street	Unknown	Parking lot/fields	Electric, Gas, Water	No	EAUF School District
Park	Emery Road east of Underhill	Unknown	Park	Electric, Gas, Water	No	Erie County



Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Baseball fields	300 Gleed Avenue	Unknown	Baseball fields	Electric, Gas, Water	No	Town of Aurora
Park	736 Warren Drive	Unknown	Park	Electric, Gas, Water	No	Town of Aurora
Park	401 West Falls Road	Unknown	Park	Electric, Gas, Water	No	Town of Aurora
Park	Buffalo Road west of village line;	Unknown	Park	Electric, Gas, Water	No	NYS Office of Parks
Park	Knox Road west of village line; south side of road	Unknown	Park	Electric and Gas	No	NYS Office of Parks - managed by Town of Aurora
Field	Girard Avenue at Buffalo Road	Unknown	Field	Electric, Gas, Water	No	Fisher Price Inc./Mattel
Parking lot/field	141 Girard Avenue	Unknown	Parking lot/field	Electric, Gas, Water	No	EAUF School District

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The town would rely on County, State and Federal guidance, along with Red Cross and FEMA guidance, as to where to place temporary and/or permanent housing units in the event of an occurrence that would require these units. The town believes it should not designate a site that is not owned by the town i.e., school grounds, private property, county property or state property. Most of the large tracts of land that would/could accommodate the units are town, county or state parks. Water, gas and electric are available at the road throughout most of the Town of Aurora. Public sewer is available in limited areas that are already developed with residential housing. The location of private septic systems is a function of the Erie County Health Department.

Table 9.8-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
1003 Center St.	1003 Center St.	200 sites	Field	All	None



9.8.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.8-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.8-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	19	0	20	0	19	0	19	0	51	0	31	0
Multi-Family	0	0	1	0	0	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0		0	1	0	0	0	0	0
Total Permits Issued	19	0	21	0	19	0	21	0	51	0	31	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Aurora Mills	Residential	85		Mill Rd/Aurora Mills Dr/Creekstone Dr/ Millstone Dr		Wildfire-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roads		50% complete				
Reed Hill	Res	33		Reed Hill Dr/Creekview Dr		Wildfire-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roads		50% complete				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

** The number of permits noted in the preceding chart do not include permits issued for additions, alterations, fences, accessory structures (ex: porches, pools, etc.); accessory buildings (ex: sheds, garages, etc.)

*** This property could not be geocoded to perform a spatial analysis.

9.8.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Aurora’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are





adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Aurora has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.8-1. Town of Aurora Hazard Area Extent and Location Map 1

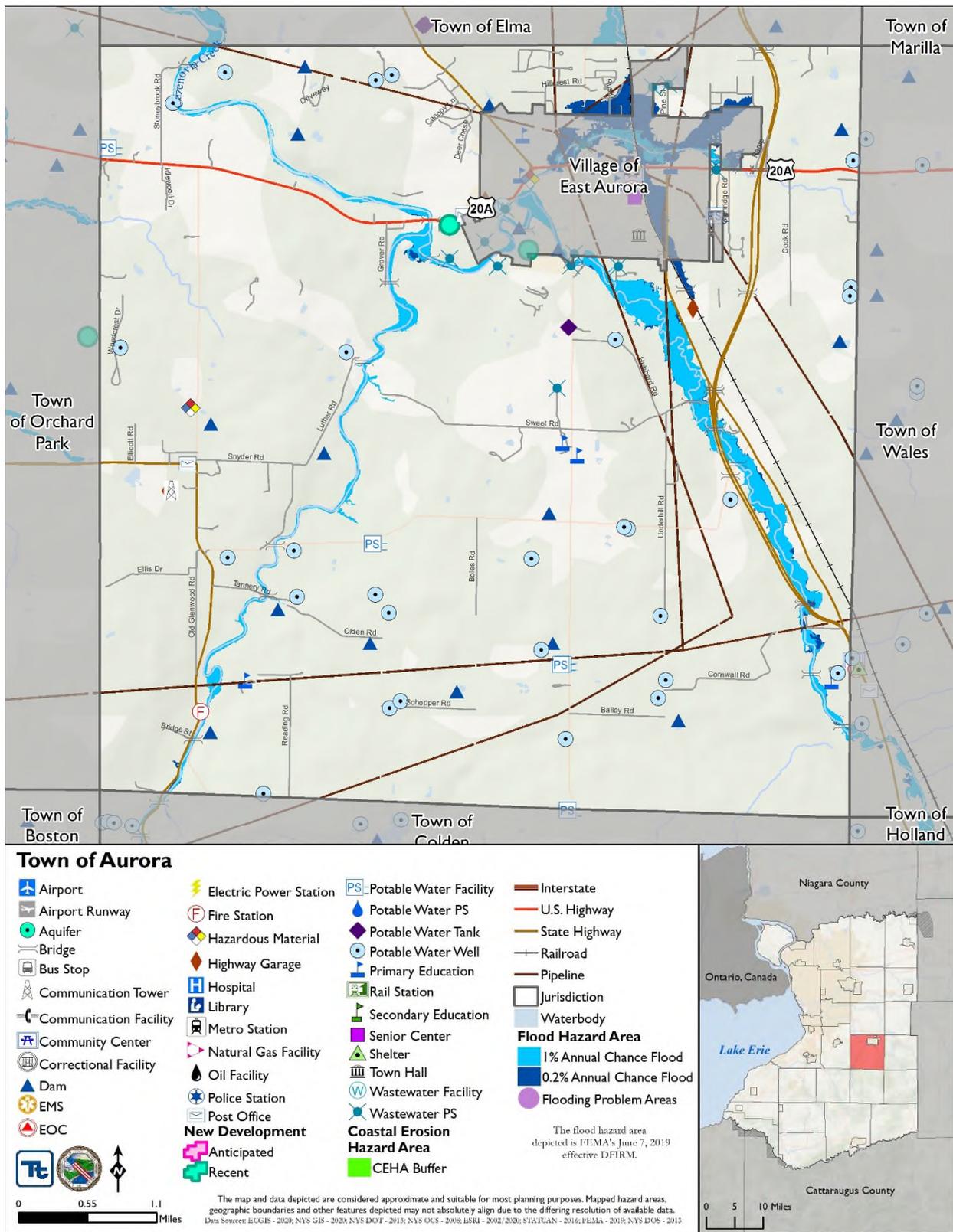




Figure 9.8-2. Town of Aurora Hazard Area Extent and Location Map 2

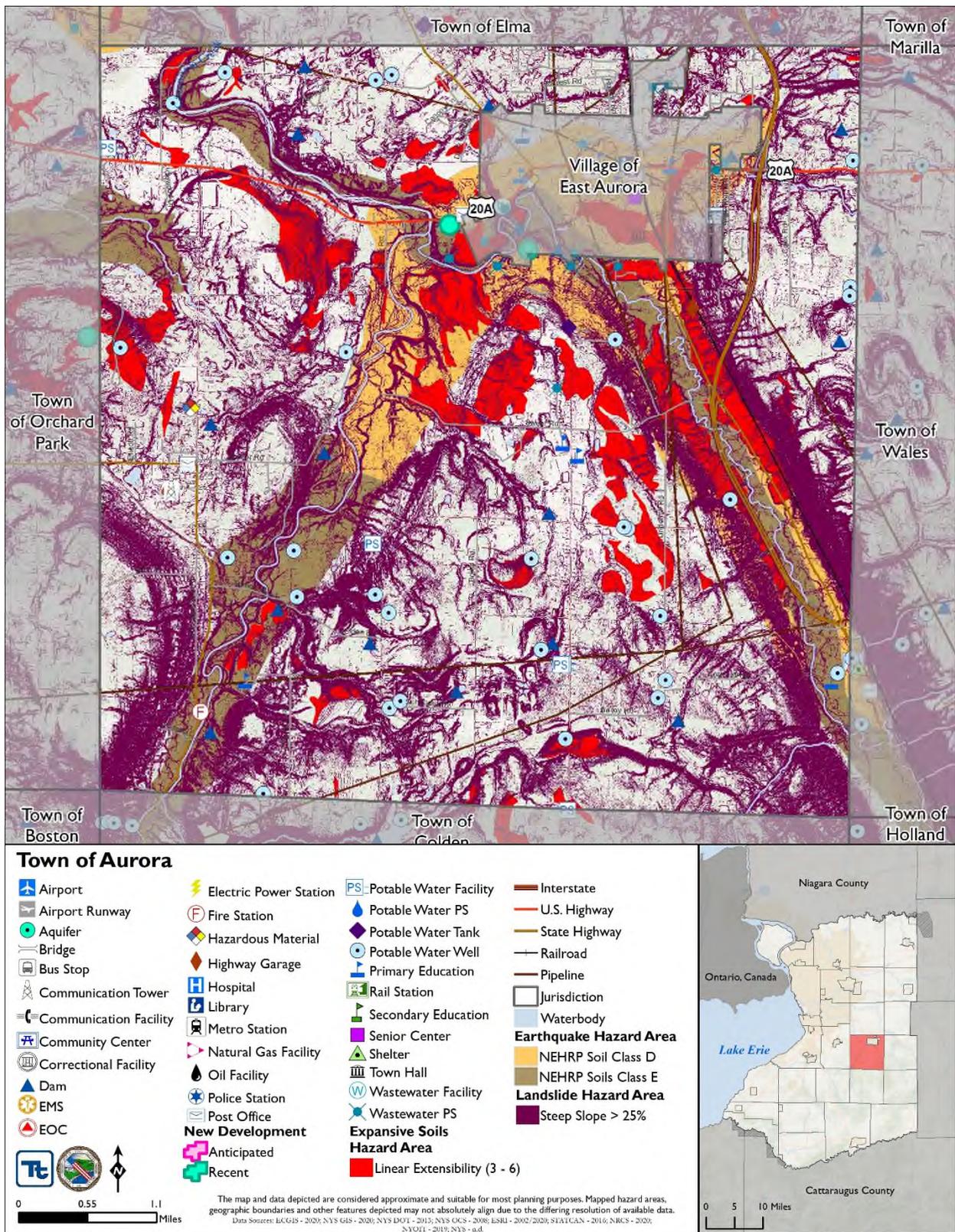
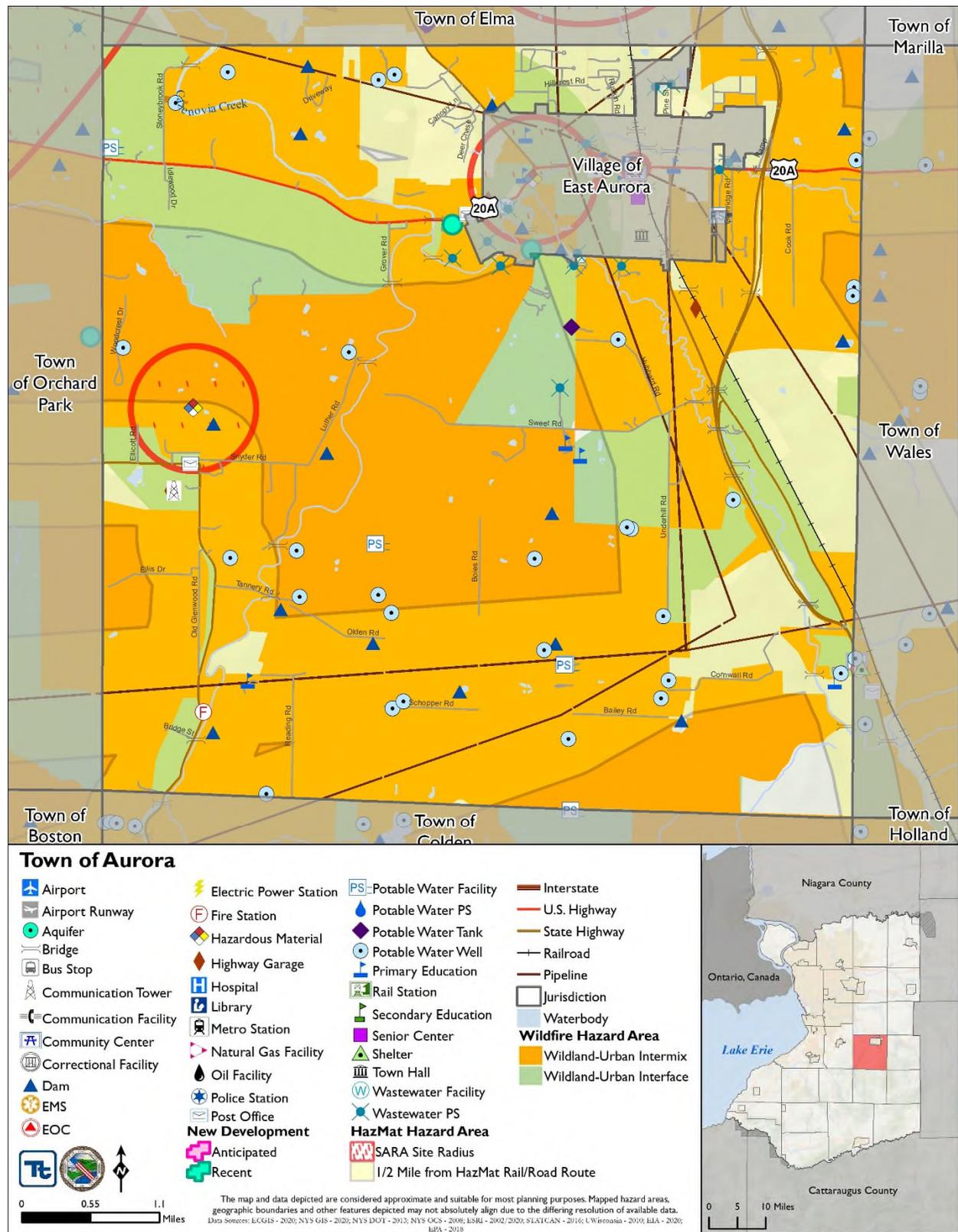




Figure 9.8-3. Town of Aurora Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Aurora’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.8-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.8-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19 - EM-3434	Yes	Pandemic	Businesses closing, social distancing, and multiple deaths across the region.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency





DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Aurora’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Aurora. The Town of Aurora has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- High wind events are occurring on more frequent basis (wind speeds in excess of 50-60 mph) which result in downed trees and power outage.
- Recent replacement of culverts on Tannery Brook and work on stream banks will result in less flooding and ice jam along the stream.
- No changes in Coastal Erosion, Earthquake, Expansive Soils, Extreme Temperatures, Landslides, Tornados, Wave Action, Wildfire, and Winter Storm since the 2015 plan hazard rankings.
- Coastal erosion is not an issue since the town does not have coast. Flood is the highest concern of all hazards. Pandemic is an issue, but town has limited capabilities to prevent this. Severe Storm, Severe Winter storm, are not the highest hazard and thus are ranked lower. Wildfire is not a major issue, while utility failure is a big issue with storms and flood.

Based on the above, the town will re-rank flooding from Low to High, Severe Storm from High to Medium, Severe Winter Storm from High to Medium, and Wildfire from High to Low.

Table 9.8-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	High	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Medium	Medium	Medium	Medium	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.8-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None identified				

Source: FEMA 2021

Identified Issues

After review of the Town of Aurora’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Aurora has identified the following vulnerabilities within their community:

- Weather conditions are a concern. While Lake Erie and Ontario temper the summer weather, it is not unusual for severe summer weather to occur. Severe thunderstorms, heavy rains, downbursts, and occasional tornado watches and warnings. A history of tornados and micro bursts is noted with minor damage. Heavy rains have caused localized flooding in areas around Tannery Brook as previously stated.
- In winter, the path of storms and the proximity of Lake Erie combine to create extreme winter weather conditions.
- Tannery Brook has continuously seen major flooding and properties along the waterbody have and continue to be vulnerable to frequent flooding along the creek, especially the nursing home.
- The Federal Readiness and Emergency Management in Schools (REMS) has guidance on schools to conduct necessary mitigation measures to determine readiness around hazards which is not something the town is participating in at this time.
- The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply.
- The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.



9.8.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.8-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
1	Nursing Home Vulnerability: Revise Emergency Response Plan	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Complete	Low	Unsure	<ol style="list-style-type: none"> Discontinue Project is within the Village of East Aurora.
2	Nursing Home Vulnerability: Mitigate flooding potential along Tannery Brook	Flooding	Not Identified	Emergency Management	No progress	-	-	<ol style="list-style-type: none"> Discontinue Project is within the Village of East Aurora.
3	Nursing Home Vulnerability: Conduct evacuation exercise	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Project is within the Village of East Aurora.
4	Flood Control: Clearing of accumulating debris along Tannery Brook from Pine St to Whaley Ave	Flooding	Not Identified	DPW/Highway	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing
5	Flood Control: Surveil and, as necessary, take immediate action clear the Main St grates for Tannery Brook underpass to prevent destructive erosion of Main St and to prevent inundation flooding of large nursing home.	Flooding	Not Identified	DPW	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Project is within the Village of East Aurora.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
6	Flood Control: Enlarge and reinforce culvert on Benning Road	Flooding	Not Identified	DPW/Highway	No progress	Cost	-	<ol style="list-style-type: none"> Discontinue Benning Road is not in Town of Aurora
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
7	School Vulnerability: Conduct an all-hazards vulnerability study of the eight primary-secondary schools in accordance with the Federal Readiness and Emergency Management in Schools (REMS)	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	<ol style="list-style-type: none"> Include in 2022 HMP 2022-Aurora T-001
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
8	School Vulnerability: Prepare mitigation recommendations for all schools	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
9	Potable Water Infrastructure Protection Plan: Conduct a specific all-hazards vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	No progress	Cost	-	<ol style="list-style-type: none"> Include in 2022 HMP
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
10	Potable Water Infrastructure Protection Plan: Prepare mitigation recommendations from vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
11	Potable Water Infrastructure Protection Plan: Obtain funding for mitigation actions	Water Supply Contamination	Not Identified	DPW/Highway	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Include in 2022 HMP
						Level of Protection	-	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Damages Avoided; Evidence of Success	-	3.
12	Special Needs Population: Utilizing three area CERT/Auxiliary teams analyze the population of the Township to determine all those who will require special services during a major emergency	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
13	Special Needs Populations: Prepare a modern database of the special needs population for input to the Township's GIS	All Hazards	Not Identified	Emergency Management	Choose an item.	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not relevant to town.
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Not Identified	OEM	Complete	Cost	Low	1. Discontinue
						Level of Protection	Unsure	2.
						Damages Avoided; Evidence of Success	Compliance	3. Complete - Local Law based on FEMA regulations adopted by Town Board
15	Designate/install a specific person to be your municipality's Floodplain Administrator.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	Unsure	3. Complete
16	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing Capability



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
17	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	<ol style="list-style-type: none"> Discontinue Complete. Local Law adopted by Town Board
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Compliance	
18	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
19	Very low financial or political incentive to take action given the current fiscal climate	Not Identified	Local Fiscal Climate	Code Enforcement Officer	No progress	Cost	-	<ol style="list-style-type: none"> Discontinue No longer a priority
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Aurora has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- No additional actions identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Aurora participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.8-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood	X	X			X	X			X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X								X
Severe Winter Storm		X								X
Utility Failure		X				X				X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.8-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Aurora would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.8-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Aurora T-001	School Vulnerability	3,4	Flood	<p>Problem: The Federal Readiness and Emergency Management in Schools (REMS) has guidance on schools to conduct necessary mitigation measures to determine readiness around hazards which is not something the town is participating in at this time.</p> <p>Solution: The eight primary schools will conduct a vulnerability assessment to determine the needs and improvement needed to mitigate future hazards and prepare for any natural and man-caused disaster. The study shall propose executable mitigation actions for the school to conduct over the coming years to increase readiness, resiliency, and safety for all school students and staff. The town will then implement the proposed actions.</p>	Yes	No	5 years	School District/ DPW	\$50,000	All	FEMA, HMGP and School Budget	High	LPR	PR
2022-Aurora T-002	Potable Water Infrastructure Protection Plan	1,2	Drought, Utility Failure	<p>Problem: The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply.</p> <p>Solution: The town will conduct a study on specific areas that could have a potable water facility and based on the recommendations of the study, install the potable water facility/ tank in the designated public spaces.</p>	No	No	3 years	Town Board, DPW	High	Stable water supply	HMGP, Municipal Budget	High	SIP	PP



Table 9.8-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Aurora T-003	Install backup power supply at emergency facility	1,2	All Hazards	<p>Problem: The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters.</p> <p>Solution: The facility will conduct an assessment of the existing sites to determine the generator type needed and install 2 generators, one at each site. These generators should have enough capacity to match the demand needed for power of the maximum number of trailers that can fit on the site.</p>	No	No	2 years	OEM, DPW	\$500,000	Emergency preparedness	FEMA HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Aurora T-004	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:





CAV Community Assistance Visit
 CRS Community Rating System
 DPW Department of Public Works
 EHP Environmental Planning and Historic Preservation
 FEMA Federal Emergency Management Agency
 FPA Floodplain Administrator
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program
 OEM Office of Emergency Management

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.8-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Aurora T-001	Federal Readiness and Emergency Management in Schools (REMS)	1	1	1	1	1	1	0	0	1	1	0	1	1	1	11	High
2022-Aurora T-002	Potable Water Infrastructure Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-Aurora T-003	Backup power	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Aurora T-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.8.9 Action Worksheets

The following action worksheets have been developed by the Town of Aurora to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Potable Water Infrastructure Protection Plan		
Project Number:	2022-Aurora T-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Drought, Utility Failure		
Description of the Problem:	The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a study on specific areas that could have a potable water facility and based on the recommendations of the study, install the potable water facility/ tank in the designated public spaces.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Stable water supply
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, Municipal Budget
Responsible Organization:	Town Board, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Capital planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build Emergency Water Supply Tank	Low	Problem continues but emergency supply available – less ideal
	Feasibility study and implementation	High	Will provide best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Potable Water Infrastructure Study	
Project Number:	2022-Aurora T-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	The project is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	
Legal	1	
Fiscal	0	Need funding for implementation
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	Town Board
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Install backup power supply at emergency facility		
Project Number:	2022-Aurora T-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: The facility shall conduct an assessment of the existing sites to determine the generator type needed and install 2 generators, one at each site. These generators should have enough capacity to match the demand needed for power of the maximum number of trailers that can fit on the site.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continuous backup power
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$500,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FEMA HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Highway Department/ Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar generator	High	power supply unreliable
		High	Most reliable source
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Install backup power supply at emergency facility	
Project Number:	2022-Aurora T-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	There is no political opposition
Legal	1	No legal issues
Fiscal	-1	Need funding
Environmental	1	No environmental issues
Social	1	No social issues
Administrative	1	No administrative issues
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	Town Board
Other Community Objectives	1	Safety and economic continuity.
Total	12	
Priority (High/Med/Low)	High	



9.9 Village of Blasdell

This section presents the jurisdictional annex for the Village of Blasdell. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Blasdell’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.9.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Blasdell’s hazard mitigation plan primary and alternate points of contact. The Village of Blasdell followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Village Administrator’s office, and Emergency Management department. The Village Administrator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.9-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Janet L. Plarr, Village Administrator Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-822-1921 Email: voboffice@aol.com	Name/Title: Joseph Fox Sr., Emergency Manager Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-238-4593 Email: jwfox44sr@yahoo.com
NFIP Floodplain Administrator	
Name/Title: Janet L. Plarr, Village Administrator Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-822-1921 Email: voboffice@aol.com	
Additional Contributors	
Name/Title: Roger Gibson, Town of Hamburg Code Enforcement Method of Participation: Provided Data and Information	

9.9.2 Municipal Profile

The Village of Blasdell is in the northern part of the Town of Hamburg and is surrounded on three sides by that town. The City of Lackawanna forms the village’s northern boundary. The village calls itself the "Gateway to the Southtowns" of Erie County. The Village of Blasdell is one square mile in size. US Route 62 and NYS Route 179 run through the village.

The Erie Railroad was extended through the village in the 1870's. Herman Blasdell was the first Station Master for the depot. As there was no name for the area yet and very few residents, the name Blasdell became permanent.





In the early 1890's, village land was divided into streets and lots. The village incorporated in 1898. In 1900, the village established a water system with fire hydrants and, after a disastrous fire in 1903, a Volunteer Fire Department was created. Additional companies were later formed (Village of Blasdell, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Blasdell was 2,553. The estimated 2019 population was 2,645, a 3.6 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.3 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.9.3 Jurisdictional Capability Assessment and Integration

The Village of Blasdell performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.9.3). The Village of Blasdell’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Blasdell. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.9-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Blasdell Village Code	Local	Village Board
Comments: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the “2015 I-Codes”), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	Village of Blasdell	Local	Village Board
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken “in accord with a well-considered plan” ¹¹ or “in accordance with a comprehensive plan.” ¹²					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general “comprehensive plan” requirement. **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level</p>					
Subdivision Ordinance	No	-	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	No	Stormwater Plan	Local	Village of Blasdell
<p>Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System (SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department</p>					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Planning Board	Local	Town of Hamburg
<p>Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a). The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc.</p> <ul style="list-style-type: none"> The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations. 					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Flood plan	Local	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)
<p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program.</p> <ul style="list-style-type: none"> It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation. 					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Master Plan	Local	Village of Blasdell Administration
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	Yes	Yes	Village of Blasdell Capital Improvement Plan	Local	Village Administrator
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Floodplain plan	Local	Village Engineer
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	Floodplain plan	Local	Village of Blasdell
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Response Plan	Local	Emergency Manager
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-



Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None				

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Blasdell to oversee and track development.

Table 9.9-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	No space for future developments
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Blasdell and their current responsibilities which contribute to hazard mitigation.

Table 9.9-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Town of Hamburg
Zoning Board of Adjustments	Yes	Village of Blasdell
Planning Department	Yes	Town of Hamburg
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Town of Hamburg
Public Works/Highway Department	Yes	Village of Blasdell
Construction/Building/Code Enforcement Department	Yes	Town of Hamburg
Emergency Management/Public Safety Department	Yes	Blasdell fire dept
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Red alert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	VOB public works



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mutual aid agreements	Yes	Erie County mutual aid plan
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Village Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Village Engineer
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Village Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Village Engineer
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Village Administrator
Surveyor(s)	No	-
Emergency Manager	Yes	Joseph Fox, Emergency Manager
Grant writer(s)	Yes	Village Administrator
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Blasdell.

Table 9.9-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Blasdell.

Table 9.9-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	No	Contracted out
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Website and news articles
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Red alert
Warning systems for hazard events	Yes	Red alert
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Blasdell.

Table 9.9-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable





Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.9-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.9.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Janet L. Plarr, Village Administrator & Roger Gibson, Town of Hamburg Code Enforcement

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Blasdell.

Table 9.9-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Blasdell	1	25	\$150,556	9	0

Source: FEMA, 2019
 Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Identified areas prone to flooding within the village include an area near the NY-179 Exit ramp and Jeffery Boulevard, as well as properties adjacent to Blasdell Creek. While the village does not maintain a list of property





owners interested in flood mitigation. The flood hazard maps adequately address the flood risk within the village. There have been zero properties mitigated for flood risk within the village. The Village Engineer and Village Administrator make Substantial Damage determinations for properties.

NFIP Compliance

The Village Administrator currently is responsible for floodplain management within the village and is a certified floodplain manager (CFM). The Town of Hamburg Building Department aids the Village with NFIP administration services due to a lack of staff within the village to conduct an effective NFIP program. The village consults with local engineers to determine if proposed developments on existing structures would qualify as a substantial improvement to the structure. There are no compliance issues within the village, and the floodplain management program meets minimum requirements. The Village Flood Damage Prevention Ordinance can be found in Chapter 122 of the Code of the Village of Blasdell, most recently updated in 2019.

9.9.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Blasdell has identified the following routes and procedures to evacuate residents prior to and during an event:

- County Road Lake Ave which traverses the village from East to West.
- US Route 62 which traverses the village from North to South.

Sheltering

The Village of Blasdell has identified the following designated emergency shelters within the village.

Table 9.9-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with the county to identify Emergency Sheltering Locations. See Mitigation Action #003							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Blasdell has identified the following sites suitable for placing temporary housing units.



Table 9.9-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Blasdell Firemen's Park	165 Lake Ave Blasdell, NY	20	Baseball Field	Yes	Yes

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Blasdell has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.9-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify Permanent Housing Locations. See Mitigation Action #004					

9.9.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.9-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.9-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	-	0	-	0	-	0	-	0	-	2	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	0	-	0	-	0	-	0	-	0	-	2	-
Property or Development Name	Type of Development		# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*			Description / Status of Development		
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												



Type of Development	2015	2016	2017	2018	2019	2020
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.9.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Blasdell’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Blasdell has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.9-1. Village of Blasdell Hazard Area Extent and Location Map 1

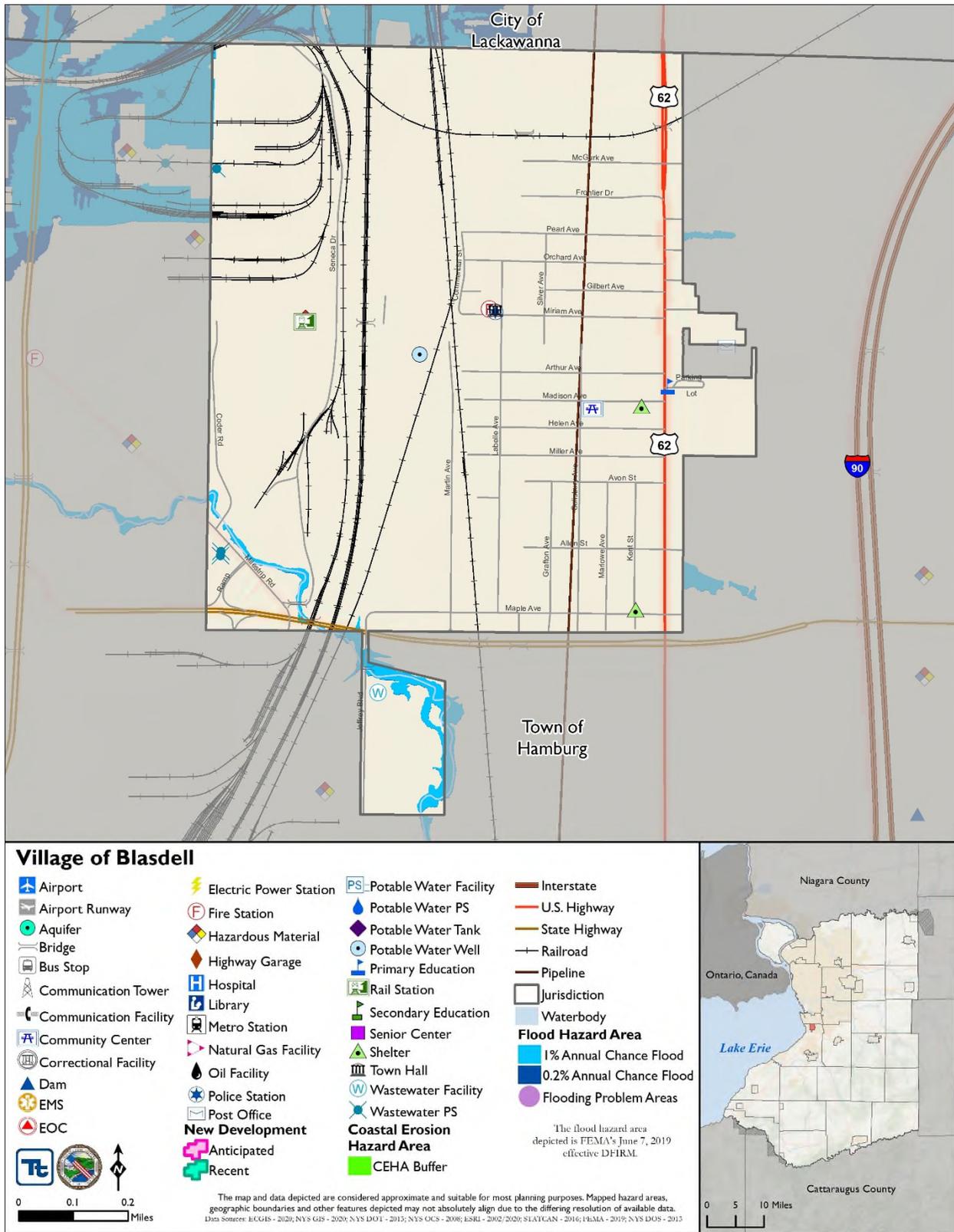




Figure 9.9-2. Village of Blasdell Hazard Area Extent and Location Map 2

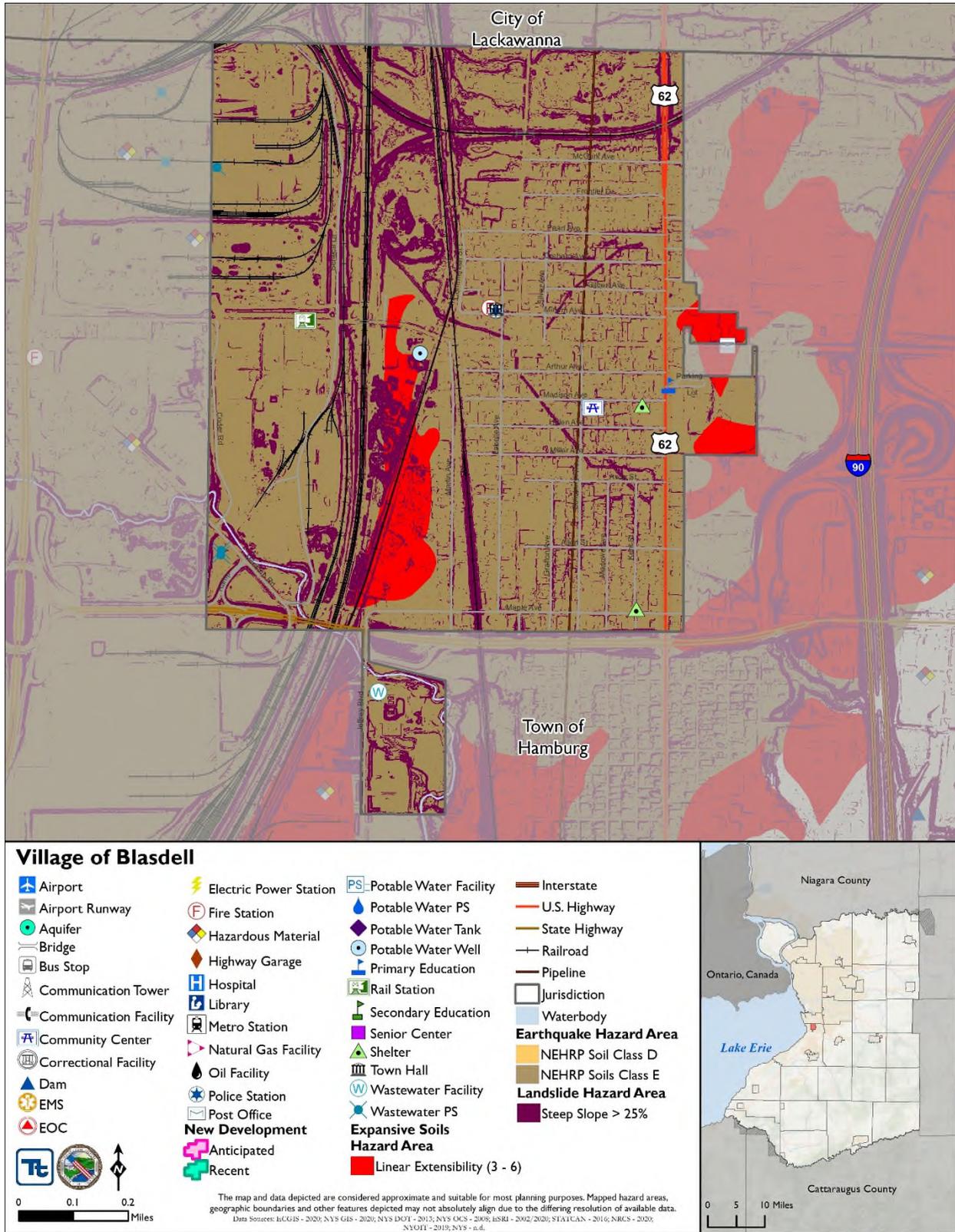
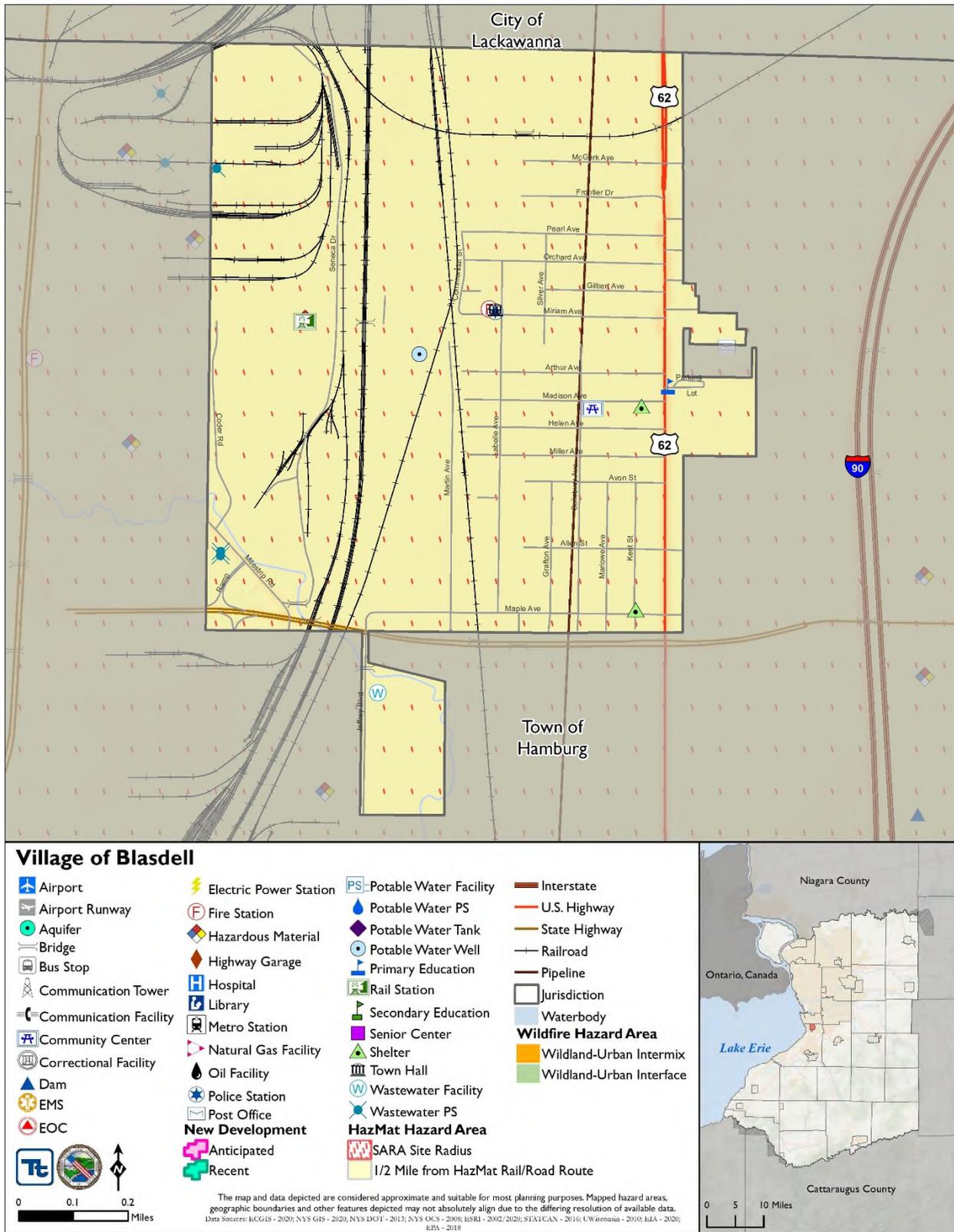




Figure 9.9-3. Village of Blasdell Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Blasdell’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.9-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.9-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 6, 2015	Lake-Effect Snow	No	Lake Effect Snow developed across Erie County, resulting in the temporary closing of the New York State Thruway.	Eleven (11) inches of snow were reported in Blasdell and an estimated \$20,000 in property damages were reported throughout the County.
January 4-7, 2017	Lake-Effect Snow	No	A long duration lake-effect snow event produced three to four feet of snow, causing road closures and hazardous conditions along the I-90 Thruway. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or more and school busses were unable to bring students home.	Four to five inches of snow per hour fell in Blasdell, bringing traffic to a standstill. Plows were unable to keep up with clearing the snow and people abandoned their cars on the New York Thruway and local roads. Total snowfall report in Blasdell amounted to 28 inches
March 1, 2017	High Wind	No	Strong winds as high as 64 mph were reported throughout the area.	Falling trees damages homes or automobiles in Blasdell.
May 1, 2017	Thunderstorm Wind	No	A strong cold front brought a line of thunderstorms which produced damaging winds that downed trees and wires across western New York.	Thunderstorm winds downed a large tree on Gilbert Street in Blasdell, resulting in an estimated \$15,000 in property damages.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightning throughout the duration of the event.	Fifteen (15) inches of snow were reported in Blasdell.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Thirteen (13) inches of snow were reported in Blasdell.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 27- November 1, 2019	Lakeshore Flooding and High Winds DR-4472-NY	Yes	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	Rainfall totals reached 1.88 inches in Blasdell.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Blasdell’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Blasdell. The Village of Blasdell has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- Earthquakes are very unlikely to happen in the village, posing a low risk to the community, therefore the risk was reduced to low.
- Due to the development and availability of new vaccines for the COVID-19 Pandemic, the risk for this hazard is medium.
- Severe Storms and Severe Winter Storms only happen once in a while, resulting in a Medium risk for the village.
- Utilities are well-maintained in the village; therefore utility interruption is a low risk for the village.

Table 9.9-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low



Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Low	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.9-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of Blasdell’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Blasdell has identified the following vulnerabilities within their community:

- There has been an increase in heavy wind (extreme wind) events in the village.
- Lake-Effect Snowstorms continue to be a major concern for the village.
- Flood-prone areas within the village include an area near the NY-179 Exit ramp and Jeffery Boulevard intersection, as well as properties adjacent to Blasdell Creek.

9.9.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.9-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection Damages Avoided; Evidence of Success	
	Widening of Rush Creek to help alleviate overflow of banks that flood a storage building	Flood	Public Works	Flooding in area around Rush Creek	Ongoing Capability	Cost	-	1. Include in 2022 HMP 2. 2022-V. Blasdell-001 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Village BOT	Not Identified	Complete	Cost	-	1. Discontinue 2. 3. The Village meets minimum requirements for floodplain management.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Village BOT	Not Identified	Complete	Cost	-	1. Discontinue 2. 3. The Village Administrator is a Certified Flood Plain Manager (CFM) and serves as the Village NFIP FPA.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Village BOT	Not Identified	In Progress	Cost	-	Include in 2022 HMP
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Join the Community Rating System (CRS).	Flood	Village BOT	Not Identified	No Progress	Cost	-	1. Discontinue 2. 3. The Village is not participating in the CRS program
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	All code enforcement and building permits are done by the TOH	Flood	TOH	Not Identified	Complete	Cost	-	1. Discontinue 2. 3. Complete
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Blasdell has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Blasdell participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.9-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X				X					X
Cyber Attack	X				X					X
Earthquake	X				X					X
Expansive Soils	X				X					X
Extreme Temperature	X				X					X
Flood	X		X		X		X	X		X
Hazardous Materials	X				X					X
Landslide	X				X					X
Pandemic	X				X					X
Severe Storm	X		X		X			X		X
Severe Winter Storm	X		X		X			X		X
Utility Failure	X				X					X
Wildfire	X				X					X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.9-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Blasdell would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.9-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.9-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Blasdell-001	Rush Creek Widening	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The village experiences flooding in area around Rush Creek</p>	No	Yes	Within 5 years	Public Works	High	High	FEMA BRIC	High	NSP	NR
				<p>Solution: The Public Works Department will develop a plan for widening Rush Creek to help alleviate overflow of banks that flood a storage building and cause property damages during storm events and floods. As a second phase. The village will implement the plan and ensure that all state and environmental permitting requirements are met.</p>										
2022-V. Blasdell-002	Updates to Floodplain Management Plan	1, 2, 3	Flood	<p>Problem: FEMA is updating their DFIRM flood maps to more accurately reflect conditions within the village.</p>	No	No	Within 5 years	Board of Trustees, Planning/ Zoning Department	Low	High	Municipal Budget	Medium	LPR	PR
				<p>Solution: The Village Board of Trustees and planning/zoning department will review the 2021 updated DFIRM maps and make adjustments to the floodplain management ordinances/NFIP regulations as necessary. Updates to building/code enforcement related to the new DFIRM will also be completed as necessary.</p>										
2022-V. Blasdell-003	Emergency Sheltering	1, 2, 3	All Hazards	<p>Problem: The village does not have any designated Emergency Sheltering locations.</p>	No	No	Short	Village Board of Trustees; Erie County Emergency Services; Red Cross	Medium	High	Municipal Budget, Red Cross, NYSDHSES	High	LPR	PR, ES
				<p>Solution: The village will work with Erie County Emergency Services to identify and designate locations within the village, or nearby that are accessible to residents and can serve as sheltering locations and heating/cooling/charging centers</p>										



Table 9.9-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				during hazard events. The Village will ensure that these locations have access to emergency backup power and are ADA-compliant.										
2022-V. Blasdell-004	Permanent Housing	1, 2, 3	All Hazards	<p>Problem: The village does not have any land designated as available for relocation of homes due to flood/disaster damages.</p> <p>Solution: The village will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose.</p>	No	No	Short	Village Board of Trustees; Erie County Emergency Services	Low	Medium	Municipal Budget, County Support	Medium	LPR	PR, PP
2022-V. Blasdell-005	Repetitive Loss Outreach	1, 2, 3	Flood	<p>Problem: There are 9 Repetitive Loss Properties within the Village.</p> <p>Solution: The Village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	Short	Village of Blasdell FPA, homeowners	Low to conduct Outreach	High	HMGP, BRIC, FMA	High	LPR, SIP	PI, PP



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities





Table 9.9-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Blasdell-001	Rush Creek Widening	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	10	High
2022-V. Blasdell-002	Updates to Floodplain Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-003	Emergency Sheltering	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-004	Permanent Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-005	Repetitive Loss Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.9.9 Action Worksheets

The following action worksheets have been developed by the Village of Blasdell to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Rush Creek Widening		
Project Number:	2022-V. Blasdel-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Village experiences flooding in area around Rush Creek.		
Action or Project Intended for Implementation			
Description of the Solution:	The Public Works Department will develop a plan for widening Rush Creek to help alleviate overflow of banks that flood a storage building and cause property damages during storm events and floods. As a second phase. The village will implement the plan and ensure that all state and environmental permitting requirements are met.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, reduces flooding
Useful Life:	25 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	NSP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Municipal Budget, FEMA HMGP
Responsible Organization:	Public Works	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install storm drains	N/A	Would displace water onto roadway
	Install sump pump	N/A	Not feasible due to location of Creek
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Rush Creek Widening	
Project Number:	2022-V. Blasdell-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Eliminates flooding concerns
Property Protection	1	Reduces flooding at properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	Permitting will be required
Fiscal	-1	Will seek funding
Environmental	0	Will consult with DEC
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Updates to Floodplain Management Plan		
Project Number:	2022-V. Blasdel-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	FEMA is updating their DFIRM flood maps to more accurately reflect conditions within the Village.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Board of Trustees and planning/zoning department will review the 2021 updated DFIRM maps and make adjustments to the floodplain management ordinances/NFIP regulations as necessary. Updates to building/code enforcement related to the new DFIRM will also be completed as necessary.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures accurately reported flood risk
Useful Life:	5 years	Goals Met:	1, 2, 3
Estimated Cost:	Low	Mitigation Action Type:	LPR
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	Municipal Budget
Responsible Organization:	Board of Trustees	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Rewrite entire FDPO	N/A	Updates can be made to existing plan
	Update FDPO before DFIRM	N/A	Not cost effective to have to update twice based on changes to DFIRM
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Updates to Floodplain Management Plan	
Project Number:	2022-V. Blasdell-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures flood mapping aligns with village plans/ordinances
Property Protection	1	Gives village better understanding of flood risk
Cost-Effectiveness	1	
Technical	1	Board of Trustees
Political	1	
Legal	1	
Fiscal	0	Little to no costs outside of staff time
Environmental	1	
Social	1	
Administrative	1	Board of Trustees
Multi-Hazard	0	Flood
Timeline	1	ASAP
Agency Champion	1	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



9.10 Town of Boston

This section presents the jurisdictional annex for the Town of Boston. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Boston’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.10.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Boston’s hazard mitigation plan primary and alternate points of contact. The Town of Boston followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Code Enforcement and Supervisor’s Office. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.10-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gene Wieckowski, Emergency Manager Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-440-1875	Name/Title: Jason Keding, Supervisor Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-941-6518 Email: supervisorsoffice@townofboston.com
NFIP Floodplain Administrator	
Name/Title: William Ferguson, Code Enforcement Officer Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-440-1875	

9.10.2 Municipal Profile

Incorporated in 1817, Boston is one of the oldest towns in Erie County. The town’s area was created from the original large town of Eden. (Town of Boston 2021) The town contains three hamlets that originated in the early 1800s; North Boston, Patchin and Boston. The town is bordered by the Town of Orchard Park and the Town of Hamburg to the north, the Town of Eden to the west, the Towns of North Collins and Concord to the south and the town of Colden to the east. Eighteen Mile Creek runs through the town from north to south on its way to draining into Lake Erie.

The first Native Americans to occupy the Town of Boston area were the Erie Indians. By the time pioneer settlers came to the Boston area, the succeeding Seneca Indians had been confined to the Buffalo, Cattaraugus and other





reservations. The Holland Land Company organized sale of lands in Boston which triggered white settlement. The economy of Boston has changed significantly over the years. The town was agricultural for several generations. As the land was cleared and put under cultivation, hill farms were adapted to milk production, potatoes and cabbage, while the richer land of the valley was suitable for more diverse crops.

Boston's first industry was a distillery established in 1818. The town's bell factory was for some time the largest in the United States. In 1903, construction began on the Susquehanna Railroad through Boston Valley. The route through Boston was a scenic route and was often fully occupied with passengers in addition to freight. The railroad proved beneficial to both industry and agriculture but failed in just ten years. The Southern Expressway was completed in the 1970's and was later incorporated into US Route 219, a limited access freeway. These extensions spurred additional suburban development in the town. Eighteen Mile Creek runs through the town (Town of Boston Comprehensive Plan 2002).

According to the U.S. Census, the 2010 population for the Town of Boston was 8,023. The estimated 2019 population was 8,042, a 0.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.3 percent of the population is 5 years of age or younger and 21.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.10.3 Jurisdictional Capability Assessment and Integration

The Town of Boston performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.10.3). The Town of Boston's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Boston. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.10-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Local Law No. 3-1987	Local	Town CEO
<p>Comment: The town building code was developed with the following goals and objectives:</p> <p>A. It is the intent of this Article regulating planned unit developments (PUD's) to provide performance criteria in the context of flexible use and design regulations so that small-to-large-scale residential neighborhoods may be developed, within designated districts, incorporating a variety of residential types and nonresidential uses and containing both individual building sites and common property which are planned and developed as a unit. Such a planned unit is to be designed and organized so as to be capable of satisfactory use and operation as a separate entity without necessarily needing the participation of other building sites or other common property in order to function as a neighborhood.</p> <p>B. This Article specifically encourages innovation in residential development so that the growing demands for housing at all economic levels may be met by greater variety in type, design and siting of dwellings and by the conservation and more efficient use of land in such developments. This Article recognizes that while the standard zoning function (use and bulk) and the subdivision function (platting and design) are appropriate for the regulation of land use in areas or neighborhoods that are already substantially developed, these controls represent a type of pre-regulation, regulatory rigidity and uniformity which may be inimical to the techniques of land development concept. Further, this Article recognizes that a rigid set of space requirements, along with bulk and use specifications, would frustrate the application of the planned unit development concept. Thus, where PUD techniques are deemed appropriate through the rezoning of land to a planned unit development by the Town Board, the set of use and dimensional specifications otherwise set forth in this chapter are herein replaced by an approved process in which an approved plan with proper rezoning becomes the basis for continuing land use controls during the development period.</p>					
Zoning Code	Yes	No	Chapter 123 (Zoning); Local Law #6 from 1990	Local	Town CEO
<p>Comment: The municipal zoning ordinance has been developed with the following guidelines to encourage sustainable and resilient development. 1) A PUD must have a development pattern which preserves trees, outstanding natural topography and geologic features and prevents soil erosion. 2) A site plan must include a map or maps of present site conditions that includes topography at contour intervals of five feet or less, streams or watercourses, together with their classification if any, under the State Stream Protection Law, and soil information as mapped by the United States Soil Conservation Service or the equivalent, with soil legends and interpretations showing susceptibility to erosion, flooding or ponding and soil suitability for the proposed uses. 4) Site plan review to include adequacy of structures, roadways and landscaping in areas with moderate-to-high susceptibility to flooding and ponding and/or erosion. 5) Site plan submission to include: Preliminary engineering plans, including street improvements, storm drainage system, public utility extensions, water supply, sanitary sewer facilities, outdoor lighting and location of existing and proposed fire hydrants, as approved by the Fire Chief or Town Engineer.</p>					
Subdivision Ordinance	Yes	No	Chapter 104 (Subdivision of Land); Local Law No. 7-1990	Local	Planning Board
<p>Comment: The subdivision ordinance has been developed with consideration to the following attributes. 1) Preliminary plat, showing contours, proposed road layout, proposed public improvements (pavement, drainage, storm sewers, sanitary sewers, water service, etc.) 2) Where drainage is to be a natural watercourse, lake, swamp, sink or roadside or drainage ditch, the elevation of water in such watercourse or ditch at the recognized flood stage shall be shown on preliminary plat. 3) Where storm sewers or ditches may be required to discharge across an adjacent property in order to drain into a natural watercourse or watershed in which the subdivision lies, the subdivider shall secure an easement from the adjacent property owners to assure uninterrupted discharge of drainage water from the subdivision. Such easement shall be of a dimension required by the Planning Board. 4) Lands subject to flooding shall not be platted or residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard.</p>					
Stormwater Management Ordinance	Yes	Yes	Local Law 12	Local	Engineering
<p>Comment: The stormwater management ordinance has been developed with the following guidelines. 1) It shall be unlawful to discharge into any storm drain any sewage, industrial wastes or other polluted waters, except water from swimming pools. 2) No building sewer lateral shall be laid parallel to or within three feet of any bearing wall, which might thereby be weakened. The depth shall be sufficient to afford protection from frost. 3) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<i>intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i>					
Growth Management	No	Yes	-	-	-
Comment:					
Site Plan Review	Yes	No	Local Law No. 8-1990	Local	Planning Board
<i>Comment: Final site plan includes: The intended drainage plan to include low areas that are to be filled and drained, inverts of proposed pipes, ditches and/or swales, retention and/or detention facilities as necessary, including all design and profile data; drainage flow calculations, expected roof and sump drainage and easements for proposed or existing drainage, where necessary. 2) Final site plan includes: Snow storage area 3) Where adequate surface drainage is not possible by grading alone, a supplementary drainage system approved by the Town of Boston shall be required. On-site management of surface drainage shall be planned so that there shall be no greater runoff during and following construction than prior to commencement of construction. Lawn and yard areas shall be adequately drained to permit normal use and maintenance.</i>					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 60 (Flood Damage Prevention); Local Law No. 60 2019-3	Local	Town CEO
<i>Comment: It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program. The Code Enforcement Officer is appointed local administrator to administer and implement this chapter. Duties of the administrator include: permit application review; using flood data; obtaining and maintaining information; notifications; interpreting FIRM boundaries; stop-work orders; inspections; and certificate of compliance. Any construction or substantial improvements in the flood hazard areas must be elevated to two feet or higher above the base flood elevation.</i>					
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	Local Law No. 60 2019-3	Local	Town OEM
<i>Comment: Activities that are subject to the requirements of this section are those types of activities that cause or contribute to a violation of the Town of Boston's MS4 SPDES permit.</i>					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Boston Comprehensive Plan: A Vision for the Year 2020	Local	Town Planning
<i>Comment: Town should minimize negative impacts on Eighteen Mile Creek and seek funding to improve banks of the creek for the public to use, this includes vegetation management (removal of dead logs/branches or planting for erosion control), restrict new development from sensitive areas such as floodplains or wetlands.</i>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Being developed as of 2021	Local	Engineering
<i>Comment: Will incorporate elements of flood mitigation and stormwater management.</i>					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town Emergency Management Plan, Updated 2016	-	Town OEM
Comment: <i>No Information Available at this time as it is being updated as the HMP is undergoing its update.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Boston to oversee and track development.

Table 9.10-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement/ Building Department



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	None

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Boston and their current responsibilities which contribute to hazard mitigation.

Table 9.10-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Town Planning Board – volunteer board that is responsible for all site plan reviews and SEQRA. The board also advises on various property safety issues.
Zoning Board of Adjustments	Yes	Zoning Board - There are five regular members and two alternate members, who step in to meet the quorum in the absence of a regular member. All members are allowed to question the applicant, however only the regular members vote on the motion to grant or deny the variance request.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Conservation Board - The CAC advises the Town Board on conservation issues which will increase the quality of life in the Town of Boston.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – the department is responsible for maintaining all municipally owned roads and other public works related issues.
Construction/Building/Code Enforcement Department	Yes	Building Inspector – the responsibility of the office is to issues building permits and conduct construction and building inspections.
Emergency Management/Public Safety Department	Yes	Emergency Squad – The Boston Emergency Squad is a Volunteer Ambulance Corporation serving the town of Boston and providing mutual aid services to the surrounding communities since January 4th 1967. The dedicated volunteers of the Boston Emergency Squad are committed to providing excellent ambulance and first aid service primarily within the Town of Boston
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Fire, Highway
Other	No	-
Technical/Staffing Capability-		
Planners or engineers with knowledge of land development and land management practices	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Various departments
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	No	-
Emergency Manager	Yes	Town Emergency Manager
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Boston.

Table 9.10-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No (utility)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Boston.



Table 9.10-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook: https://www.facebook.com/BostonTownHallNY
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Reverse 911
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Boston.

Table 9.10-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
NYSDEC Climate Smart Community	Yes	Designated	2020
Storm Ready Certification	No	-	-
Firewise Communities classification	No		
Other	No		

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.10-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.10.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

William Ferguson, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Boston.

Table 9.10-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Boston	11	19	\$180,739	9	0

Source: July and September, 2021 NFIP Data.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town of Boston does not maintain lists of properties that have been damaged by flooding or of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town’s flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

As of 2021, the Code Enforcement Office is in charge of municipal floodplain management. Due to limited resources, the town does not have a certified floodplain manager on staff nor any other technical capabilities, as they are contracted out by the town as needed. The town has not had to determine any substantial improvements as the town is in full compliance of the NFIP program. The most recent CAV date is April 17, 2014. The local municipal flood damage prevention number is Local Law No. 2019-3 and meets the requirements of the NFIP



program. The town does not have any other plans or ordinances that support the program and the town is not interested in the CRS program.

9.10.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Boston has identified the following routes and procedures to evacuate residents prior to and during an event.

- County Route 227
- Buffalo – Pittsburg Highway – Route 219
- Route 439
- Boston State Road

The routes would be determined by the County, as each hazard could change the potential destination for evacuation.

Sheltering

The Town of Boston has identified the following designated emergency shelters within the town.

Table 9.10-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	8500 Boston State Rd, Boston, NY	100	Yes	Yes	No	None	Need power generator, and showers. Not adequate space – addressed in project 001

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Boston has identified the following sites suitable for placing temporary housing units.

Table 9.10-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
County Fairgrounds	5600 McKinley Pkwy, Hamburg, NY	266 acres	Open Space	All utilities available	None



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Boston has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.10-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Open field	8555 Boston State Road	Unknown	Open field	None	None

9.10.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.10-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.10-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	30	0	23	0	7	0	24	0	14	0	15	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	1	0	0	0	0	0	1	0	0	0	0	0
Total Permits Issued	31	0	23	0	7	0	25	0	14	0	15	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.10.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section



5.4 (Hazard Ranking) for a detailed summary for the Town of Boston's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Boston has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.10-1. Town of Boston Hazard Area Extent and Location Map 1

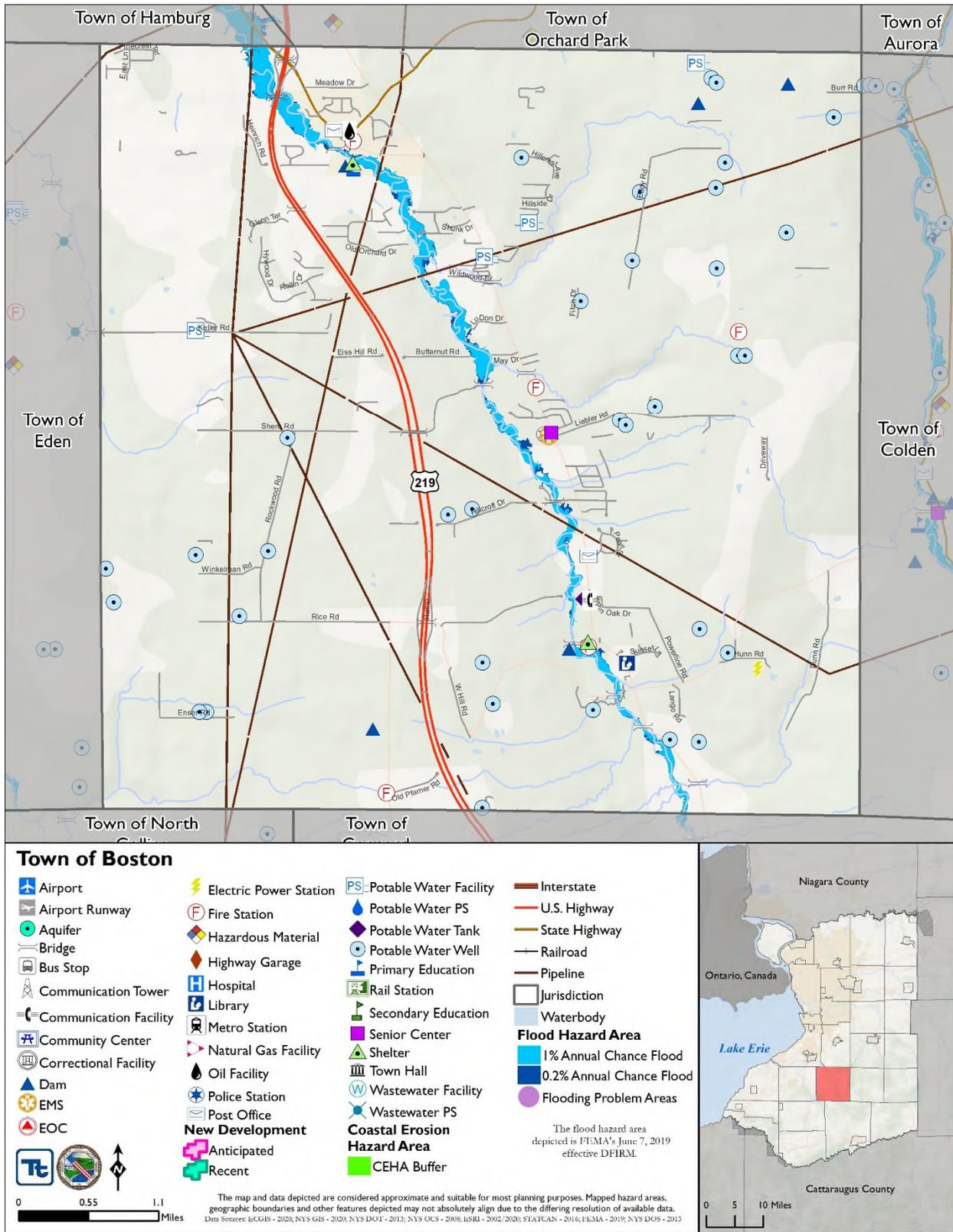




Figure 9.10-2. Town of Boston Hazard Area Extent and Location Map 2

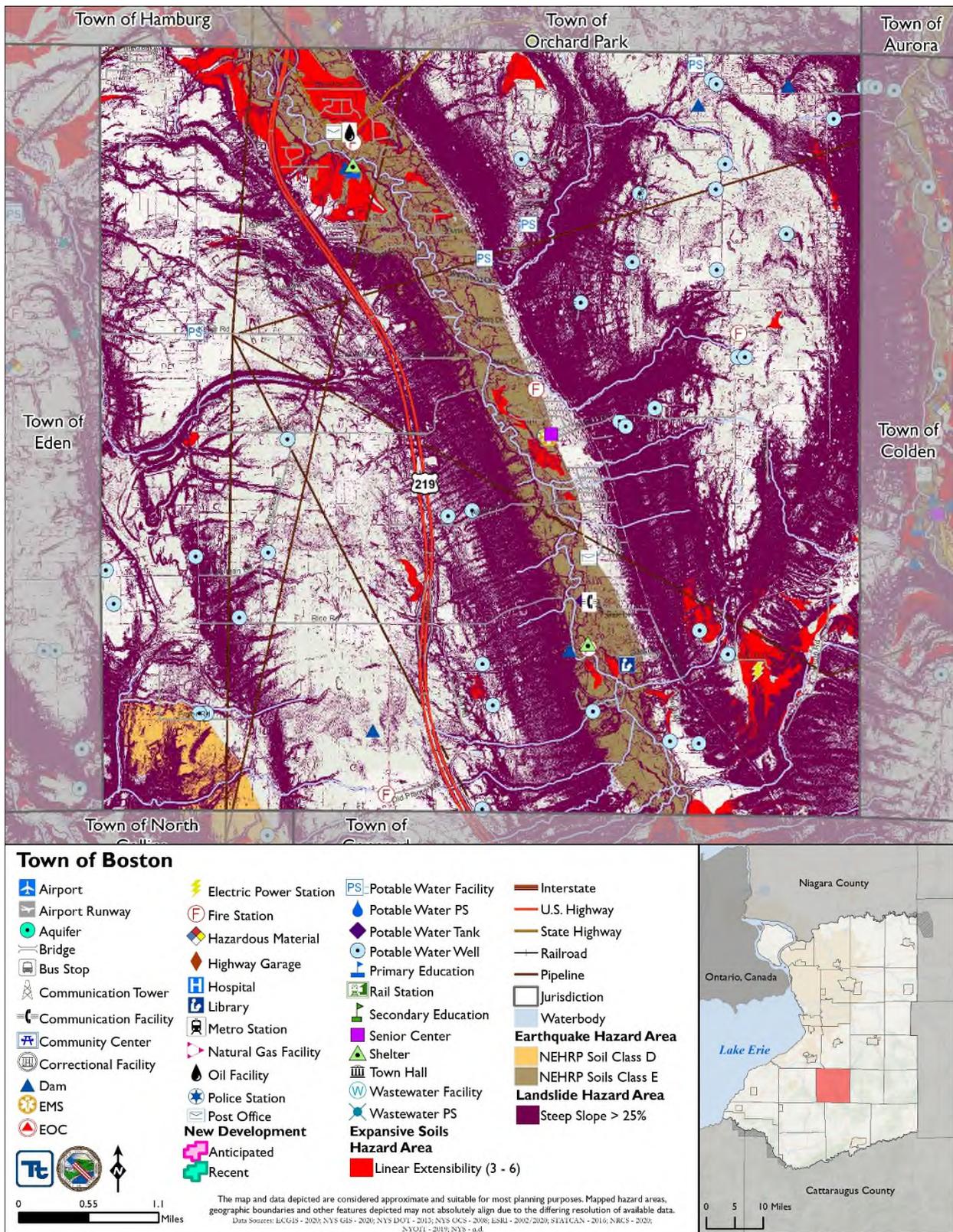
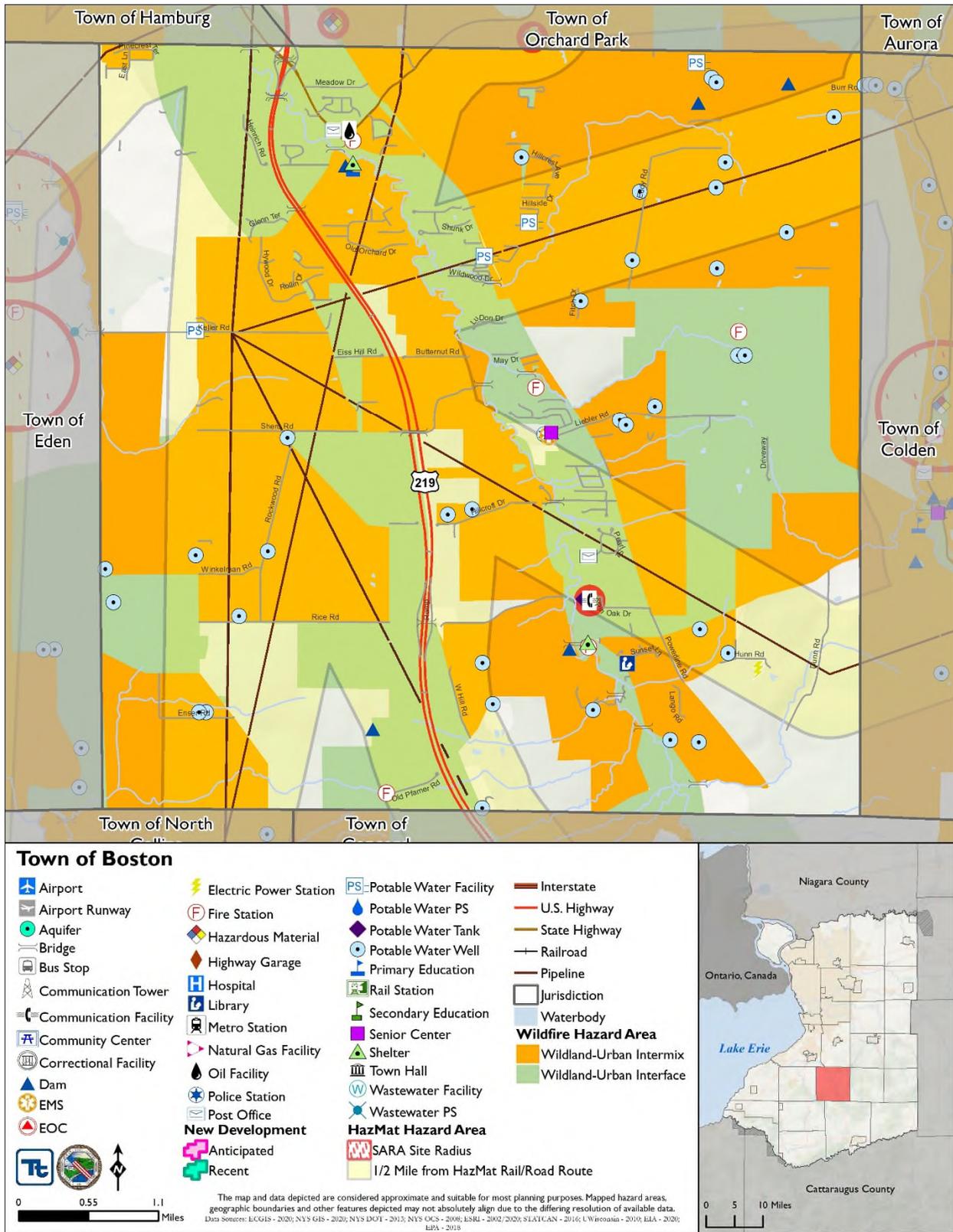




Figure 9.10-3. Town of Boston Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Boston’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.10-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.10-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No major loss – downed trees
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
2020-21	COVID -19	No	Various losses not quantifiable

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Boston’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Boston. The Town of Boston has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- There has been no change in coastal, wave action, wildfire, and earthquake related hazards.
- Earthquakes do not occur in the town and therefore has been re-ranked from high to low.
- Pandemics affect areas beyond the town, and given the rural nature of the municipality, the hazard will remain medium.
- There however has been an increase in extreme temperatures, winter storms, extreme wind, flood, ice jams, landslides, and tornados.

Table 9.10-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.10-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
No facilities identified				

Source: 2021 GIS

Identified Issues

After review of the Town of Boston’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Boston has identified the following vulnerabilities within their community:

- 18 Mile Creek that flows through town causes significant flooding.
- Significant runoff from east and west hills
- No all municipal buildings have backup power.
- The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health.
- Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. Therefore, it is crucial to have adequate backup power for the facility.
- The town is developing a stormwater management plan for the town. This plan is in coordination with the County SWCD and is intended to identify specific areas that are vulnerable to flooding and require infrastructural investment.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- Flooding along 18-Mile Creek



9.10.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.10-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	High	
	Bank stabilization of 18-mile creek	Flooding	Constant erosion and changing of creek course lends to localized flooding causing damage to property and road infrastructure	Town Highway	Complete	Cost	High	1 . Discontinue
						Level of Protection	High	2 .
						Damages Avoided; Evidence of Success	Flood	3 . Complete
	Improved drainage in specific subdivisions and target tributaries to 18-mile creek	Flooding	Personal property damage	Town Highway	Ongoing Capability	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided; Evidence of Success	-	3 . Ongoing capability
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided; Evidence of Success	-	3 . Ongoing capability
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flooding	Not Identified	Town Clerk/ Building Inspection	Complete	Cost	Low	1 . Discontinue
						Level of Protection	Moderate	2 .
						Damages Avoided; Evidence of Success	Low	3 . Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided;	-	3 . Ongoing



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Evidence of Success		
						Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Emergency Management/ Town Clerk	Ongoing Capability	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided; Evidence of Success	-	3 . Ongoing
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flooding	Not Identified	Emergency Management/ Town Clerk	Ongoing Capability	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided; Evidence of Success	-	3 . Ongoing
	Join the Community Rating System (CRS).	Flooding	Not Identified	Emergency Management/ Town Clerk	No Progress	Cost	-	1 . Discontinue
						Level of Protection	-	2 .
						Damages Avoided; Evidence of Success	-	3 . Community Not Interested



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Boston has not identified any previous mitigation actions.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Boston participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.10-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	X
Cyber Attack		X							X	X
Earthquake		X							X	X
Expansive Soils		X							X	X
Extreme Temperature		X							X	X
Flood		X	X			X		X	X	X
Hazardous Materials		X							X	X
Landslide		X							X	X
Pandemic		X							X	X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X							X	X
Wildfire		X							X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Error! Reference source not found. summarizes the comprehensive range of specific mitigation initiatives the Town of Boston would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.10-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Boston-001	Emergency Shelter/Community Center Development	1,2,3	All	<p>Problem: The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health.</p> <p>Solution: The town will build a community center with shelter capabilities that will also be used as an emergency operations center. A generator will also be installed to provide power in the event of an outage. The facility would be built on 8555 Boston State Road which is owned by the town.</p>	Yes	No	2 years	Town Board	\$1 million	Adequate shelter space	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget	High	SIP	ES
2022-Town of Boston-002	Backup Power at Town Hall	1,2	All	<p>Problem: Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. In addition, the electrical panel boxes need to be upgraded. The panel box currently poses a fire hazard and therefore qualifies as hazard mitigation. Therefore, it is crucial to have adequate backup power for the facility.</p> <p>Solution: The town will install a permanent generator at the current town hall. The town will first upgrade panel boxes for electricity and then install generator. Once upgraded, the</p>	Yes	No	1 year	Town Highway	\$500,000	Backup power	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program	High	SIP	SP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				town will install the generator and appropriate fuel sources.										
2022-Town of Boston-003	Stormwater Actionable Items	1,2	Flood	<p>Problem: The town is developing a stormwater management plan for the town. This plan is in coordination with the County SWCD and is intended to identify specific areas that are vulnerable to flooding and require infrastructural investment.</p> <p>Solution: As a result of completing a stormwater management plan, several projects were identified that should be implemented in the town to increase capabilities and reduce impacts from stormwater flooding. The town will apply for grant funding to complete projects ranging from streambank restoration to culvert rightsizing and road/ bridge redevelopment.</p>	No	No	5 years	Town Board, Planning, County SWCD	\$1 million	Flood Mitigation	HMGP, FMA, BRIC, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement Project (WQIP) Program	High	NSP, SIP	NR, SP
2022-Town of Boston-004	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes 💧 Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.





- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.10-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Boston Town-001	Emergency Shelter/Community Center Development	1	1	1	1	1	0	-1	1	1	1	1	1	1	1	11	High
2022-Boston Town-002	Backup Power at Town Hall	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Boston Town-003	Stormwater Actionable Items	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Boston-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	0	0	1	0	1	0	0	9	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.10.9 Action Worksheets

The following action worksheets have been developed by the Town of Boston to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Emergency Shelter/ Community Center Development		
Project Number:	2022-Town of Boston--001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will build a community center with shelter capabilities that will also be used as an emergency operations center. A generator will also be installed to provided power in the event of an outage. The facility would be built on 8555 Boston State Road which is owned by the town.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Development of new emergency facility
Useful Life:	35 years	Goals Met:	1, 2, 3
Estimated Cost:	\$1 million	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget
Responsible Organization:	Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation and preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Designate City of Buffalo shelters as town shelters	Low	Too far away
	Develop emergency shelter	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Emergency Shelter/ Community Center Development	
Project Number:	2022-Town of Boston--001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project saves lives
Property Protection	1	This project can protect property
Cost-Effectiveness	1	This is cost effective in the long run
Technical	1	There are no technical issues identified
Political	1	There are no political issues identified
Legal	0	There can be some unclear legal issues
Fiscal	-1	There are inadequate financial resources
Environmental	1	There are no environmental issues with this project
Social	1	This has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses all hazards of concern
Timeline	1	This timeline is feasible
Agency Champion	1	The town board
Other Community Objectives	1	This contributes to the community's goal to become a safer place
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Backup Power at Town Hall		
Project Number:	2022-Town of Boston-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. In addition, the electrical panel boxes need to be upgraded. The panel box currently poses a fire hazard and therefore qualifies as hazard mitigation. Therefore, it is crucial to have adequate backup power for the facility.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will install a permanent generator at the current town hall. The town will first upgrade panel boxes for electricity and then install generator. Once upgraded, the town will install the generator and appropriate fuel sources.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$500,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, BRIC, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program
Responsible Organization:	Town Highway	Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Backup Power at Town Hall	
Project Number:	2022-Town of Boston--002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



9.11 Town of Brant

This section presents the jurisdictional annex for the Town of Brant. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Brant’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.11.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Brant’s hazard mitigation plan primary and alternate points of contact. The Town of Brant followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Grants, Planning, and Code Enforcement. The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.11-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark J. DeCarlo, Supervisor Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-549-0301 x 3 Email: supervisor@brantny.com	Name/Title: Connie Miner, Grants Consultant Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-549-0301 Email: minerconni@verizon.net
NFIP Floodplain Administrator	
Name/Title: Gary A. Breaker, Code Enforcement Officer Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-392-7241	
Additional Contributors	
Name/Title: Joseph Ostrowski, Chairman, Planning Board Method of Participation: Completed Capability Assessment	
Name/Title: Gary A. Breaker, Code Enforcement Officer Method of Participation: Provided data and information	

9.11.2 Municipal Profile

Brant is located in the southwestern part of Erie County and is known as one of the county’s "Southtowns". The Town of Brant is a mostly rural municipality located approximately 25 miles southwest of downtown Buffalo. The Village of Farnham is located wholly within the town and is on the town’s west side. The town is bounded on the north by the Town of Evans, to the east by the Town of North Collins, and to the south is the Cattaraugus



Indian Reservation. The town contains a small stretch of Lake Erie shoreline and Evangola State Park is in the town’s northwest corner.

The first white settler arrived in the area around 1816. The town incorporated in 1839, being formed from portions of Towns of Evans and Concord. Col. Joseph Brant, the Mohawk chief, inspired the town’s naming. (Wikipedia) The town has an area of 24.7 square miles. A significant part of the land base is in an Agricultural District and produces field crops such as sweet corn, cabbage and snap beans; fruits such as grapes and strawberries; and two plant nurseries (Town of Brant Comprehensive Plan, 2003).

According to the U.S. Census, the 2010 population for the Town of Brant was 1,683. The estimated 2019 population was 1,541, an 8.4 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 2.5 percent of the population is 5 years of age or younger and 22.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.11.3 Jurisdictional Capability Assessment and Integration

The Town of Brant performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.11.3). The Town of Brant’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Brant. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.11-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Town Code Ch. 69, 2010	Local	Code Enforcement Officer
Comments: Except as otherwise specifically provided by law, ordinance, rule or regulation or except as herein otherwise provided, the Code Enforcement Officer shall administer and enforce all of the provisions of the New York State Uniform Fire Prevention and Building Code and					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
other laws, ordinances, rules and regulations applicable to plans, specifications or permits for the construction, alteration and repair of buildings and structures and the installation and use of materials and equipment therein and to the location, use and occupancy thereof.					
Zoning Code	Yes	Yes	Town Code Ch.161, 2019	Local	Code Enforcement Officer
Comment: These regulations are made in accordance with a Comprehensive Plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.					
Subdivision Ordinance	Yes	Yes	Town Code Ch.137, 1976	Local	Code Enforcement Officer
Comment: It is declared to be the policy of the Planning Board to consider land subdivision plats as part of a plan for the orderly, efficient and economical development of the town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Comprehensive Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.					
Stormwater Management Ordinance	Yes	Yes	Town Code Ch. 87	Local	Code Enforcement Officer
Comment: The Code Enforcement Officer shall review all building permit applications for new construction or substantial improvements to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a location that has a flood hazard, any proposed new construction or substantial improvement, including prefabricated and mobile homes, must be designed, or modified, and anchored to prevent flotation, collapse or lateral movement of the structure; use construction materials and utility equipment that are resistant to flood damage; and use construction methods and practices that will minimize flood damage.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	1992, Sec 35	Local	Code Enforcement Officer
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. <ul style="list-style-type: none"> It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation. 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	2003 Revised 2017	Local	Town Board
Comment: The goals are as follows: <ul style="list-style-type: none"> Promote a strong collaborative regional approach to future development Direct controlled population growth to appropriate areas Ensure there are safe, affordable, and attractive housing choices of all kinds Preserve and enhance the rural character Ensure the community services are adequate such as schools and emergency services, and appropriate recreational opportunities and cultural facilities Ensure that resources devoted to transportation, public transportation and utilities development protect and enhance the quality of life Expand the economic base and promote the development of economic opportunities 					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Brant to oversee and track development.

Table 9.11-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Brant and their current responsibilities which contribute to hazard mitigation.

Table 9.11-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	Yes	No Comment
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	No Comment



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	No Comment
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Supervisor
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Brant.

Table 9.11-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Brant.

Table 9.11-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	No Comment
Personnel skilled or trained in website development	Yes	No Comment
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	No Comment
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Brant.

Table 9.11-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.11-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.11.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gary A. Breaker, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Brant.





Table 9.11-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Brant	1	99	\$287,387	40	0

Source:

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Floodprone areas within the town include the Lake Erie Short Line and Two Creeks, but no residential properties are located in these areas. The town does not maintain a list of property owners interested in flood mitigation, and there are no Risk MAP projects underway. The town makes substantial damage determinations by conducting onsite inspections. The flood hazard maps adequately address flood risk within the town.

NFIP Compliance

The Buildings Department and Code Enforcement Officer are responsible for floodplain management. There are no Certified Floodplain Managers within the town, but all floodplain courses are attended, and no additional assistance is needed. There are no outstanding compliance issues with the NFIP.

9.11.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Brant has identified the following routes and procedures to evacuate residents prior to and during an event:

- Cain Road
- Milestrip Road
- Route 323
- Route 249
- Route 5
- Route 20

Sheltering

The Town of Brant has identified the following designated emergency shelters within the town.

Table 9.11-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The town will work with the county to identify and designate an emergency shelter. See Mitigation Action 2022-T. Brant-#001.							



Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Brant has identified the following sites suitable for placing temporary housing units.

Table 9.11-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-T. Brant-#002.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Brant has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.11-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-T. Brant-#002.					

9.11.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.11-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.11-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	-	0	-	0	-	0	-	0	-	0	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	0	0	0	0	0	0	0	0	0	0	0	0
Property or Development Name	Type of Development		# of Units / Structures		Location (address and/or		Known Hazard Zone(s)*		Description / Status of Development			



Type of Development	2015	2016	2017	2018	2019	2020
			block and lot)			
Recent Major Development and Infrastructure from 2015 to Present						
None Identified						
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.11.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Brant’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Brant has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.11-1. Town of Brant Hazard Area Extent and Location Map 1

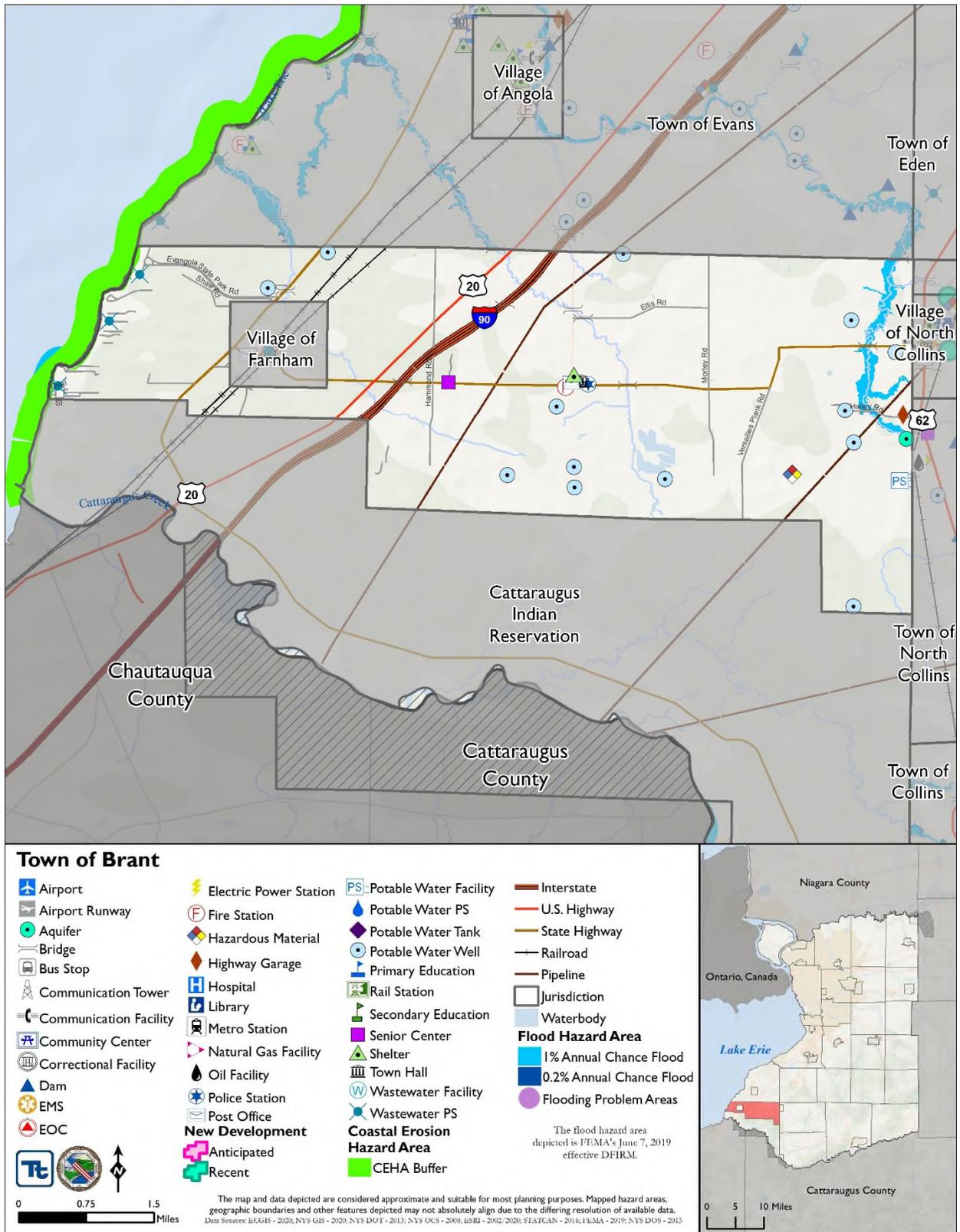




Figure 9.11-2. Town of Brant Hazard Area Extent and Location Map 2

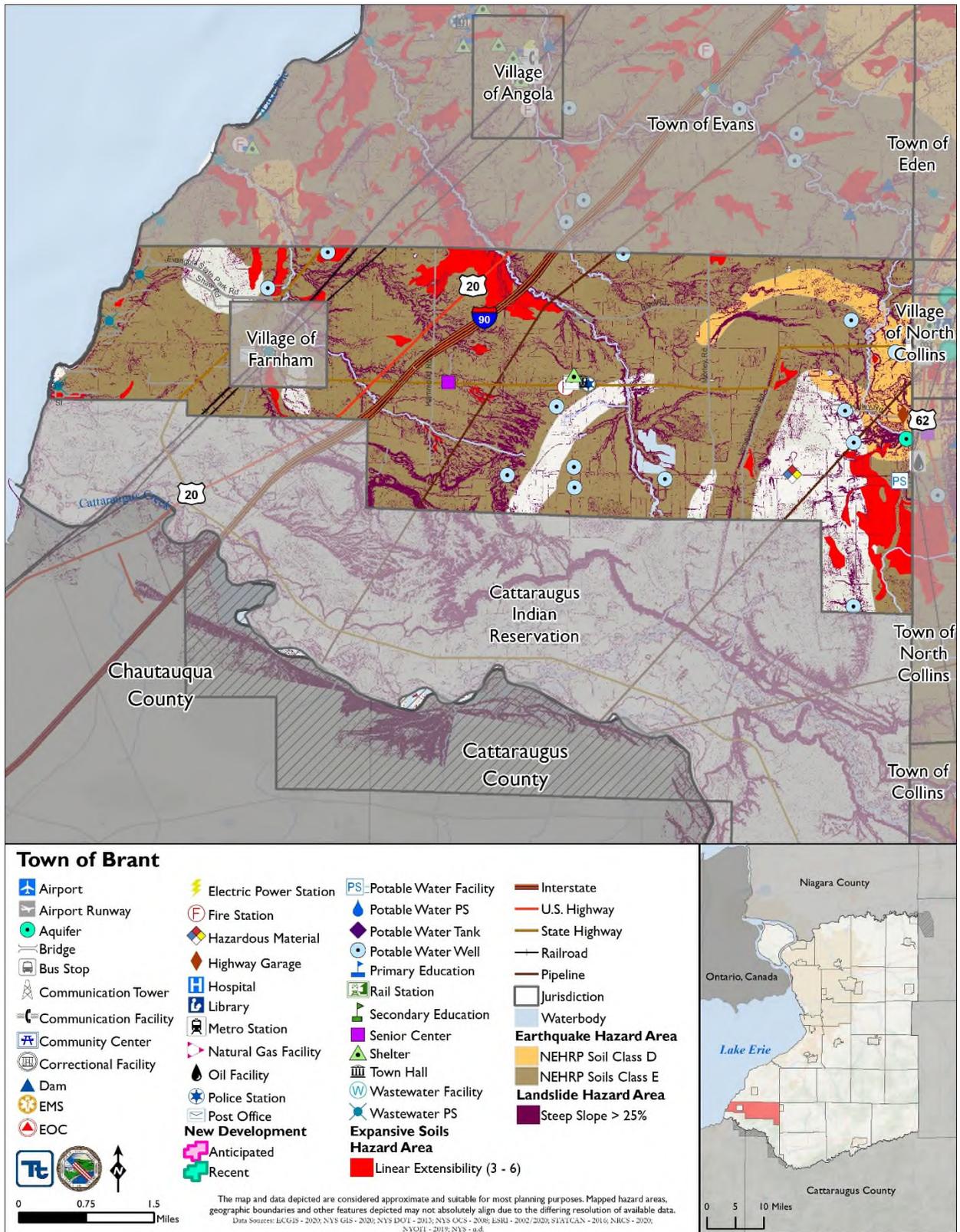
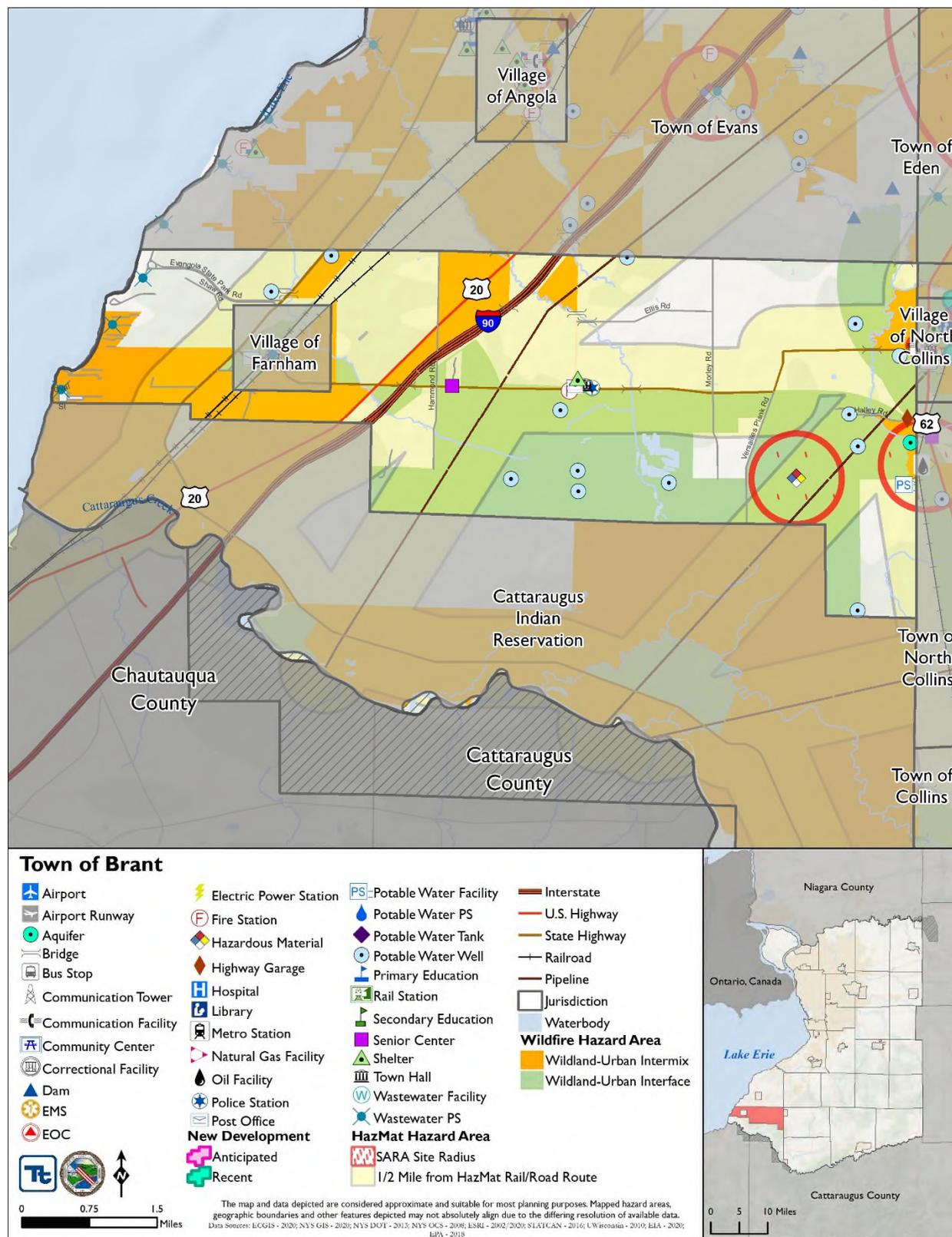




Figure 9.11-3. Town of Brant Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Brant’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.11-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.11-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, no municipal damages were reported.
October 28-29, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, no municipal damages were reported.
November 12, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
November 18, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
January 11, 2017	High Wind	No	Although the county was impacted, no municipal damages were reported.
March 8, 2017	High Wind	No	Although the county was impacted, no municipal damages were reported.
March 13, 2017	Winter Storm	No	Although the county was impacted, no municipal damages were reported.
July 20, 2017	Tornado	No	Although the county was impacted, no municipal damages were reported.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, no municipal damages were reported.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
January 2, 2018	Blizzard	No	Although the county was impacted, no municipal damages were reported.
October 6, 2018	Lightning	No	Although the county was impacted, no municipal damages were reported.
February 24, 2019	High Wind	No	Although the county was impacted, no municipal damages were reported.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, no municipal damages were reported.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, no municipal damages were reported.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Brant’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Brant. The Town of Brant has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.11-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.11-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: Effective DFIRM

Identified Issues

After review of the Town of Brant’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Brant has identified the following vulnerabilities within their community:

- The town does not have any designated Emergency Shelter locations.
- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms.
- The town does not have a disaster plan.
- The Lake Erie Shore Line along Brant is specifically vulnerable to erosion.
- Lotus Bay and Wide Beach have just one point of entry which is also the exit.

9.11.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.11-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
-	Clean existing abandoned ditches on certain properties for flood damage reduction purposes. * Easements required.	Flooding	Not Identified	Highway Dept/ Attorney	No Progress	-	-	<ol style="list-style-type: none"> Include in 2020 HMP
-	Set up town-wide disaster plan to educate public on what to do (step by step).	All Hazards	Not Identified	Disaster Coordinator	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
-	Town-wide food shelter storage.	All Hazards	Not Identified	Disaster Coordinator	Complete	-	-	<ol style="list-style-type: none"> Discontinue Complete
-	Working with and in collaboration with the Seneca Nation.	All Hazards	Not Identified	Town Board	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability
-	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability
-	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Code Enforcement Officer/	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMS	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability
-		Flood	Not Identified		Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)			Code Enforcement Officer		Damages Avoided; Evidence of Success	-	<ol style="list-style-type: none"> Ongoing Capability
-	Join the Community Rating System (CRS).	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue
						Level of Protection	-	<ol style="list-style-type: none">
						Damages Avoided; Evidence of Success	-	<ol style="list-style-type: none"> Ongoing Capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Brant has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Brant participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.11-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X		X	X			X	X		X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X		X	X		X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X	X		X		X	X		X	X
Severe Winter Storm	X	X		X		X	X		X	X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.11-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Brant would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.11-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.11-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Brant-001	Emergency Shelter	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Emergency Shelter Locations.</p> <p>Solution: The town will work with the county to identify and designate an Emergency Shelter with ADA compliance and sufficient capacity and backup power.</p>	No	No	Short	Town of Brant	Low	High, establishes shelter	Municipal Budget	High	LPR	ES
2022-T. Brant-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.</p>	No	No	Short	Town of Brant	Low-Medium	High, establishes alternative housing locations for displaced residents	Municipal Budget, CDBG	High	LPR	ES
2022-T. Brant-003	Drainage System Maintenance	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms.</p> <p>Solution: The town will develop a maintenance program to clean existing abandoned ditches on certain</p>	No	No	Ongoing once established	Town of Brant Highway	Medium	High, reduces flooding outside of the SFHA	Municipal Budget, HMGP	High	LPR, SIP	PI, PP, SP



Table 9.11-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				properties for flood damage reduction purposes										
2022-T. Brant-004	Disaster Plan	1, 2, 3	All Hazards	<p>Problem: The town does not have a disaster plan.</p> <p>Solution: The Town of Brant will create and adopt a step-by-step disaster plan to educate the public on steps to take during all hazard events profiled in the HMP.</p>	No	No	Short	Town Board	Low	High	Municipal Budget, BRIC	High	LPR, EAP	PI
2022-T. Brant-005	Lake Erie Erosion	1, 2	Coastal erosion	<p>Problem: The Lake Erie Shore Line along Brant is specifically vulnerable to erosion.</p> <p>Solution: The town will monitor the shoreline for increased erosion and will conduct vulnerability and feasibility analyses to determine the impacts of the erosion and potential solutions, placing an emphasis on green/natural solutions. Once complete, the town will conduct a benefit-cost analysis and select the best project, and seek funding to implement the solutions.</p>	No	Yes	Short	Town Board, Engineering, DPW	High	High	BRIC, Municipal Budget	High	NSP	NR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:





FPA Floodplain Administrator
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.11-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Brant-001	Emergency Shelter	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Brant-002	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Brant-003	Drainage System Maintenance	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Brant-004	Disaster Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	High
2022-T. Brant-005	Lake Erie Erosion	1	1	1	1	1	0	-1	0	1	1	1	1	1	1	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.11.9 Action Worksheets

The following action worksheets have been developed by the Town of Brant to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Drainage System Maintenance		
Project Number:	2022-T. Brant-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will develop a maintenance program to clean existing abandoned ditches on certain properties for flood damage reduction purposes.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, reduces flooding outside of the SFHA
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Medium	Mitigation Action Type:	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Ongoing once established
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	Municipal Budget, HMGP
Responsible Organization:	Town of Brant Highway	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	\$500,000	Costly and may not solve problem
	Relocate drainage systems	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Drainage System Maintenance	
Project Number:	2022-T. Brant-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flooding
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding
Environmental	1	No environmental concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Disaster Plan		
Project Number:	2022-T. Brant-004		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town does not have a disaster plan.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Brant will create and adopt a step-by-step disaster plan to educate the public on steps to take during all hazard events profiled in the HMP.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High
Useful Life:	10 years	Goals Met:	1, 2, 3
Estimated Cost:	Low	Mitigation Action Type:	Local Plans and Regulation, Education and Awareness Program
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Short
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Municipal Budget, BRIC
Responsible Organization:	Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Develop plans for each hazard	N/A	Costly, easier to have combined plan
	Disseminate information as hazard is happening/expected	N/A	Reactive, may not reach enough residents
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Disaster Plan	
Project Number:	2022-T. Brant-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures residents are aware/prepared
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town Board
Political	1	Plan has support
Legal	1	
Fiscal	1	
Environmental	1	No Concerns
Social	1	Residents Support
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	Short
Agency Champion	1	
Other Community Objectives	1	
Total	14	
Priority (High/Med/Low)	High	



9.12 City of Buffalo

This section presents the jurisdictional annex for the City of Buffalo. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Buffalo’s risk and vulnerability; the different capabilities utilized in the city; and an action plan that will be implemented to achieve a more resilient community.

9.12.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Buffalo’s hazard mitigation plan primary and alternate points of contact. The City of Buffalo followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including: Buffalo Fire Department Division Chief and Commissioner Department of Public Works. The Fire Department Division Chief represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.12-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael Tuburdyke, Buffalo Fire Department Division Chief Phone Number: (716) 444-5210 Email: mjtuburdyke@bfdny.org	Name/Title: Michael Finn, Commissioner Department of Public Works Phone Number: (716) 536-9795 Email: mfinn@city-buffalo.com
NFIP Floodplain Administrator	
Name/Title: Michael Finn, Commissioner Department of Public Works Phone Number: (716) 536-9795 Email: mfinn@city-buffalo.com	
Additional Contributors	
Name/Title: Don Poletto, Senior Operations Engineer Method of Participation: Attended Steering Committee Meetings, attended Municipal Support Meeting, provided data and information, supported update of mitigation strategy	

9.12.2 Municipal Profile

Buffalo is the second largest city in New York state and is the county seat. Buffalo is an important gateway for commerce and travel across the Canadian border. The city is bordered by the Towns of Tonawanda and Amherst to the north, the towns of Cheektowaga and West Seneca and the Village of Sloan to the east, Lake Erie to the west and the City of Lackawanna to the south. The city took its name from the River that runs through its southside and into Lake Erie. The city has an area of 53 square miles and has a relatively flat topography.





Buffalo's original inhabitants were Iroquois peoples. After the Revolutionary War, native peoples throughout the county were dispossessed of their lands. The first white landowner in Buffalo was Captain William Johnston. Buffalo's rise to economic power came through its waterways in the form of transshipment, and manufacturing. The city grew quickly after the opening of the Erie Canal in 1825; the Port of Buffalo was the original western terminus of the Erie Canal. Buffalo is known as the Queen City, a term coined by Erie County's native son, Millard Fillmore. In 1804, Joseph Ellicott laid out a radial grid street plan that continues to define the city. Frederick Law Olmsted designed several parks within the city, including celebrated Delaware Park.

The city experienced a population boom during the mid-1800s and doubled in size between 1845 and 1855. Grain and commercial goods shipment led to repeated expansion of the harbor. Access to abundant hydropower spurred Buffalo to electrify early and became known as the "City of Lights" The city eventually also became a major rail center serving the entire nation. The City contains many significant architectural works developed during its heyday. In the latter part of the 20th century. Multiple factors impacted Buffalo's economy in the latter half of the 20th Century. The opening of the Saint Lawrence Seaway, plus deindustrialization and suburbanization led to decline of the city's main industries. Eight New York State highways, one three-digit Interstate Highway and one US Highway traverse the city. The Peace Bridge is one of North America's important commercial ports with four thousand trucks crossing it daily (Comprehensive Plan 2006).

According to the U.S. Census, the 2010 population for the City of Buffalo was 261,310. The estimated 2019 population was 256,480, a 1.8 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.6 percent of the population is 5 years of age or younger and 12.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.12.3 Jurisdictional Capability Assessment and Integration

The City of Buffalo performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.12.3). The City of Buffalo's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Buffalo. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.12-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 103, Building Construction and Demolition; Fire Prevention, 1974	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: The City of Buffalo administers the New York State family of codes, a collection of publications coauthored by the International Code Council and the New York State Department of State, legislated by the state, and implemented on July 3, 2002.					
Zoning Code	Yes	No	Chapter 496, Unified Development Ordinance 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: This Ordinance is adopted in accordance with a comprehensive plan to promote the interest and welfare of the people through standards that address the orderly and compatible use of land, the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and type of blocks, thoroughfares, and open spaces.					
Subdivision Ordinance	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.5, Subdivision Approvals 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: Subdivision allows for the orderly division or consolidation of lots, the alteration of lot boundaries, and the dedication of land for public rights-of-way, parks, and other public purposes. The Commissioner of Permit and Inspection Services must take action on an exempt alteration of lots. The City Planning Board must take action on requests for approval of a minor subdivision or major subdivision.					
Stormwater Management Ordinance	Yes	No	Chapter 326, Plumbing, Article IV, Stormwater Retention System	Local	Chief Plumbing Inspector and the Sewer Authority
Comment: All new parking lots or other new paved and drained areas where the collected stormwater load would surpass that of the sewer system into which it would discharge shall have a complete stormwater retention system designed by an architect or engineer and approved by the Chief Plumbing Inspector and the Sewer Authority, as part of their construction.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment:					
Growth Management	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.5, Subdivision Approvals 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: The subdivision ordinance will ensure the accurate and easy description of land, orderly growth and development, efficient land use, and proper use of natural resources.					
Site Plan Review	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.3, Zoning Approvals	Local	Division of Zoning and Land Use Planning, City Clerk
<p>Comment: Major site plan review is required prior to a building permit being issued for any development project which meets or exceeds the below thresholds:</p> <ol style="list-style-type: none"> 1. New construction of a principal building of at least 5,000 square feet in gross floor area, except in a case that involves the construction of only a single unit dwelling or a double unit dwelling. 2. A 5,000 square foot or more increase in gross floor area to an existing principal building. 3. New construction of, or additions to, principal buildings to be conducted in phases so that the total gross floor area of all phases combined is at least 5,000 square feet. 4. New construction of a principal building of the civic building type in a neighborhood zone. 5. New construction of a principal building on a parcel that is within, directly across a public right-of-way from, or within 150 feet of, a Historic Olmsted Park or Parkway. 6. Any new construction of a multiple-unit dwelling in an N-2R or N-3R zone. 7. Substantial renovation of any principal building that is at least 50,000 square feet in gross floor area and that involves a change of use, other than in the D-S, D-C, D-IL, D-IH, or C-R zones. 8. New construction or reconstruction of a parking lot of at least 50 spaces. 9. New construction of a loading area containing at least three loading berths. 10. The demolition of a principal building in an N-1D, N-1C, N-1S, N-2C, N-2E, N-3C, N-3E per Section 3.2.1.K. 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Environmental Protection Ordinance	Yes	No	Chapter 168, Environmental Review, 3/6/1998	Local	Buffalo Environmental Management Commission
<p>Comment: This chapter is enacted pursuant to Article 8 of the New York Environmental Conservation Law and 6 NYCRR 617, State Environmental Quality Review (SEQR) regulations. The basic purpose of this chapter is to incorporate the consideration of environmental factors into the existing planning, review and decision making processes of the city at the earliest possible time. To accomplish this goal, this chapter requires that all agencies determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment and, if it is determined that the action may have a significant adverse impact, prepare or request an environmental impact statement.</p>					
Flood Damage Prevention Ordinance	Yes	Yes	The Charter, Article 31, Flood Damage Prevention, 9/3/2008	Local	Commissioner of Public Works, Parks and Streets
<p>Comment: It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (1) regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; (4) control filling, grading, dredging and other development which may increase erosion or flood damages; (5) regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and; (6) qualify and maintain for participation in the National Flood Insurance Program. <p>BFE+2 feet is required for all construction in the SFHA (residential and non-residential)</p>					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	The Queen City in the 21st Century: Buffalo's Comprehensive Plan, 2/7/2006	Local	Buffalo Office of Strategic Planning
<p>Comment: The Buffalo Comprehensive Plan was created to guide Buffalo to achieve a shared community vision of the future for the city. It is the intent of the plan to build a city that is a prosperous, green regional center providing livable communities for all its citizens.</p>					
Capital Improvement Plan	Yes	No	Within the Comprehensive Plan	Local	Buffalo Office of Strategic Planning



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The Comprehensive Plan proposes a special Buffalo Development Program which combines the Capital Improvement Program constructed out of already available funds with an additional \$35 million per year from other sources. Over the ten-year course of the program an additional \$350 million would be invested.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Niagara River Watershed Management Plan, 2013 Regional Niagara River Lake Erie Watershed Management Plan, 2017	Local, County	Buffalo Niagara Riverkeeper, Erie County
Comment: Riverkeeper approached the watershed planning process through a two-phased approach, with the first focusing on completing an initial assessment of the watershed, by performing an ecological inventory, desktop GIS analysis, municipal code review, and ranking sub-watersheds within the Niagara River Watershed based on water quality, habitat and land use metrics. The second phase consisted of developing implementation plans for five priority sub-watersheds based on field data collected over two years.					
Stormwater Plan	Yes	No	Stormwater Management Plan, October 2015	City	Buffalo Sewer Authority
Comment: The SWMP Plan is based on the most current NYSDEC SPDES General Permit (GP-0-15-003) issued under the Federal Stormwater Phase II rule (issued in 1999) which requires MS4 owners and operators, in U.S. Census defined urbanized or other designated areas, to develop a SWMP Plan. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures, include: <ol style="list-style-type: none"> 1. Public Education and Outreach 2. Public Involvement / Participation 3. Illicit Discharge Detection and Elimination 4. Construction Site Runoff Control 5. Post-Construction Stormwater Management 6. Pollution Prevention / Good Housekeeping for Municipal Operations 					
Open Space Plan	Yes	No	Land Use Plan September 2016	City	Office of Strategic Planning
Comment: The Buffalo Green Code is a place-based economic development strategy designed to implement the city's Comprehensive Plan. It includes the first citywide land use plan since 1977, and the first zoning rewrite since 1953. It incorporates the city's Homestead Urban Renewal Plan, Local Waterfront Revitalization Plan, and Brownfield Opportunity Area Plans into a common vision that will guide Buffalo's physical development over the next 20 years.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	No	Local Waterfront Revitalization Program September 2020	City	Office of Strategic Planning
Comment: The City of Buffalo Local Waterfront Revitalization Area expands the original New York State Coastal Area boundary to better mimic the Niagara River Greenway Focus Area boundary and to ensure that the LWRA includes: <ul style="list-style-type: none"> • The full reach of Scajaguada Creek (above ground only) and Hoyt Lake, Buffalo River, Cazenovia Creek and South Park Lake within the City of Buffalo; • The full reach of the Great Lakes Seaway Trail National Scenic Byway in Buffalo, particularly the full extent along Niagara Street, as it serves as the City's primary local waterfront corridor; • The City's five waterfront Olmsted Parks including Riverside, the southern half of Delaware Park, Front Park, Cazenovia Park and South Park; and The Canalside and Cobblestone areas. 					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Transportation Plan	Yes	No	2040 Metropolitan Transportation Plan Update, May 2014	Regional	Greater Buffalo-Niagara Regional Transportation Council
<p>Comment: The Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) is a partnership of local and state governments working together to make decisions about transportation planning in the Buffalo-Niagara region. GBNRTC members include: City of Buffalo; City of Niagara Falls; Erie County; Niagara County; Niagara Frontier Transportation Authority (NFTA); New York State Department of Transportation (NYSDOT); and New York State Thruway Authority (NYSTA). The Empire State Development Corporation, the Transportation Council of the Buffalo-Niagara Partnership, and the Seneca Nation of Indians serve formally as Regional Strategic Stakeholders. Working together, GBNRTC members carry out a continuing, cooperative, and comprehensive planning process to develop transportation plans and programs for the Buffalo-Niagara region. As the Metropolitan Planning Organization (MPO), the GBNRTC is responsible for developing a long-range metropolitan transportation plan (MTP) for the region that reflects both regional needs and local concerns. The MTP serves a number of purposes. It provides a vision of the region's future growth and development; identifies regional transportation needs for future transportation improvements and services; and provides guidance and direction for infrastructure investments in the region. The plan sets the foundation and priorities for the distribution of federal transportation funds and serves as the framework for the development of the Transportation Improvement Program (TIP), the capital program of all federally funded transportation projects in the region.</p>					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					



Development and Permitting Capability

The table below summarizes the capabilities of the City of Buffalo to oversee and track development.

Table 9.12-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Department of Permit & Inspection Services
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	All permits must meet City and State Ordinances
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Not Indicated	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Buffalo and their current responsibilities which contribute to hazard mitigation.

Table 9.12-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board makes determinations on Major Site Plans and Subdivisions. The Planning Board also advises the Common Council on Rezoning Requests, Special Use Permits, Planned Unit Developments, and Adaptive Reuse Permits.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals reviews all applications seeking relief from what is required by the Unified Development Ordinance.
Planning Department	Yes	The Mayor’s Office of Strategic Planning, a division within the city’s Executive Department, coordinates economic development activities throughout the City of Buffalo. The Mayor’s Office of Strategic Planning is subdivided into four divisions: Development, Real Estate, Planning & Zoning, and Environmental Affairs. The Division of Development works directly with the business community and real estate developers. The Division of Real Estate handles real estate transactions related to city-owned property, including the sale of real property owned by the City of Buffalo, including vacant lots, residential structures, and capital assets such as decommissioned schools and fire houses. The Division of Planning & Zoning oversees the administration of the city’s development regulatory boards (Planning Board, Zoning Board of Appeals, and Historic Preservation Board) and engages the community in planning initiatives. The Division of Environmental Affairs handles matters related to state and federal environmental review, implementation of state and federal environmental land use laws, and oversees the Environmental Management Commission.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental division is responsible for the review and coordination of actions subject to the State and Federal regulations, the assessment and remediation of the city’s brownfields, providing support staff to the Buffalo Environmental Management Commission, and advising city departments on environmental issues and affairs.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Division of Development in the Mayor's Office of Strategic Planning strives to make doing business in Buffalo as seamless as possible.
Public Works/Highway Department	Yes	<p>The City of Buffalo Department of Public Works (DPW) plays a major role in connecting the Buffalo Community. Whether it is clearing snow from your street, inspecting bridges, collecting trash, or mowing the sports fields our children play on, we are in our neighborhoods every day working to improve quality of life for residents, businesses and visitors in the city. It is the mission of the department to maintain, enhance and beautify city streets, public facilities, infrastructure, waterways, and parks. The DPW is constantly working to keep all the elements of the city functioning properly.</p> <p>The Buildings Division of the DPW is responsible for:</p> <ul style="list-style-type: none"> • Building Planning and Design - Responsible for the design, planning, and construction oversight for all major capital improvements and repairs at over 200 city-owned facilities. These facilities include cultural and sports assets, major municipal buildings, police facilities, fire houses, all city service garages, all libraries within the city limits, all city-owned community centers, and all park buildings, shelters, ice rinks and pools. • Building Maintenance - Oversees all building maintenance on over 200 city owned facilities.
Construction/Building/Code Enforcement Department		The Department of Permit and Inspection Services oversees all development and uses on private property in the City of Buffalo, ranging from a new patio in a residential backyard to the construction of a new multi-story office building. Our mission is to guide residents and property owners through the license and/or permit process. We review and inspect these projects to ensure safety and compliance with the New York State Building and Fire Code, the Buffalo Green Code, and all other appropriate codes or ordinances.
Emergency Management/Public Safety Department	Yes	The Buffalo Fire Department is responsible for Emergency Management Services.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	BuffAlert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	<ul style="list-style-type: none"> • The Engineering Department is responsible for construction and paving of all City streets; traffic signals and signage; maintains over 32,000 street lights citywide; maintains 44 bridges, oversees harbor functions; monitors ice formations on bodies of water in winter • The Buildings Department oversees all construction of City-owned facilities and handles major repairs; oversees all maintenance on hundreds of City-owned buildings • The Streets Department: Plows and cleans 1,600 lane miles of City roadways, and handles bulk trash pickup • The Sanitation Department is responsible for collecting and disposing of 70,000 trash pick-ups weekly • The Recycling Department works with a contractor to collect recyclables on a weekly basis to reduce our reliance on landfills, prevent pollution, increase air quality and save tax dollars • The Water Department handles all water engineering, daily operations, water-related customer service and maintenance on 800 miles of sub-surface piping



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<ul style="list-style-type: none"> The Department of Parks and Recreation is responsible for all park operations including maintaining around 190 City properties including athletic fields, bike trails, traffic circles, green spaces and managing over 64,000 street trees. This division also manages programming at 7 City recreation centers, pools, splash pads and skating rinks.
Mutual aid agreements	No	Not Indicated
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Division of Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Division of Engineering
Planners or engineers with an understanding of natural hazards	Yes	Division of Engineering
Staff with expertise or training in benefit/cost analysis	Yes	Administration, Finance, Policy & Urban Affairs
Professionals trained in conducting damage assessments	No	Division of Engineering, Department of Permit and Inspection Services
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Office of Strategic Planning
Scientist familiar with natural hazards	No	Not Indicated
NFIP Floodplain Administrator (FPA)	Yes	Commissioner, Department of Public Works
Surveyor(s)	No	Not Indicated
Emergency Manager	Yes	Fire Commissioner
Grant writer(s)	No	Not Indicated
Resilience Officer	No	Not Indicated
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Buffalo.

Table 9.12-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Buffalo.

Table 9.12-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Mayor’s Office of Communications
Personnel skilled or trained in website development	Yes	Mayor’s Office of Communications
Hazard mitigation information available on your website	Yes	Buffalony.gov
Social media for hazard mitigation education and outreach	Yes	Facebook, Twitter, and Instagram available
Citizen boards or commissions that address issues related to hazard mitigation	Yes	The Citizens Planning Council is a group of appointed citizens that makes capital budget recommendations to the Mayor’s Office based upon capital budget requests from City departments, not-for-profit institutions, and the community. The Preservation Board reviews all exterior changes to landmark properties and properties located within City of Buffalo Preservation Districts as per Chapter 337 of City of Buffalo Code. The Preservation Board uses the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings as its guidelines.
Other programs already in place that could be used to communicate hazard-related information	Yes	BuffAlert Newsletter
Warning systems for hazard events	Yes	CodeRED
Natural disaster/safety programs in place for schools	Yes	Fire Safety, Tornado Safety
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Buffalo.

Table 9.12-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-





Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	Bronze	9/26/2019
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.12-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.12.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Finn, Commissioner Department of Public Works

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Buffalo.





Table 9.12-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Buffalo	94	403	\$927,901	33	45

Source: FEMA 2020a, FEMA 2020b

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the City of Buffalo along Lake Erie are particularly susceptible to coastal flooding as a result of storm-induced rises and seiches. The Buffalo River is a notable floodplain in Erie County that flows through the southern portion of the city. Over 4.5% of the land area in the City of Buffalo (1,187 acres) is located within the SFHA (100-year floodplain).

NFIP Compliance

The City of Buffalo’s more recent Community Assistance Contact (CAC) was on April 8, 2005 and the most recent Community Assistance Visit (CAV) was on April 26, 2017. There are currently no outstanding compliance issues.

9.12.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Buffalo has identified the following routes and procedures to evacuate residents prior to and during an event.

- I-190
- I-90
- Pittsburgh-Buffalo Hwy (US-219)
- South Park Ave (US-62)
- NY-400
- NY-33
- NY-5

Sheltering

The City of Buffalo has identified the following designated emergency shelters within the city.

Table 9.12-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The city will work with the county to identify and designate sheltering locations. See Mitigation Action 2022-C. Buffalo-#014							



Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Buffalo has identified the following sites suitable for placing temporary housing units.

Table 9.12-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The city will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-C. Buffalo-#014					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The City of Buffalo has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.12-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The city will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-C. Buffalo-#014					

9.12.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.12-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.12-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	18	3	9	1	16	3	40	0	18	3	26	0
Multi-Family	3	0	5	0	6	1	9	0	11	0	2	0
Other (commercial, mixed-use, etc.)	19	1	10	2	15	0	15	0	17	1	9	0
Total Permits Issued	40	4	24	3	37	4	64	0	46	4	37	0
Property or Development Name	Type of Development		# of Units / Structures		Location		Known Hazard Zone(s)*		Description / Status of Development			



				(address and/or block and lot)		
Recent Major Development and Infrastructure from 2015 to Present						
None Identified						
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.12.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Buffalo’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Buffalo has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.12-1. Northern Section of City of Buffalo Hazard Area Extent and Location Map 1

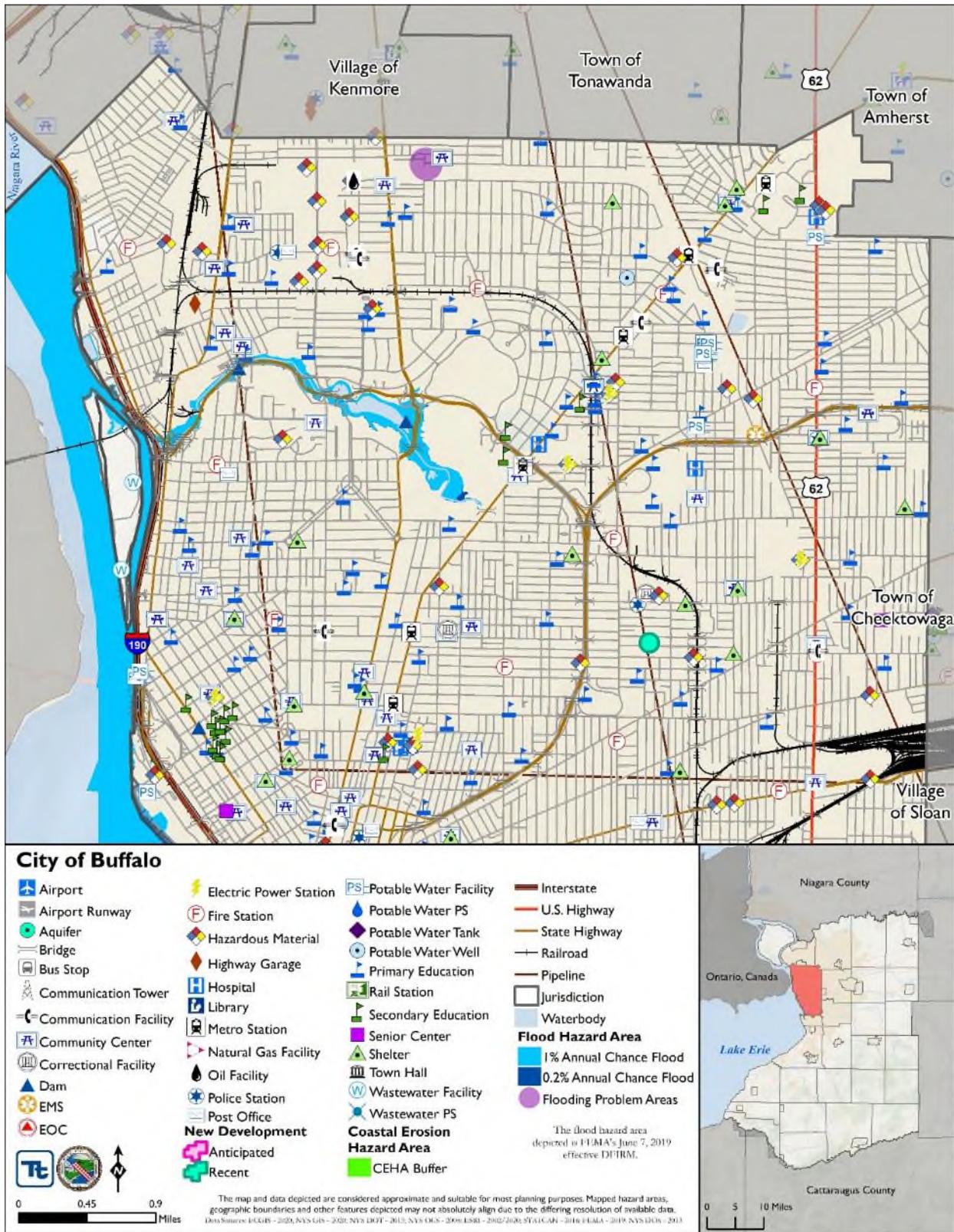




Figure 9.12-2. Northern Section of City of Buffalo Hazard Area Extent and Location Map 2

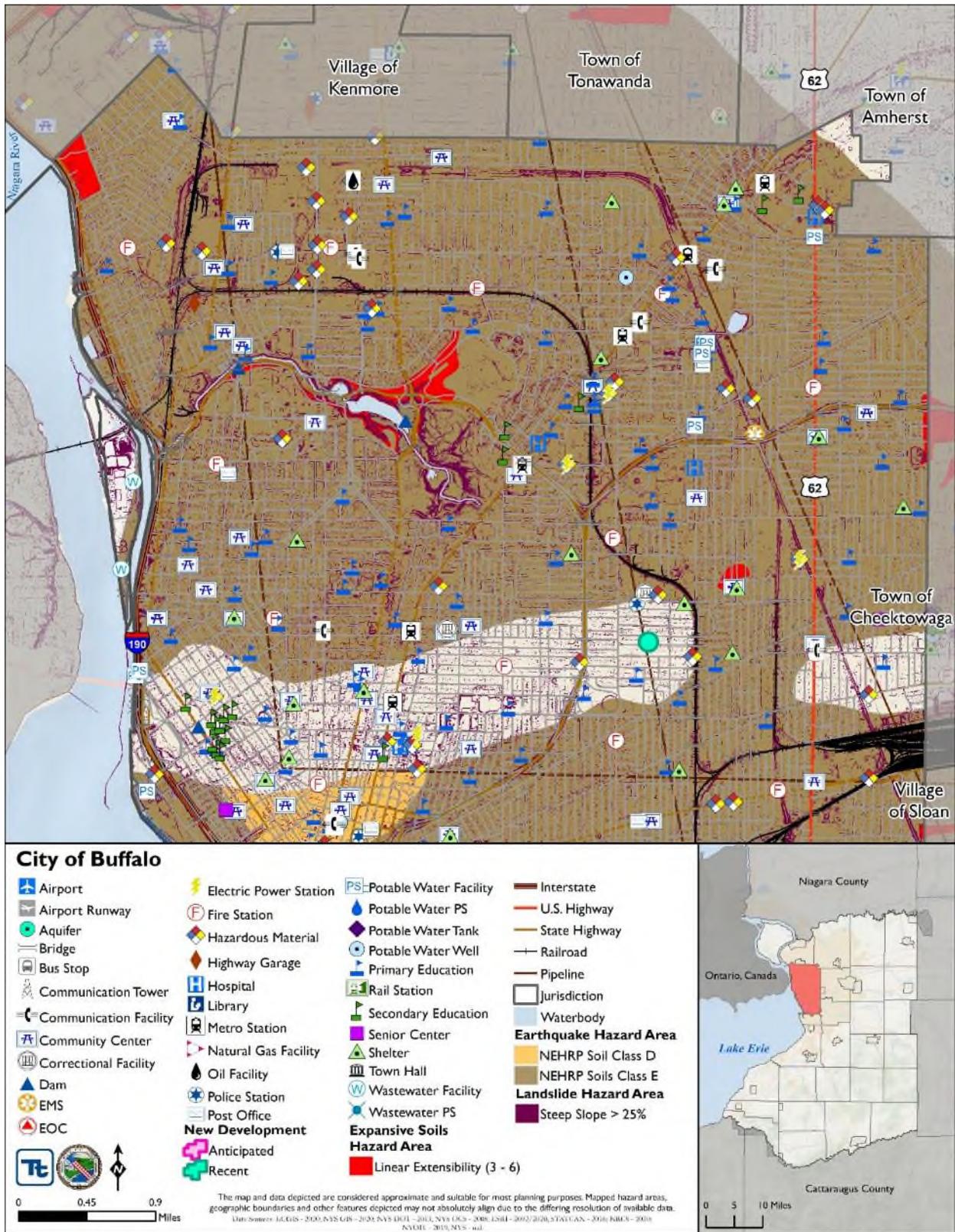




Figure 9.12-3. Northern Section of City of Buffalo Hazard Area Extent and Location Map 3

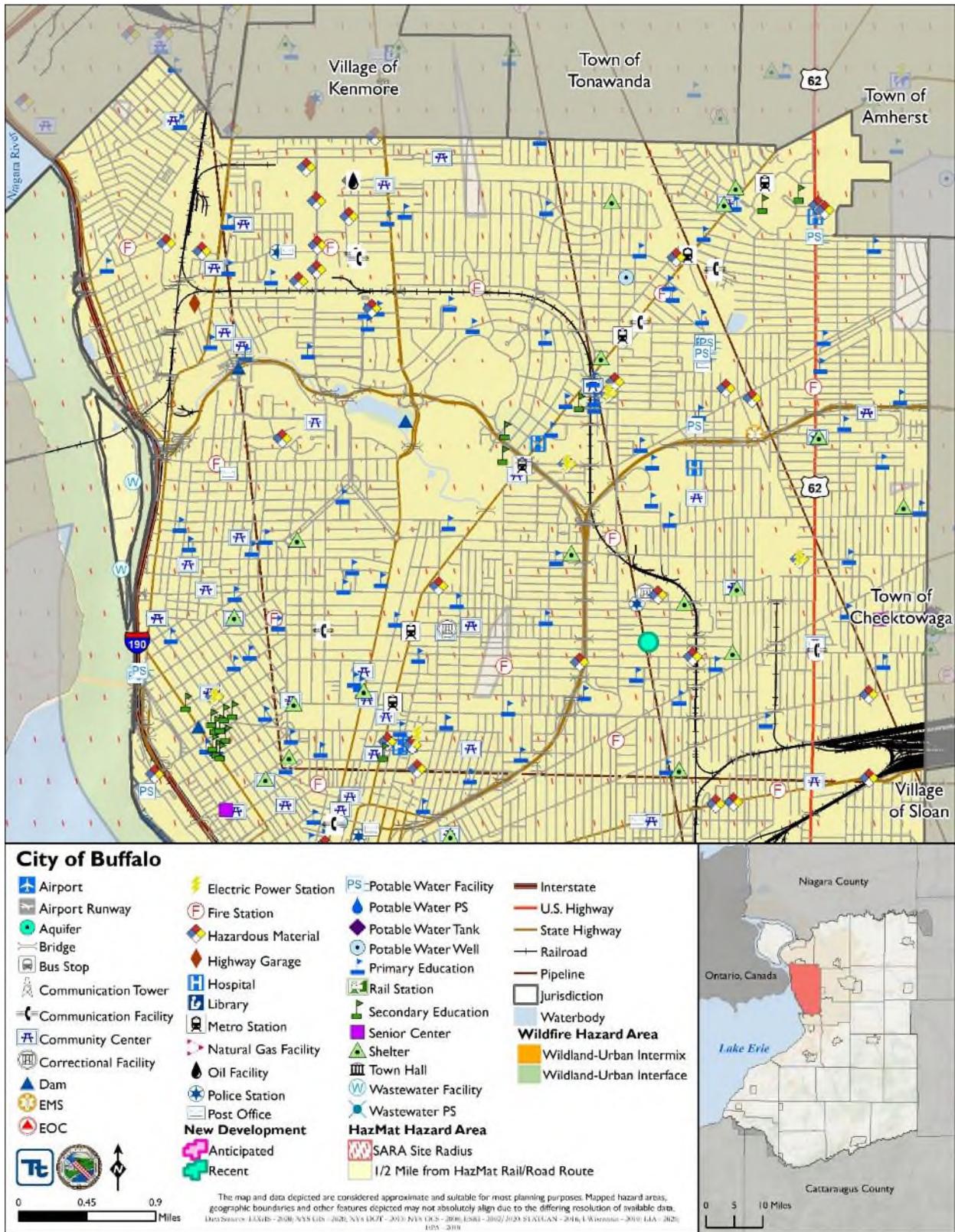




Figure 9.12-4. Southern Section of City of Buffalo Hazard Area Extent and Location Map 1





Figure 9.12-5. Southern Section of City of Buffalo Hazard Area Extent and Location Map 2

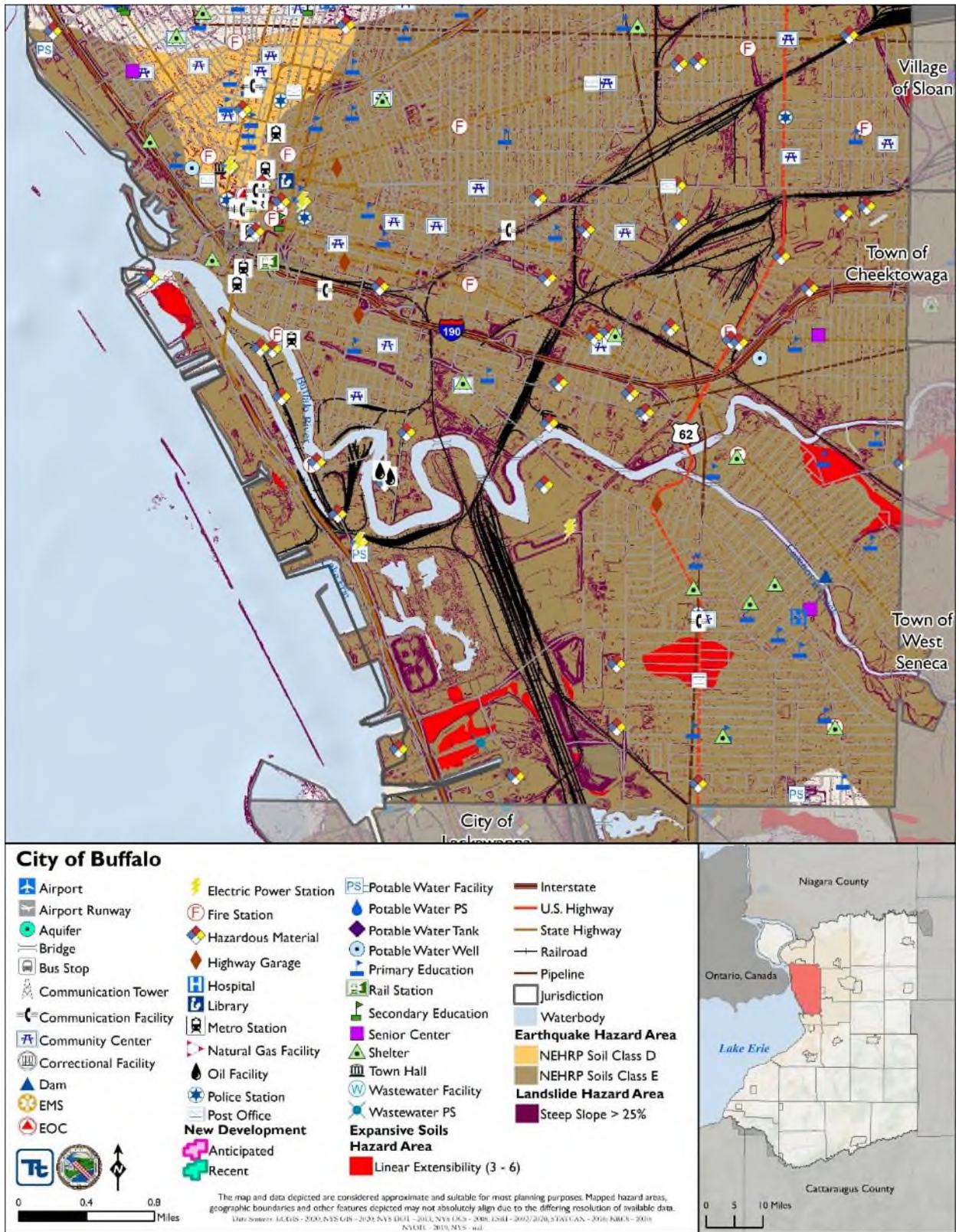
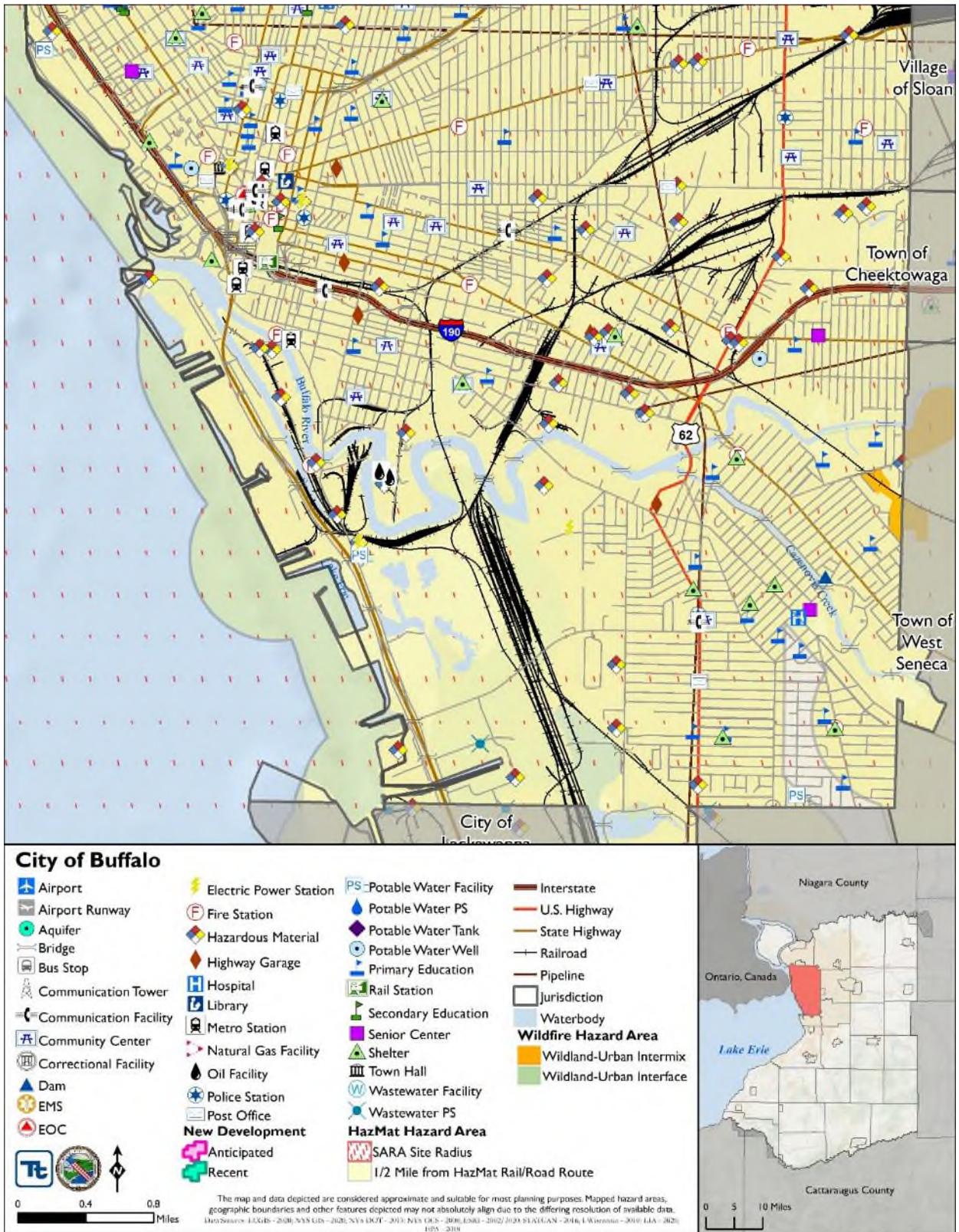




Figure 9.12-6. Southern Section of City of Buffalo Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Buffalo’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.12-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.12-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	A portion of the New York State Thruway was closed.
August 11-15, 2015	Flash Flood	No	Some of the main roads closed included: Maple Road, Niagara Falls Blvd, and Sheridan Drive. Secondary roads, too numerous to mention, were also flooded. In East Amherst, streets were flooded and people had to be rescued from vehicles trapped in flood waters.
October 28-29, 2015	High Wind	No	Reports of trees down scattered about the City of Buffalo.
November 6, 2015	Thunderstorm Wind	No	The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car. Damage was estimated at \$200,000.
November 12, 2015	High Wind	No	Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets.
November 18, 2015	High Wind	No	Although the county was impacted, the city did not report damages
January 11, 2017	High Wind	No	Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.
March 8, 2017	High Wind	No	Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the winds.
March 13, 2017	Winter Storm	No	Most schools and some businesses closed on Tuesday. Snowfall records were set at 19.5 inches in Buffalo.
July 20, 2017	Tornado	No	Although the county was impacted, the city did not report damages
August 4, 2017	Thunderstorm Wind	No	In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the city did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the city did not report damages
January 2, 2018	Blizzard	No	Although the county was impacted, the city did not report damages
October 6, 2018	Lightning	No	Although the county was impacted, the city did not report damages
February 24, 2019	High Wind	No	Thousands were reported without power.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach.
November 27, 2019	Lakeshore Flooding	No	This caused a lesser long-lived seiche on Lake Erie than the previous event. It peaked at 9.56 ft above low water datum with the level above Lake Erie's flood stage for about four hours. This again flooded Canalside in downtown Buffalo, flooded Route 5, and did additional damage to breakwaters in Dunkirk in Buffalo.
January 12, 2020	Lakeshore Flooding	No	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.
January 18, 2020	Lakeshore Flooding	No	As the cold front passed that brought colder air in, a seiche on Lake Erie again brought lakeshore flooding to Chautauqua and Erie counties, doing further damage to the Dunkirk Pier, Buffalo break wall, and closing Route 5 in Hamburg. There were two distinct pulses of higher water on the east end of the lake, as well. The first corresponded with lake levels of 8.18 feet above low water datum, and the second of 7.3 feet above low water datum.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the City of Buffalo’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Buffalo. The City of Buffalo has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.



During the review of the hazard/vulnerability risk ranking, the city did not suggest modifications for the following hazard rankings.

Table 9.12-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.12-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Delaware Park Lake Dam	Dam	X	X	2022-C. Buffalo-001
Scajaquada Creek Dam	Dam	X	X	2022-C. Buffalo-002
Buffalo Fire Investigation	Fire Station	X	X	2022-C. Buffalo-003
General Mills Cereal Properties, LLC	Hazardous Material		X	2022-C. Buffalo-004
National Fuel Gas Distribution - Minera	Hazardous Material	X	X	2022-C. Buffalo-005
USCG Sector Buffalo	Hazardous Material	X	X	2022-C. Buffalo-006
Buffalo Fire Engine 25	Shelter		X	2022-C. Buffalo-007

Source: Effective DFIRM

Identified Issues

After review of the City of Buffalo’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Buffalo has identified the following vulnerabilities within their community:

- Various critical facilities are located within the floodplain
- Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, oil facilities, post offices, private schools, and colleges, in the city are in the earthquake hazard area.



- All of the critical facilities in the City of Buffalo may be at risk of being exposed to hazardous materials incidents.
- Several private facilities are located on steep slopes and at risk of landslides.
- The South Side Buffalo Post Office may be at risk of experiencing damages caused by expansive soils.
- There are 33 Repetitive Loss Properties within the city.
- Ice jams during high water events cause flooding and destabilization of the Cazenovia Creek and Buffalo River banks.
- The city does not have identified emergency shelters, temporary or permanent housing locations, or heating/cooling centers.
- FEMA FIRMs are updated on an ongoing basis and may change the flood risk to the city.
- The city would like to increase public awareness, preparedness, and information sharing about disasters.

9.12.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.12-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	-	
	Enhance local Snow Removal Plan by controlling employee leave time; extending shifts to 12-16 hours; establishing a Command Center/War Room; providing additional notification/information of impending and current events via Public Notification System; establishing off-street parking agreements with local businesses to facilitate plowing of streets; purchasing eight new wing plows; renewing GPS contract to assist in tracking and deploying assets	Exposure; transportation; continuity of operations for health facilities; businesses and gov't	Not Identified	Dept. of Public Works	Complete	Level of Protection	-	<ol style="list-style-type: none"> Discontinue Project is complete and improvements are in place. Buffalo has been successful in the past several storms. The mutual aid provided by NYSDOT has been the best of all improvements made. That allows city forces to focus on secondary and residential routes and achieve overall completion faster.
	Currently seeking funding for expansion of slope walls/bank protection along the Caznovia Creek and Buffalo River; dredging of key areas outside of Federal navigational limits; increased ice breaking/cutting; enforcement of all local/State and Federal rules and regulations involving floodplain development	Flooding, Ice Jams	Effects of flooding caused by ice jams during high water events	Dept. of Public Works	Ongoing Capability	Level of Protection	-	<ol style="list-style-type: none"> Include in 2020 HMP Continue to seek funding for slope wall construction and dredging upstream of the Federal navigation channel. <p>Actions taken since 2015 include consistently breaking ice in the navigation channel with the Cotter fire boat, breaking ice at bridges with long arm excavator and cutting triangles in upstream sheet ice to weaken the field ahead of forecasted ice flow.</p> <ol style="list-style-type: none">
	Promote Citizen Awareness/Preparedness by holding CERT classes; disseminating disaster preparedness and EMS information to the Board of Block Clubs; Buffalo Public Schools; Community Centers; faith based organizations; kiosks at festivals/PRs; etc.	All Hazards	Not Identified	Dept. of Fire	In Progress	Level of Protection	-	<ol style="list-style-type: none"> Include in 2020 HMP Current programs are in place for dissemination of information to the citizens of Buffalo. May revise the project description to reflect current options for information sharing.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Formally establish, via MOUs, heating/cooling centers throughout the City	Weather Temperature Extremes	Vulnerable populations having lack of access	Dept. of Fire	In Progress	Cost	-	<ol style="list-style-type: none"> Include in 2020 HMP Formally establish heating/cooling relocation and reunification centers via MOA's
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	DPW, Law, Common Council	Complete	Cost	-	<ol style="list-style-type: none"> Discontinue Article 31 of the City Charter has been added to address Flood Damage Prevention
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flood	Not Identified	DPW	Complete	Cost	-	<ol style="list-style-type: none"> Discontinue The Commissioner of Public Works, Parks and Streets is designated as the Floodplain Administrator.
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Not Identified	Inspections	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue The Commissioner of Public Works, Parks and Streets is designated as the Floodplain Administrator.
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	DPW, Law, Common Council, Insp.	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Include in 2020 HMP The most recent adopted FIRMs have been added to the City's Ordinance. This item should remain as it is a perpetual ongoing effort.
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	DPW, Law, Common Council, Insp.	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability of the city
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Join the Community Rating System (CRS).	Flood	Not Identified	DPW, Law, Common	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing Capability of the city
					Level of Protection	-		



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> 1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Council, Insp.		Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Buffalo has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Caznovia Creek and Buffalo River – The city consistently breaks up ice in the navigation channel with the Cotter fire boat, breaks ice at bridges with along arm excavator and cuts triangles in upstream sheet ice to weaken the field ahead of forecasted ice flow.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Buffalo participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.12-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X			X			X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X			X		X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X	X		X			X		X	X
Severe Winter Storm	X	X		X			X		X	X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.12-19 summarizes the comprehensive-range of specific mitigation initiatives the City of Buffalo would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.12-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CBS Category
2022-C. Buffalo-001	Work with the Delaware Park Lake Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2	Flood	Problem: The Delaware Park Lake Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
				Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.										
2022-C. Buffalo-002	Work with the Scajaquada Creek Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2	Flood	Problem: The Scajaquada Creek Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
				Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.										
2022-C. Buffalo-003	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	1, 2	Flood	Problem: The Buffalo Fire Investigation is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.	Yes 💧	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
				Solution: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Buffalo Fire Investigation to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility										



Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CBS Category
				<ul style="list-style-type: none"> Floodproofing of facility Mobile flood barriers Once the most cost-effective option is identified, the city will carry out the option.										
2022-C. Buffalo-004	Assess the flood risk at the General Mills Cereal Properties, LLC	1, 2, 3	Flood	Problem: The General Mills Cereal Properties, LLC is in the 0.2% annual chance flood event. Solution: The FPA will contact the facility owner and assess the flood risk at the facility.	Yes ●	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022-C. Buffalo-005	Work with the National Fuel Distribution - Minera owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	Problem: The National Fuel Distribution - Minera is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes ●	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-006	Work with the USCG Sector Buffalo owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	Problem: The USCG Sector Buffalo is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes ●	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-007	Assess the flood risk at the facility	1, 2, 3	Flood	Problem: The Buffalo Fire Engine 25 is in the 0.2% annual chance flood event.	Yes ●	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by	Ensures continuity of	City Budget	High	EAP	PI





Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CBS Category
	Buffalo Fire Engine 25			Solution: The FPA will contact the facility owner and assess the flood risk at the facility.					engineering study	operations of the facility				
2022-C. Buffalo-008	Work with the private building owners in the city to determine earthquake risk	1, 2, 3	Earthquake	<p>Problem: Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, oil facilities, post offices, private schools, and colleges, in the city are in the earthquake hazard area.</p> <p>Solution: The city will encourage private property owners to Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.</p>	Yes	None	Within 6 months for outreach	City of Buffalo	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	City Budget	High	EAP	PI
2022-C. Buffalo-009	Protect the critical facilities on the City of Buffalo from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	<p>Problem: All of the critical facilities in the City of Buffalo may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.</p>	Yes	None	Within 6 months for outreach	City of Buffalo	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	LPR	ES
2022-C. Buffalo-010	Work with private facility owners to protect the	1, 2, 3	Landslide	Problem: Several private facilities are located on steep slopes and at risk of landslides.	Yes	None	Within 6 months for outreach	City of Buffalo	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	EAP	PI



Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CBS Category
	facilities from landslides			Solution: with the City will encourage private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.										
2022-C. Buffalo-011	Work with the South Side Buffalo Post Office facility owner to protect the facility from the risk of expansive soils	1, 2, 3	Expansive Soils	<p>Problem: The South Side Buffalo Post Office may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: w the city will encourage the facility owner to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.</p>	Yes	None	Within 6 months for outreach	City of Buffalo	<\$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the post office from expansive soils	City Budget	High	EAP	PI
2022-C. Buffalo-012	Repetitive Loss Mitigation	1, 2, 3	Flood	<p>Problem: There are 33 Repetitive Loss Properties within the city.</p> <p>Solution: The city will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the city will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	None	Within 6 months for outreach	FPA	Low	High	City Budget	High	EAP	PI



Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CBS Category
2022-C. Buffalo-013	Cazenovia Creek and Buffalo River Bank Protections	1, 2	Flood, Winter Storm, Severe Storm	<p>Problem: Ice jams during high water events cause flooding and destabilization of the riverbanks.</p> <p>Solution: The city will continue to seek funding for slope wall construction and dredging upstream of the federal navigation channel, including increased ice breaking/cutting; and enforcement of all local/state and federal rules and regulations involving floodplain development.</p>	No	None	2 years	Engineering, DPW	Medium, \$50,000 (includes estimated costs for fireboat cotter and crew for 3 days, engineering crew for 2 days, police overtime for 2 days, extended reach excavator)	High	FEMA HMA, HMGP, BRIC	High	SIP	SP
2022-C. Buffalo-014	Citizen Awareness and Preparedness Education	1, 2, 3	All Hazards	<p>Problem: The city would like to increase public awareness, preparedness, and information sharing about disasters.</p> <p>Solution: The city will boost dissemination of information to the citizens of Buffalo by holding CERT classes; disseminating disaster preparedness and EMS information to the Board of Block Clubs; Buffalo Public Schools; Community Centers; faith based organizations; kiosks at festivals/PRs; etc.</p>	No	None	Ongoing	Dept. of Fire	Low	High	City Budget	High	EAP	PI
2022-C. Buffalo-015	Shelters and Temporary Housing	1, 2, 3	All Hazards	<p>Problem: The city does not have identified emergency shelters, temporary or permanent housing locations, or heating/cooling centers.</p>	Yes	None	6 months	Dept. of Fire	Low	High	City Budget	High	LPR	ES



Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The city will formally establish heating/cooling relocation and reunification centers via MOA's, as well as identifying and designating locations for overnight sheltering, temporary, and permanent housing.										
2022-C. Buffalo-016	Floodplain Management Ordinance	1, 2	Flood	<p>Problem: FEMA FIRMs are updated on an ongoing basis and may change the flood risk to the city.</p> <p>Solution: The most recent adopted FIRMs have been added to the city's ordinance. The city will update/revise floodplain management ordinances to be consistent with potential future new FIRMs is a perpetual on-going effort.</p>	No	None	Ongoing	DPW, Law, Common Council, Insp.	Low	High	City Budget	High	LPR	PR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





OEM Office of Emergency Management

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.12-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-C. Buffalo-001	Work with the Delaware Park Lake Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-002	Work with the Scajaquada Creek Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-003	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	1	1	1	1	0	1	-1	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-004	Assess the flood risk at the General Mills Cereal Properties, LLC	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-005	Work with the National Fuel Distribution - Minera owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-006	Work with the USCG Sector Buffalo owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-007	Assess the flood risk at the facility Buffalo Fire Engine 25	1	1	1	1	0	1	-1	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-008	Work with the private building owners in the	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High



Table 9.12-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	city to determine earthquake risk																
2022-C. Buffalo-009	Protect the critical facilities on the City of Buffalo from HazMat incidents	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-010	Work with private facility owners to protect the facilities from landslides	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-011	Work with the South Side Buffalo Post Office facility owner to protect the facility from the risk of expansive soils	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High
2022-C. Buffalo-012	Repetitive Loss Mitigation	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-013	Cazenovia Creek and Buffalo River Bank Protections	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-C. Buffalo-014	Citizen Awareness and Preparedness Education	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2022-C. Buffalo-015	Shelters and Temporary Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-C. Buffalo-016	Floodplain Management Ordinance	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.12.9 Action Worksheets

The following action worksheets have been developed by the City of Buffalo to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event		
Project Number:	2022-C. Buffalo-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Buffalo Fire Investigation is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Buffalo Fire Investigation to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the city will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the facility
Useful Life:	40 years	Goals Met:	1, 2
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate building	\$500,000	Not feasible
	Elevate roads	\$500,000	Elevated roadways would not protect the facility from flood damages
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	
Project Number:	2022-C. Buffalo-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures continuity of operations of EMS/Fire
Property Protection	1	Protects critical facility
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	-1	May need funding after feasibility assessment
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	Fire Department
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Cazenovia Creek and Buffalo River Bank Protections		
Project Number:	2022-C. Buffalo-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Winter Storm, Severe Storm		
Description of the Problem:	Ice jams during high water events cause flooding and destabilization of the riverbanks.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will continue to seek funding for slope wall construction and dredging upstream of the federal navigation channel, including increased ice breaking/cutting; and enforcement of all local/ftate and Federal rules and regulations involving floodplain development.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	Medium-High	Mitigation Action Type:	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	As soon as funding is available
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	FEMA HMA, HMGP, BRIC
Responsible Organization:	Engineering, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Redirect streambanks	N/A	Not environmentally sound
	Fill in river	N/A	Not environmentally sound
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Cazenovia Creek and Buffalo River Bank Protections	
Project Number:	2022-C. Buffalo-013	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures water flow
Property Protection	1	Reduces flooding/ice jams
Cost-Effectiveness	1	
Technical	1	Engineering/DPW can assist
Political	1	Priority for city
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Winter Storm, Severe Storm
Timeline	1	Within 5 years, ongoing
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



9.13 Town of Cheektowaga

This section presents the jurisdictional annex for the Town of Cheektowaga. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Cheektowaga’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.13.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Cheektowaga’s hazard mitigation plan primary and alternate points of contact. The Town of Cheektowaga followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Services, Planning, and Engineering. The Emergency Services Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.13-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mike Mazurowski, Emergency Services Manager Phone Number: (716) 893-0869 Email: mmazurowski@tocny.org	Name/Title: Patrick Bowen, Town Engineer/Engineering Department Phone Number: (716) 897-7288 Email: PBowen@tocny.org
NFIP Floodplain Administrator	
Name/Title: Patrick Bowen, Floodplain Administrator, Engineering Department Phone Number: (716) 897-7288 Email: PBowen@tocny.org	
Additional Contributors	
Name/Title: Jesse Jesonowski, Junior Planner Method of Participation: Provided data and information	

9.13.2 Municipal Profile

The Town of Cheektowaga is in the north-central part of Erie county, and is an inner ring suburb of Buffalo. It is the second most populated suburb in Erie County, after the Town of Amherst. Cheektowaga contains the incorporated Villages of Sloan and Depew. The town is bordered by the Town of Lancaster on the east, the Town of West Seneca on the south, the City of Buffalo on the west, and the Town of Amherst to the north. The Scajaquada Creek, Cayuga Creek and Ellicott Creek run through the town (Wikipedia 2020).



The town was hunting and fishing grounds for different groups of Native Americans. After white settlement, Cheektowaga became a thriving rural town with several taverns, sawmills, and cloth mills. In 1839, Cheektowaga was formed from the original Town of Amherst. Agriculture was very productive. By the time the Civil War started, several railroad lines bisected the town and spurred industrial development. The Buffalo Airport's development was very important to the town. The construction of the New York State Thruway, with three of its main interchanges within Cheektowaga also triggered rapid residential, industrial and commercial development (Town of Cheektowaga 2020).

Originally a rural farming area, the town was extensively developed for suburban housing during the post-World War II subdivision boom of the 1950s (Town of Cheektowaga 2020). In 1989 the Walden Galleria Mall opened a 1.2 million square foot regional shopping center. The Kensington Expressway was rebuilt in 1990 to service the Buffalo Airport and the eastern suburbs. Over time the town has become steadily more urban in composition (Town of Cheektowaga Comprehensive Plan 1992).

According to the U.S. Census, the 2010 population for the Town of Cheektowaga was 74,649. The estimated 2019 population was 73,129, a two percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.1 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.13.3 Jurisdictional Capability Assessment and Integration

The Town of Cheektowaga performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.13.3). The Town of Cheektowaga's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Cheektowaga. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.13-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	No	Yes	-	-	-
Comment: None					
Zoning Code	No	No	-	-	-
Comment: None					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	No	Ch. 209 Stormwater Management and Erosion & Sediment Control, Adopted 12-3-2007 by L.L. No. 8-2007. Amendments noted where applicable.	Local	Engineering Department
Comment: Required under the town's Stormwater SPDES Permit.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Ch. 125 Adopted 5-28-2019 by L.L. No. 2-2019.[1] Amendments noted where applicable.	Local	Town Engineer
Comment: Required for participation in the National Flood Insurance Program. Meets State requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					



Section 9.13: Town of Cheektowaga

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	Yes	Yes	Adopted by the Town Board of the Town of Cheektowaga 10-21-1985 as Ch. 19 of the 1985 Code	Local	Cheektowaga Emergency Services
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: None					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Ch. 125 Adopted 5-28-2019 by L.L. No. 2-2019.[1] Amendments noted where applicable.	Local	Town Engineer, Building Department
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DPW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	Adopted 5-05-2008 by Town Bd. Resolution 2008-264	Local	Town Engineer
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					



Section 9.13: Town of Cheektowaga

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	No	No			
Comment: None					
Community Wildfire Protection Plan	No	No			
Comment: None					
Forest Management Plan	Yes	No	Urban Forestry Management Plan	Local	Building Department
Comment: Urban Forestry Management Plan was developed through grant funding from the NYSDEC					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency Management Plan	Local	Cheektowaga Emergency Services
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-



Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None				

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Cheektowaga to oversee and track development.

Table 9.13-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain Development Permit is required for any development or renovations within the 100 Year Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Cheektowaga and their current responsibilities which contribute to hazard mitigation.

Table 9.13-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Town Planning Board is a five member citizen advisory body to the Town Board. Their mission is promulgated within Chapter 26 of the Town Code. Items considered by the Planning Board are initiated by filing a Development Review Application with the Code Enforcement Officer.
Zoning Board of Adjustments	Yes	The Town regulates all uses of land, heights of buildings, building locations and the density or bulk of buildings through its Zoning Law. The Town of Cheektowaga adopted its first zoning ordinance in 1942, which was subsequently replaced by a second zoning ordinance in 1969 with the adoption of its first comprehensive plan. In 1992 the Town adopted its current zoning law and its second comprehensive plan. The current Zoning Law, which has been periodically amended to date, can be found under Chapter 260 of the Town of Cheektowaga Town Code.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	Environmental Advisory Committee serves an advisory role only
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	The Highway department provides many services, including: repair of pot holes, tree planting, branch pickup, drainage/repair of storm sewers, street sweeping, street paving, tree trimming/removal, leaf pick-up, and snow/ice removal.
Construction/Building/Code Enforcement Department	Yes	The Town of Cheektowaga Building Inspection Department is the first stop for all proposed developments or construction within the Town. In addition to reviewing plans, issuing building permits and conducting inspections, the office provides the following services or functions: Planning/Zoning Administration State Environmental Quality Review (SEQR) Coordination Plumbing Inspections
Emergency Management/Public Safety Department	Yes	The Town of Cheektowaga Office of Emergency Services was created in 1981. The main responsibility of our office is to conduct a hazard analysis of the Town and then develop a plan and resources to handle a hazard or emergency. We are also responsible for keeping the training records of all town employees regarding the National Incident Management System (NIMS). In 2006, with the help of our Police Department, we formed the Town of Cheektowaga Community Emergency Response Team (CERT) We now have 72 members on our team.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department (see Above)
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Engineer
Surveyor(s)	No	-
Emergency Manager	Yes	Town has an Emergency Manager and Emergency Coordinator
Grant writer(s)	Yes	Town contract with grant writer



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Cheektowaga.

Table 9.13-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, following legislative process
User fees for water, sewer, gas or electric service	Yes (Sanitary & Storm Sewers)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes – Drainage District Fee
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Cheektowaga.

Table 9.13-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	PIO from Town Supervisor’s Office and Police Department
Personnel skilled or trained in website development	Yes	Town website maintained by Town Supervisor’s Office
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-



Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	NY-Alert
Natural disaster/safety programs in place for schools	Yes	Fire safety programs conducted by local Fire Departments.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Cheektowaga.

Table 9.13-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	See Local Fire Departments.	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	Yes	Certificate of Achievement	June 11,2019
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.13-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong



*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.13.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Patrick Bowen, Floodplain Administrator, Engineering Department

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Cheektowaga.

Table 9.13-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Cheektowaga	76	211	\$1,197,869	47	29

Source: FEMA 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town has identified the West end of West Toulon-Cherbourg-N. Seine area and Dubonnet Dr. as being flood prone areas, including street flooding, and basement flooding. Street flooding in both areas were recently mitigated with recent drainage improvements. The town does not maintain a list of property owners interested in flood mitigation, and there are currently no RiskMAP projects underway. There have been no recent flood events that have needed substantial damage determinations. Current FEMA flood hazard maps accurately address flood risk to the town.

NFIP Compliance

The Engineering Department is responsible for floodplain administration, however there are no certified floodplain managers on staff. The town has indicated that additional courses on how to manage development in the floodplain would be beneficial. The Engineering department provides the following services for residents: Permit review, flood insurance inquiries, inspections, review of Letter of Map Revisions, review of all development projects for potential impact on the floodplain. The Town Flood Damage Prevention Ordinance was originally adopted 10-15-2001 by L.L. No. 6-2001, and amended 5-28-2019 by L.L. No. 2-2019. The FDPO meets minimum requirements.

The Town of Cheektowaga’s most recent Community Assistance Visit (CAV) was on April 17, 2014. There are currently no outstanding compliance issues.

9.13.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.





Evacuation Routes and Procedures

The Town of Cheektowaga has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation shelters and the routes to them will be identified and promulgated to residents using the local media and NY-Alert.

Sheltering

The Town of Cheektowaga has identified the following designated emergency shelters within the town.

Table 9.13-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Cheektowaga Senior Center	3349 Broadway	200	See Animal Control Plan	Partial	Yes	Emergency	Feeding
Alexander Bldg.	275 Alexander Avenue	1075	See Animal Control Plan	No	No	Emergency	None
Southline Fire Station	1049 French Road	150	See Animal Control Plan	Yes	Yes	Emergency	Feeding
Dartwood Community Center	222 Autumwood Drive	72	See Animal Control Plan	Partial	No	Emergency	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Cheektowaga has identified the following sites suitable for placing temporary housing units.

Table 9.13-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-T. Cheektowaga-#011.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Cheektowaga has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.13-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-T. Cheektowaga-#011.					

9.13.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.13-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.13-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	14	0	13	0	6	0	6	0	11	0	7	0
Multi-Family	1	0	NA	0	11	0	1	0	NA	0	3	0
Other (commercial, mixed-use, etc.)	10	0	8	0	3	0	7	0	7	0	8	0
Total Permits Issued	25	0	21	0	20	0	14	0	18	0	18	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
SafStor	Commercial	1		390 Cayuga Road		½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area		N/A				
101 French Road warehouse	Commercial			101 French Road		NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area		N/A				
102 French Road warehouse	Commercial			102 French Road		½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines		N/A				



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Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
135 Buell Road	Commercial	1 warehouse project	135 Buell Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Wendy's	Commercial	1 building	2520 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Chick-Fill-A	Commercial	1	1753 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area	N/A
Warehouse	Commercial	1	2821 Broadway	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Express Mart	Commercial	1	2621 Genesee Street	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Retail Plaza	Commercial		Transit and Madeira Drive	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Chic-Fil-a	Commercial	2	Corner of Transit and Lossons Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A



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Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Office building	Commercial	1	2980 William Street	1-percent Annual Chance Flood Event Hazard Area, 0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Metal Clad Building	Commercial	120,000 sf building	999 Aero Drive	0.2-percent Annual Chance Flood Event Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Fast Food Restaurant	Commercial	1	3601 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Medical facility	Commercial	1	3154 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Mixed Use Building	Commercial	1	4814 Transit Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Mixed Use Building	Commercial	2	5050 Transit Road	Wildfire-Urban Intermix Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A



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Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Texas Road House	Commercial	1	3755 Union Road	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Keller Chevrolet	Commercial	1	3600 Genesee Street	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Rusiniak's Collission	Commercial	1	2210 Old Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Mighty Taco	Commercial	1	2021 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area	N/A
Tim Horton's Caf�� and Bake Shop	Commercial	1	440 Pine Ridge	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
McDonald's	Commercial	1	2567 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Self Storage Structures	Commercial		550 Cayuga Road	½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Truck Terminal	Commercial		3365 Broadway	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines, Expansive Soils Hazard Area	N/A
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Identified					

SFHA Special Flood Hazard Area (1% flood event)





** Only location-specific hazard zones or vulnerabilities identified.*

9.13.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Cheektowaga's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Cheektowaga has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.13-1. Town of Cheektowaga Hazard Area Extent and Location Map 1

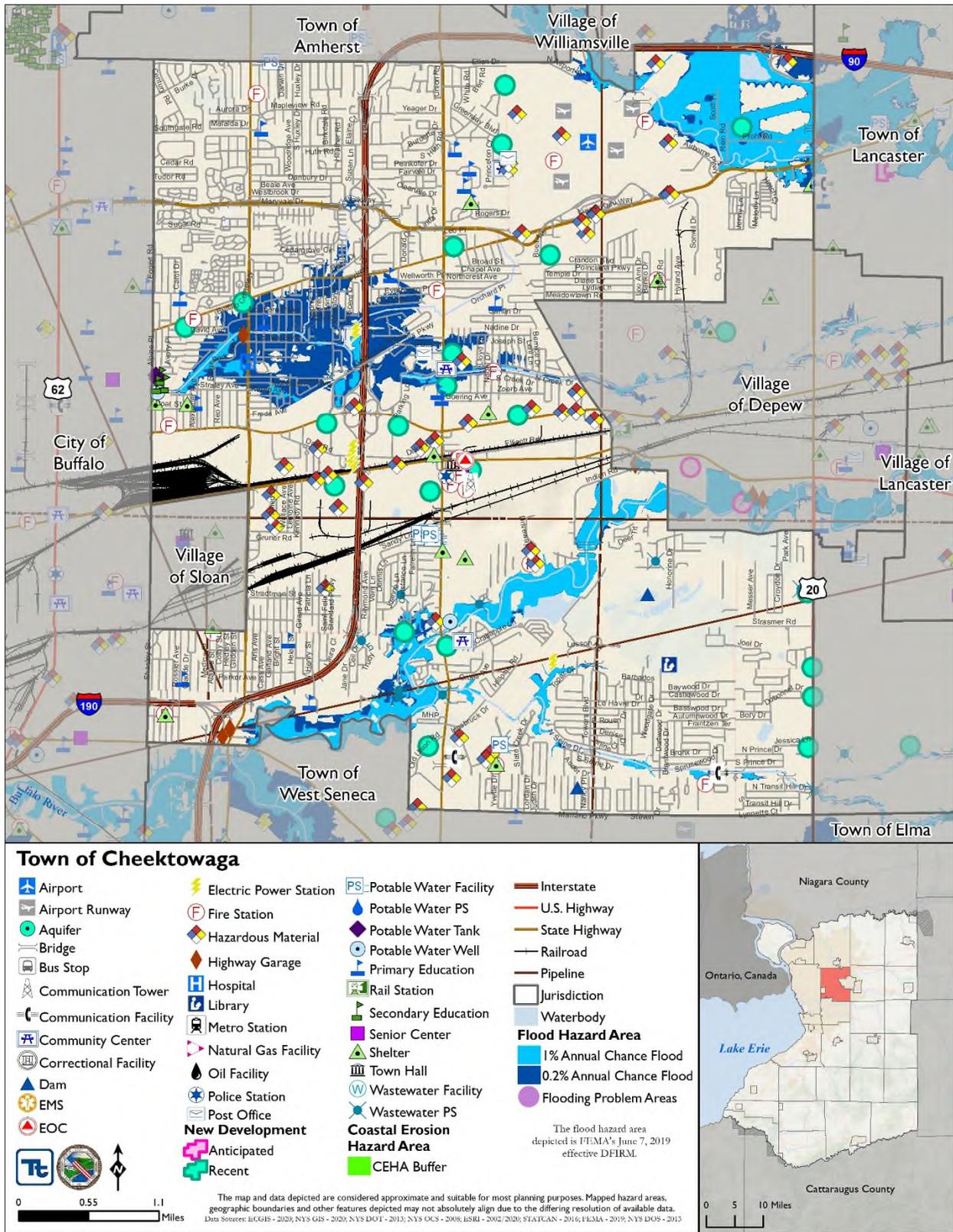




Figure 9.13-2. Town of Cheektowaga Hazard Area Extent and Location Map 2

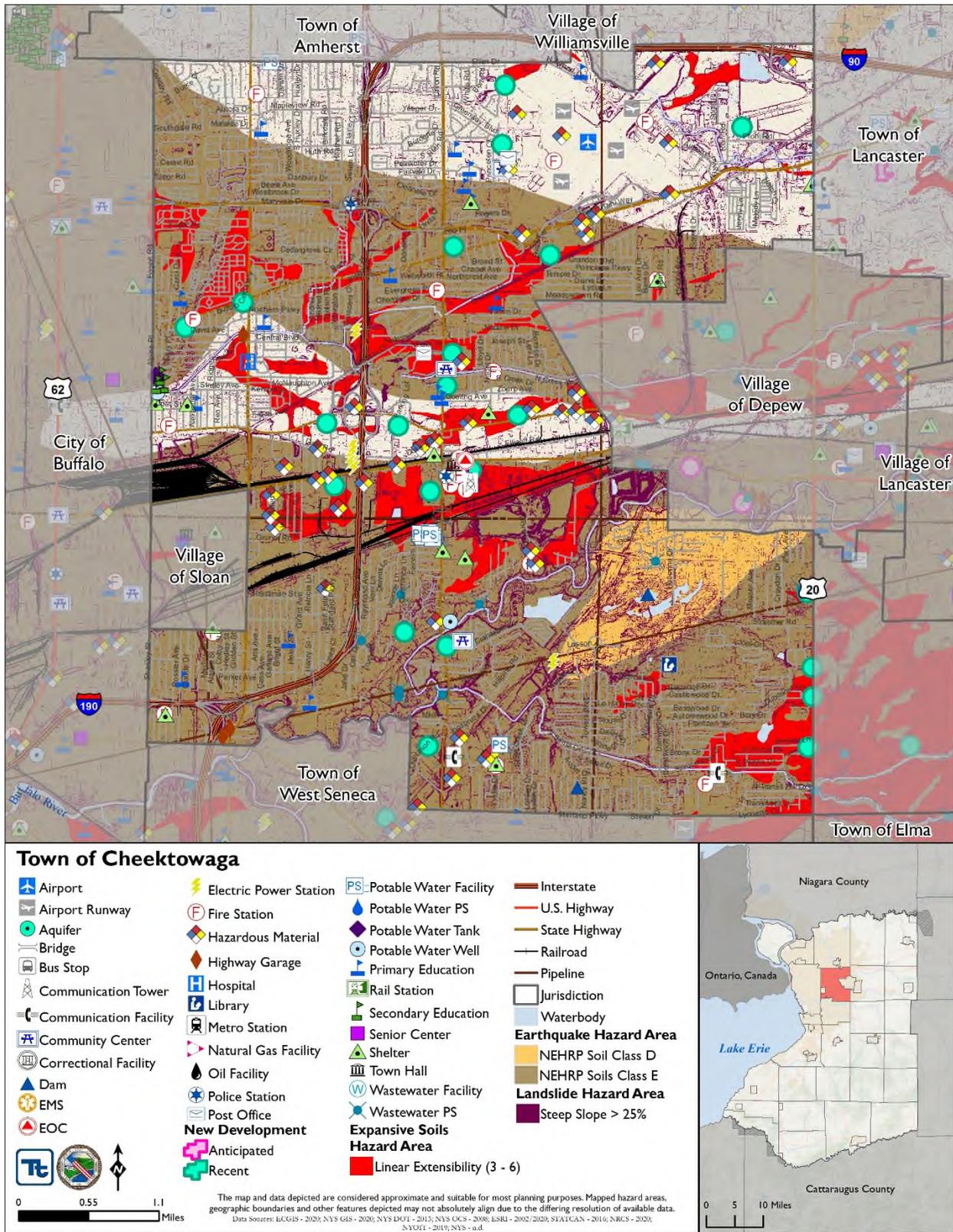
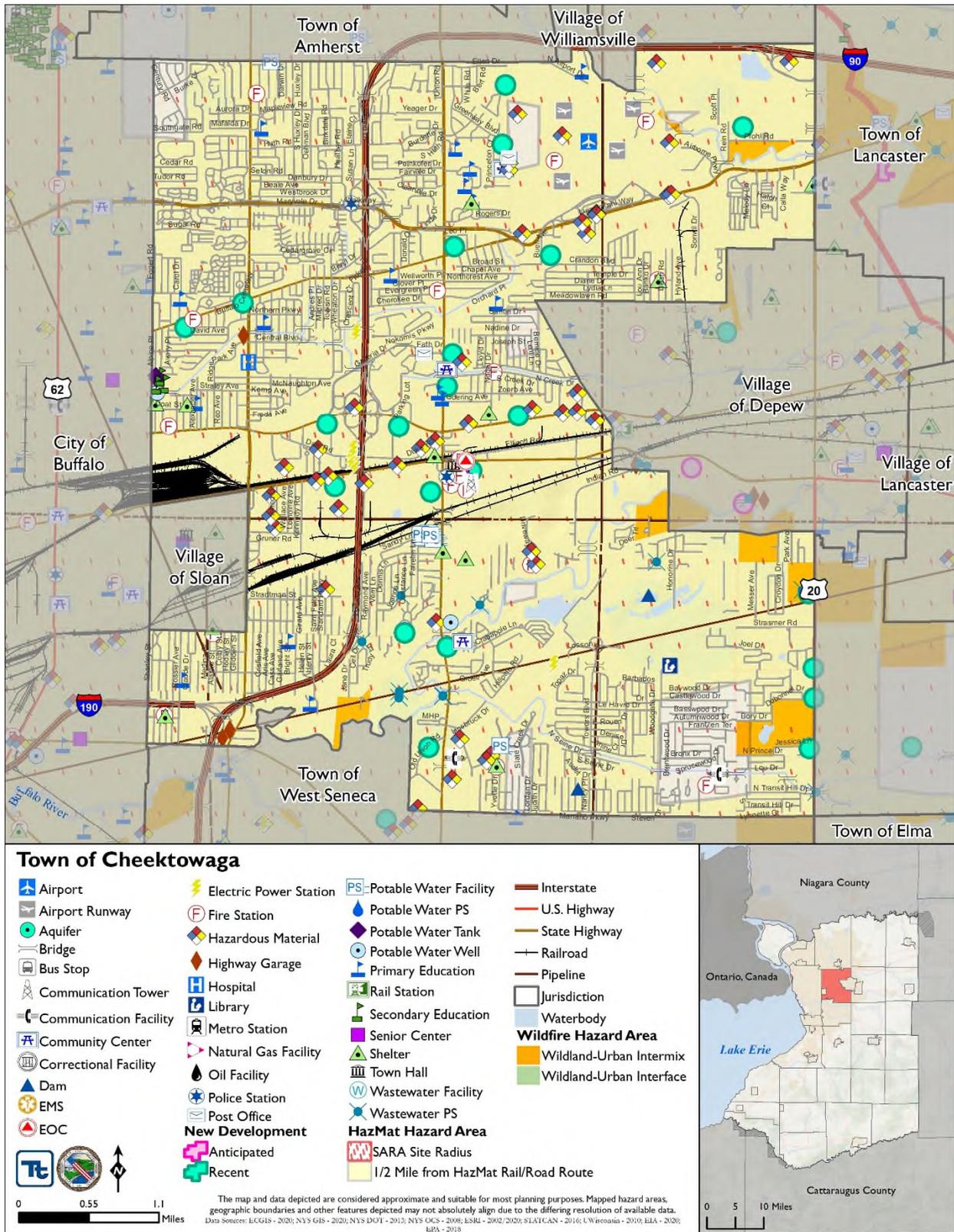




Figure 9.13-3. Town of Cheektowaga Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Cheektowaga’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.13-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.13-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
August 11-15, 2015	Flash Flood	No	Flash Flood	Minor Basement Flooding
October 27-November 1, 2019	Lakeshore Flooding, DR-4472 NY	Yes	Lakeshore Flooding	Although the county was impacted, the town did not report damages.
October 31-November 1, 2019	High Wind, DR-4472 NY	Yes	High Wind	Although the county was impacted, the town did not report damages.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Cheektowaga’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Cheektowaga. The Town of Cheektowaga has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.



During the review of the hazard/vulnerability risk ranking, the town agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.13-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.13-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Forks Fire District #3	Fire Station	X	X	2022-T. Cheektowaga-001
Sam’s Club #6673	Hazardous Material	-	X	2022-T. Cheektowaga-002
Highway (Parks) Garage ID: 102.22-8-14	Highway Garage	-	X	2022-T. Cheektowaga-002
Sisters of Charity - St Joseph Campus	Hospital	-	X	2022-T. Cheektowaga-002
Cheektowaga Post Office	Post Office	-	X	2022-T. Cheektowaga-002
Buffalo Hearing and Speech Center	Primary Education	-	X	2022-T. Cheektowaga-002
Cheektowaga High School	Primary Education	-	X	2022-T. Cheektowaga-002
Cheektowaga Middle School	Primary Education	-	X	2022-T. Cheektowaga-002

Source: FEMA DFIRM



Identified Issues

After review of the Town of Cheektowaga’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Cheektowaga has identified the following vulnerabilities within their community:

- NYS Route 277 (Union Road) between Broadway and Vern Lane has consistent flooding during slightly above average rainfall. This is a major North-South route in the County and causes significant traffic flow problems.
- William Street between Ceil Drive and Tamarak Court. Has consistent flooding during slightly above average rainfall. This is a major intersection with the NYS Thruway (Route 90) and causes significant traffic problems for motorists attempting to enter and exit the NYS Thruway.
- Walden Avenue and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption.
- The Town of Cheektowaga is in need of several electric generators as replacements/upgrades, and original installation to improve operational ability of town facilities during power outages and for Continuity of Operations Planning (COOP).
- Genesee & Toelsen Road Is a flood prone area.

9.13.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.13-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Operation, maintenance and improvement to Scajaguada Creek and Cayuga creek flood control projects	Flooding	Issues with maintaining capacity and prevent erosion	Engineering and Highway	In Progress			1. Include in 2020 HMP 2. 3.
	Multi-year storm sewer installation program	Flooding	Need improvement for poorly drained residential subdivisions	Engineering and Highway	In Progress			1. Include in 2020 HMP 2. 3.
	Infiltration and inflow a basement program for sanitary sewer district	Basement Flooding	Need to eliminate sources of inflow into sewer	Engineering and Sewer Maint. Dept.	No Progress			1. Include in 2020 HMP 2. 3.
	Administration of local flood damage prevention regulations	Flooding	Regulate development through enforcing local laws	Engineering and Building Inspection Dept	In Progress			1. Include in 2020 HMP 2. 3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering	Ongoing Capability			1. Discontinue 2. 3. Ongoing Capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Cheektowaga has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Cheektowaga participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.13-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X		X			X			X
Expansive Soils		X		X			X			X
Extreme Temperature		X								X
Flood		X		X		X	X		X	X
Hazardous Materials		X		X			X			X
Landslide		X		X			X			X
Pandemic		X								X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.13-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Cheektowaga would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.13-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Cheektowaga-001	Protect the Forks Fire Station to the 0.2% annual chance flood event	1, 2, 3	Flood	<p>Problem: The Forks Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Forks Fire Station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes 💧	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T. Cheektowaga-002	Flood Outreach to critical facilities	1, 2, 3	Flood	<p>Problem: Many privately owned critical facilities within the town are located within the 0.2% floodplain (500-year event).</p> <p>Solution: The town will conduct outreach to the facility owners about their location within the floodplain and provide information about potential damages to structures as the result of a flood event. If damages are experienced, the town will support facility owners in their pursuit of mitigation funding for structural flood protections as necessary.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- T. Cheektowaga -003	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	<p>Problem: Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, post offices, private schools, and colleges, in the town are in the earthquake hazard area.</p> <p>Solution: The town will conduct outreach to facility owners and support assessment the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes</p>	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage.	Town Budget	High	EAP	PI
2022- T. Cheektowaga -004	Protect the critical facilities in the Town of Cheektowaga from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	<p>Problem: All of the critical facilities in the Town of Cheektowaga may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.</p>	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	LPR	PI
2022- T. Cheektowaga -005	Protect the following facilities from landslides: Flattail Lake Dam and National Car	1, 2, 3	Landslide	<p>Problem: The Flattail Lake Dam and National Car Rental - Buffalo Airport are located on steep slopes and maybe at risk of landslides.</p> <p>Solution: Work with the facility owners to determine if landslide risk exists and to</p>	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential	Town Budget	High	EAP	PI



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Rental - Buffalo Airport			assess the structure and determine necessary mitigation measures to protect it from landslides.						landslide damage				
2022- T. Cheektowaga -006	Work with private facility owners to protect their facilities from the risk of expansive soils	1, 2, 3	Expansive Soils	<p>Problem: Several private facilities may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: Work with the facility owners to determine if risk exists and to assess the structures and determine necessary mitigation measures to protect the facilities from expansive soils.</p>	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022- T. Cheektowaga -007	NYS Route 277 Flood mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: NYS Route 277 (Union Rd.) between Broadway and Vern Lane has consistent flooding during slightly above average rainfall. This is a major North-South route in the County and causes significant traffic flow problems.</p> <p>Solution: Due to low elevation in the area, the town is proposing a pump station with backup generator to be installed to remove water and improve water flow, eliminating the need for road closures during storms and flood events.</p>	No	No	Short	NYSDOT, support by Town of Cheektowaga	High	Reduces flooding and road closures	FMA	High	SIP	SP
2022- T. Cheektowaga -008	William Street Flood Mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: William Street between Ceil Drive and Tamarak Court has consistent flooding during slightly above average rainfall. This is a major intersection with the</p>	No	No	Short	NYSDOT, support by Town of Cheektowaga	High	Reduces flooding and road closures	FMA	High	SIP	SP



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>NYS Thruway (Route 90) and causes significant traffic problems for motorists attempting to enter and exit the NYS Thruway.</p> <p>Solution: To reduce road closures, the town will work with NYSDOT to reduce flooding and redirect stormwater away from the NYS Thruway and town roads.</p>										
2022- T. Cheektowaga -009	Walden Rd Generator for traffic signals	1, 2	Utility Failure, All Hazards	<p>Problem: Walden Avenue and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption.</p> <p>Solution: The town will seek funding for an automatic, permanent backup generator to use at the intersection to ensure that power disruptions to not impede the flow of traffic and cause additional cascading impacts. The town will ensure that the generator is properly house and secured at the intersection and is protected from additional hazards (raised from flooding, etc.).</p>	No	No	1 year	Town of Cheektowaga	Medium, estimated \$50,000	High	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- T. Cheektowaga -010	Generator for IT Department/ Town Hall	1, 2	Utility Failure, All Hazards	<p>Problem: The Town of Cheektowaga is in need of several electric generators as replacements/upgrades, and original installation to improve operational ability of town facilities during power outages and for Continuity of Operations Planning (COOP).</p> <p>Solution: The town will seek funding to install a permanent automatic generator for the IT department and municipal building, to ensure continuity of operations and reduce impacts of a power outage or utility failure and prevent cyber attacks if the systems go down. The town will install the generator in an appropriate location to prevent damages from hazards (flooding, storms, etc.).</p>	No	No	1 year	Town of Cheektowaga	Medium, estimated \$50,000	High	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022- T. Cheektowaga -011	Temporary and Permanent Housing	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain</p>	No	No	Short	Town of Cheektowaga	Low-Medium	High	Municipal Budget	High	LPR	ES



Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										
2022- T. Cheektowaga -012	Repetitive Loss Homeowner Outreach	1, 2, 3	Flood	<p>Problem: There are 24 Repetitive Loss properties within the town; and 74 NFIP policy holders living within the 1% flood boundary (100 year floodplain).</p> <p>Solution: The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	Short	Town of Cheektowaga FPA	Low	High	Municipal Budget for outreach	High	EAP	PI



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.13-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Cheektowaga-001	Protect the Forks Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Cheektowaga-002	Flood Outreach to critical facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -003	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -004	Protect the critical facilities in the Town of Cheektowaga from HazMat incidents	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -005	Protect the following facilities from landslides: Flattail Lake Dam and National Car Rental - Buffalo Airport	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -006	Work with private facility owners to protect their facilities from the risk of expansive soils:	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -007	NYS Route 277 Flood mitigation	1	1	1	1	0	0	-1	1	1	1	1	1	1	1	10	High
2022- T. Cheektowaga -008	William Street Flood Mitigation	1	1	1	1	0	0	-1	1	1	1	1	1	1	1	10	High
2022- T. Cheektowaga -009	Walden Rd Generator for traffic signals	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -010	Generator for IT Department/ Town Hall	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -011	Temporary and Permanent Housing	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022- T. Cheektowaga -012	Repetitive Loss Homeowner Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.13.9 Action Worksheets

The following action worksheets have been developed by the Town of Cheektowaga to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Protect the Forks Fire Station to the 0.2% annual chance flood event		
Project Number:	2022-T. Cheektowaga-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Forks Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Forks Fire Station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the facility
Useful Life:	30 years	Goals Met:	1, 2, 3
Estimated Cost:	High, TDB by vulnerability assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate the facility	\$1million	No available land, not cost effective
	Elevate roads	\$500,000	Elevated roadways would not protect the facility from flood damages
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Forks Fire Station to the 0.2% annual chance flood event	
Project Number:	2022-T. Cheektowaga-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures function of emergency services
Property Protection	1	Reduces/eliminates flooding at a critical facility
Cost-Effectiveness	1	
Technical	1	Town engineering can conduct study
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding to implement recommendations of vulnerability analysis
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	Fire Department
Other Community Objectives	1	Emergency Services
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Walden Rd Generator for traffic signals		
Project Number:	2022- T. Cheektowaga -009		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Walden Ave. and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town will seek funding for an automatic, permanent backup generator to use at the intersection to ensure that power disruptions do not impede the flow of traffic and cause additional cascading impacts. The town will ensure that the generator is properly housed and secured at the intersection and is protected from additional hazards (raised from flooding, etc.).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations of the intersection
Useful Life:	25 years	Goals Met:	1, 2
Estimated Cost:	Estimated \$50,000	Mitigation Action Type:	Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town of Cheektowaga	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Walden Rd Generator for traffic signals	
Project Number:	2022- T. Cheektowaga-009	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces traffic accidents caused by loss of power at intersection
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town DPW
Political	1	Town supports
Legal	1	
Fiscal	0	Town will seek funding to implement
Environmental	1	No concerns
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.14 Town of Clarence

This section presents the jurisdictional annex for the Town of Clarence. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Clarence’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.14.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Clarence’s hazard mitigation plan primary and alternate points of contact. The Town of Clarence followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from town department. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.14-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Bissonette, Emergency Manager Address: One Town Place, Clarence, NY 14031 Phone Number: 716-741-8930 Email: david@davidbissonette.com	Name/Title: David Baumler, Deputy Emergency Manager Address: One Town Place, Clarence, NY 14031 Phone Number: 716-583-6840 Email: dbaumler@clarenceny.us
NFIP Floodplain Administrator	
Name/Title: Timothy Lavocat, Town Engineer Address: One Town Place, Clarence, NY 14031 Phone Number: 716-741-8952 Email: Tlavocat@clarenceny.us	

9.14.2 Municipal Profile

The Town of Clarence is in the north portion of Erie County. The town is 53 square miles in size; and contains the hamlets of Clarence, Harris Hill, Clarence Center. Clarence was one of the county’s original large towns and was founded in 1808. The town was reduced in size when other towns were formed from it. The town is bordered by the Town of Amherst to the west, the Towns of Lockport and Royalton (Niagara County) to the north, the Town of Newstead to the east and the Town of Lancaster to the south. Interstate 90 traverses the southeastern portion of the town. New York State Route 5 (Main Street) passes across the south part of the town. NY Route 78, Transit Road, marks the town’s western boundary. The eastern terminus of NY Route 324 is in Clarence (Town of Clarence 2020).

The town was originally inhabited by Native Americans and was called “place full of hickory bark”. The first white settler was Asa Ransom, a former colonial officer from the American Revolution, who purchased land





from the Holland Land Company in 1807 and established a tavern near Harris Hill in the southwest part of Clarence (Town of Clarence 2020). During the war of 1812, Clarence residents joined in fighting against the British army. Agriculture was for many years the chief economy of the town. The town’s first industries were in potash and clay manufacture thereafter followed by sand and gravel mining operations. Following discovery of a large gypsum deposit, National Gypsum Company began operations in 1926. After the Great Depression, the town experienced a land boom. The town experienced its most rapid period of development after the end of World War II (Town of Clarence 2007).

According to the U.S. Census, the 2010 population for the Town of Clarence was 30,673. The estimated 2019 population was 32,440, a 5.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.1 percent of the population is 5 years of age or younger and 18.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.14.3 Jurisdictional Capability Assessment and Integration

The Town of Clarence performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.14.3). The Town of Clarence’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Clarence. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.14-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Flood Damage Ordinance LL-2007, Town Building Code, Chapter 67	Local	Code Enforcement/Building Department



	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The Purpose of the Building Code is to provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the state Energy Conservation Construction Code (the Energy Code) in the Town of Clarence. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter. Enforcement of building code regulations reduces risk from natural hazards.</p>					
Zoning Code	Yes	No	LL3-2005, Town Zoning Code Chapter 107, 229	Local	Building/Zoning Departments
<p>Comment: Construction within Floodways must meet requirements. Natural features such as streams, rock outcrops, marshlands, trees, and shrubs shall be preserved and incorporated into the landscaping of the development. Site plans shall include a topographical survey that shows floodplains, wetlands, soils, existing streams and ditches with base flood elevations, existing elevations and proposed elevations clearly illustrated. 6) Parking areas shall be graded and surfaced with material that will provide adequate protection against potholes, erosion, and dust and in a manner that will not conflict with the proposed means of snow storage and/or removal.</p>					
Subdivision Ordinance	Yes	No	LL5-2005, Chapter 193 Town Subdivision Code, Town Code	Local	Code Enforcement/Building
<p>Comment: Purposes of the Subdivision Code include to secure safety from fire, flood, and other danger; to protect and conserve the value of land, buildings, and improvements and to minimize conflicts among the uses of land and buildings.</p>					
Stormwater Management Ordinance	Yes	Yes	LL6-2007, Stormwater Management and Erosion and Sediment Control, Chapter 188A	Local	Engineering staff
<p>Comment: Minimizes increases in stormwater runoff from land development activities to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	Yes	Yes	Town of Clarence Comprehensive Plan, 2015	Local	Planning and Zoning
<p>Comment: The Town's Comprehensive Plan discourages development within flood prone area.</p>					
Site Plan Review	Yes	No	Town Code Chapter 229-151, Site Plan Review, Zoning	Local	Planning and Zoning
<p>Comment: Site Plan review allows for control of where and how development occurs.</p>					
Environmental Protection Ordinance	Yes	Yes	Town Code Chapter 91, Environmental Quality Review	Local	Planning and Zoning
<p>Comment: Environmental Protection Ordinance steers development away from some hazard exposure.</p>					
Flood Damage Prevention Ordinance	Yes	Yes	Town Code Chapter 107, Flood Damage Prevention Ordinance	Local	Engineering
<p>Comment: BFE+2 feet for all construction in the SFHA (residential and non-residential). It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <p>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</p> <p>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</p> <p>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</p>					



	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Town Code Chapter 188 and 188A	Local	Engineering
Comment: the purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Clarence through the regulation of stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this article are: (1) To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, as amended or revised; (2) To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; (3) To prohibit illicit connections, activities and discharges to the MS4; (4) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and (5) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Clarence 2030, Town of Clarence Comprehensive Plan, Adopted 2016	Local	Town Board
Comment: The purpose of this Comprehensive Plan is to provide an overall framework for future public and private investment in our community. This investment can take many forms, including but not limited to, our community's financial, civic, and creative resources. In the Town of Clarence, it is this collective investment by our residents, businesses, civic institutions, and our local government <ul style="list-style-type: none"> that will shape the physical, social, and economic character of our community. 					
Capital Improvement Plan	Yes	No	Town Board	Local	Planning and Zoning
Comment: Hazard mitigation projects can be included in the municipality's CIP.					



	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	No	North Clarence Flood Reduction Plan	Local	Highway/Engineering
Comment: The Stormwater Plan has the purposed to establish proactive management of stormwater flows to reduce flooding risk.					
Open Space Plan	Yes	Yes	Open space plans included in the Town's Master Plan, 2015	Local	Planning and Zoning Boards and Greenprint Committee, Recreation Advisory Committee
Comment: The Open Space Plan provides a road map for officials and the community to preserve open space.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	Yes	No	Action Plan and Market Analysis, Adopted April 2018	Local	Planning and Zoning
Comment: The Market Analysis provides direction on economic growth including recovery from natural hazard impact.					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Yes	No	Tree Management Plan, Adopted 11-19	Local	Planning and Zoning
Comment: Management of the county's private and public forests will help reduce exposure to the wildfire risk.					
Transportation Plan	Yes	No	Transit Road Corridor Management Study, 6-04 and Clarence Traffic Analysis, 2015	Local	Planning and Zoning
Comment: Transportation Study addresses transportation needs during a natural hazard event.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Agricultural and Farmland Protection Plan, Adopted 5-12	Local/county	Planning and Zoning



	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The county plan addresses the management of agricultural wastes and other hazmat storage.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Clarence Comprehensive Plan, 2018	Local	Town OEM
Comment: The Comprehensive plan for the entire community considers the need to address natural hazard exposure and guides future development decisions in the municipality.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	Yes	Yes	Erie County	County	Erie County Health
Comment: The Public Health Plan will assist in addressing needs during a hazard event.					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Clarence to oversee and track development.

Table 9.14-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Zoning / Engineering
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain Development Permits
Do you have a buildable land inventory? If yes, please describe	Yes	Environmental Constraints Map



Indicate if your jurisdiction implements the following	Yes/No	Comment:
If no, please quantitatively describe the level of buildout in the jurisdiction.		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Clarence and their current responsibilities which contribute to hazard mitigation.

Table 9.14-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. Volunteer Appointed body, seven members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals. Volunteer Appointed body, five members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk. Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Staffed Planning and Zoning Department. The Planning and Zoning Department serves the community by providing current and long-range planning activities as well as administration of all local land use laws. Current planning activities include project reviews to enforce zoning and subdivision regulations on project proposals including environmental reviews under SEQRA. Long-range planning activities include comprehensive plan updates including policy and local law implementation. Engineering Department: The purpose of the profession of engineering is defined as performing professional service such as consultation, investigation, evaluation, planning, design, and supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principles and data. The Engineering Department is responsible for technical planning, design, and construction of capital improvements for the Town of Clarence including street improvements, right of way acquisition, storm water improvements, sanitary sewer improvements, Town building maintenance and improvements and management of development permit contracts and easement releases.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Town Environmental Quality Review Board, Planning Board Members
Open Space Board/Committee	Yes	Greenprint Committee, Volunteer Appointed body, 7 members
Economic Development Commission/Committee	Yes	Town of Clarence, Erie County, Industrial Development Agency
Public Works/Highway Department	Yes	Fully staffed Highway and Parks Departments. The Department plows and de-ices 55 center lane miles of roadway. Department picks up brush on 460 lane miles of roads in Clarendon. In 2015 the town restored 5.44 miles of field ditches.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Construction/Building/Code Enforcement Department	Yes	<p>Fully staffed Building Department. The Building Department administers and enforces regulations, pertaining to use of property and the construction of buildings. It reviews plans and conducts filed inspections for compliance with various local, state, and federal codes and standards, particularly the Town Zoning Code and the New York State Uniform Fire Prevention and Building Code (NYSUPFBC). These codes apply to planning, zoning, building, plumbing, mechanical, electrical, fire, health, and the environment.</p> <p>Responsibilities of the Department and Code Enforcement Officers are as follows:</p> <ul style="list-style-type: none"> • Plan review for compliance with NYSFPBC, Town of Clarence Code and applicable reference standards. • Issue permits for residential and commercial projects for new construction, additions, remodeling, accessory structures, change in use of buildings, installations, or replacement of certain mechanical, fire safety and plumbing systems, back-up generators, demolition of structures, swimming pools, etc. • Conduct inspections for numerous phases of construction activity. • Issue Certificate of Occupancy or Certificate of Compliance for all permitted projects. • Administrators of the Knox-Box Program in the Town of Clarence. • Conduct inspections based on complaints from citizens. • Respond to requests from the Town Fire Departments pertaining to unsafe equipment or conditions, damage due to structure fires and illegal open burning. • Respond to structure fires for assistance to Fire Department command staff related to building design, contents, potential failure, damage estimates, origin, and cause, determining if building can be occupied, and to aid the residents and occupants displaced by the incident. • Conduct fire safety inspections of existing buildings for compliance with the NYS Fire Code and Property Maintenance Code • Explain code requirements to permit applicants. • Attend NYS Required annual training. • Enforce the Avoidable Alarm Law (Chapter 59) of the Town of Clarence Code. • Conduct inspection of special events involving large gatherings/the public.
Emergency Management/Public Safety Department	Yes	<p>Emergency Services Department</p> <p>David Bissonette, Emergency Manager. Department staff coordinate emergency response</p>
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	NY Alert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Snag and drag operations in town waterways to remove obstructions. Highway Department cleans out field ditches.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Department and Engineering Department. Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Professionals trained in conducting damage assessments	Yes	Building Code Enforcement Officers
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning Department, GIS skilled
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Certified Floodplain Administrator – Town Engineer
Surveyor(s)	No	-
Emergency Manager	Yes	David Bissonette, Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Clarence.

Table 9.14-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Planning and Zoning
Capital improvements project funding	Yes – Administration and Finance
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Sewer Permit Fees
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Clarence.

Table 9.14-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on preparedness, Covid-19, and Emerald Ash Borer is located on the town’s website.
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Clarence.

Table 9.14-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Fire wise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,





future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.14-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.14.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Timothy Lavocat, Town Engineer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Clarence.

Table 9.14-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Clarence	108	41	\$77,190	2	33

Source:
 Notes: FEMA 2020a and FEMA 2020b
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the Town of Clarence that are prone to flooding include certain sections of North Clarence within the floodway and by riverine flooding associated with Ransom and Gott Creeks. The town maintains an active list of all Letters of Map Change (LOMA/LOMR-F) as a mitigation measure. There are not any Risk MAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town’s flood hazard maps adequately address the flood risk within the jurisdiction.



NFIP Compliance

The Town of Clarence does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in September 2015. The Building Department and the Engineering Department are responsible for floodplain administration. The Town Engineer is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. The town does not make Substantial Damage determinations. The town’s floodplain management program meets minimum requirements and offers NFIP administration services such as Floodplain Development Permit review and Letters of Map Change guidance, and by educating the public on floodplain management practices and ordinances. The town seeks to avoid encroachments or impacts upon the floodplain and is considering joining the Community Rating System (CRS) as noted in proposed mitigation action 2022-T Clarence-003.

9.14.5 Evacuation, Sheltering, Temporary and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Clarence did not identify any evacuation routes and procedures and will coordinate with county and town agencies during hazard events.

Sheltering

The Town of Clarence has identified the following designated emergency shelters located within the town.

Table 9.14-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Thompson Road	150	No	Yes	Yes	Contact EMT	Food prep capable
Senior High School	Main Street	300-500	No	Yes	Yes	Contact EMT	Food prep capable

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Clarence has identified the following sites suitable for placing temporary housing units.



Table 9.14-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kelly Schultz, owner	Main Street	175 units	Trailer	Portable generator	On-site direction required
Eastern Hills Mall	Main/Transit Area	250 units	Trailer	Portable generator	On-site direction required

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Clarence did not identify any areas suitable for relocating homes outside of the floodplain.

Table 9.14-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town has not identified any such locations at this time. Per Proposed Action 2022-Clarence T-012					

9.14.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.14-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.14-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	96	4	112	3	110	2	104	7	112	3	98	6
Multi-Family	2	0	0	0	1	0	6	0	1	0	1	0
Other (commercial, mixed-use, etc.)	4	0	15	0	7	0	4	0	3	0	3	0
Total Permits Issued	102	4	127	3	118	2	114	7	116	3	104	6
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												



Type of Development	2015	2016	2017	2018	2019	2020
Legacy Woods	Residential	50	Newhouse Road	Landslide	Approved, Under Construction	
Northwoods	Residential	151	Roll Road	Wind Damage	Approved, Under Construction	
Harris Hill Commons	Residential	66	Greiner Road	Expansive Soils	Approved, Under Construction	
Spaulding Green	Residential	380	Goodrich Road	Wind Damage	Approved, Under Construction	
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
Harris Hill Commons Mixed Use	Mixed Use	80 residential units, 24,800 square feet commercial	Sheridan Drive	Expansive Soils	Under Review	
Eastern Hills Mall	Lifestyle Center	3,000,000 square feet	Transit Road	Hazardous Materials	Under Review	
Woodland Hills	Residential	77	Greiner Road	Expansive Soils	Under Review	

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.14.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Clarence’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are found below and based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Clarence has significant exposure. The maps also show the location of potential new development, where available.



Figure 9.14-1. Town of Clarence Hazard Area Extent and Location Map 1

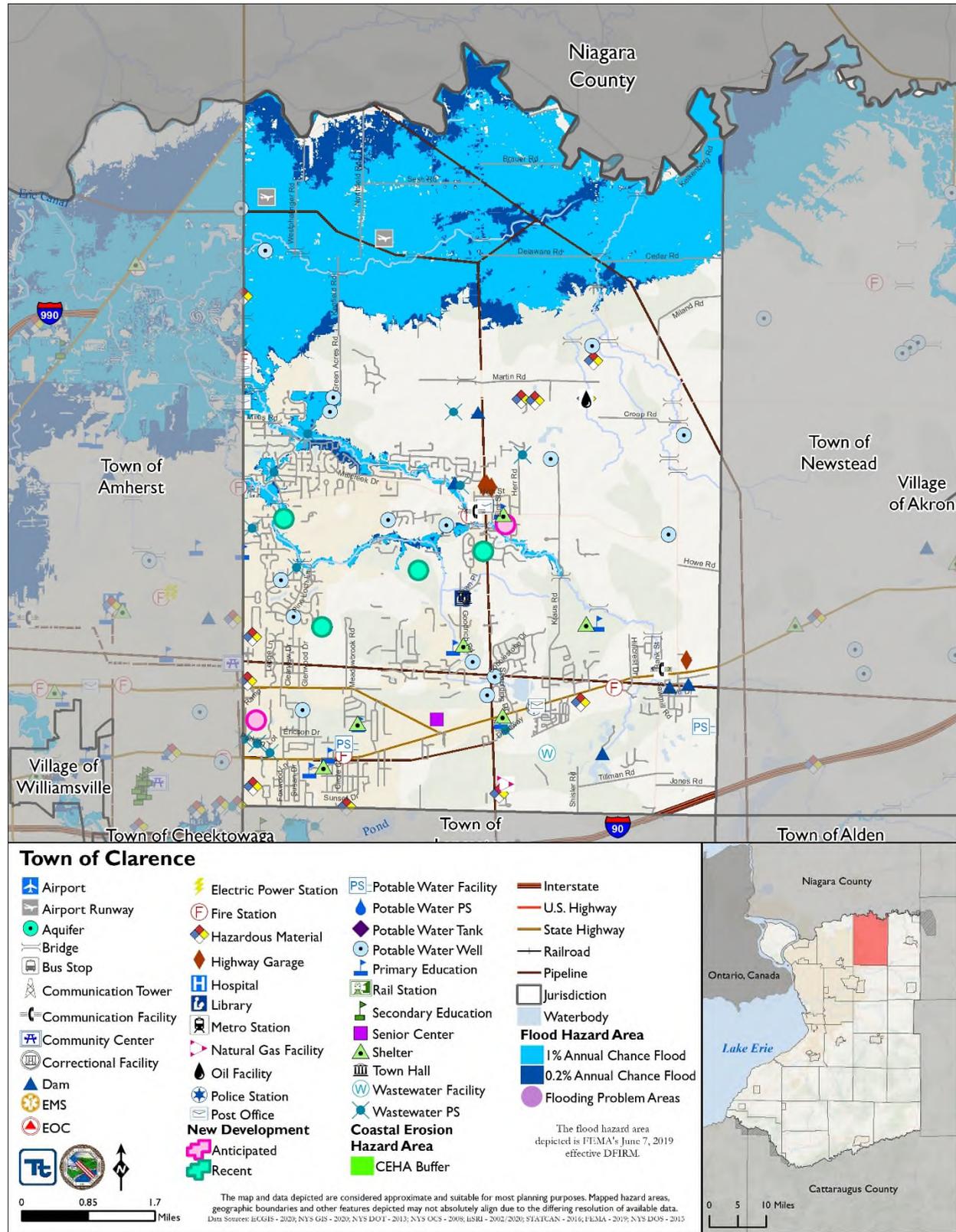




Figure 9.14-2. Town of Clarence Hazard Area Extent and Location Map 2

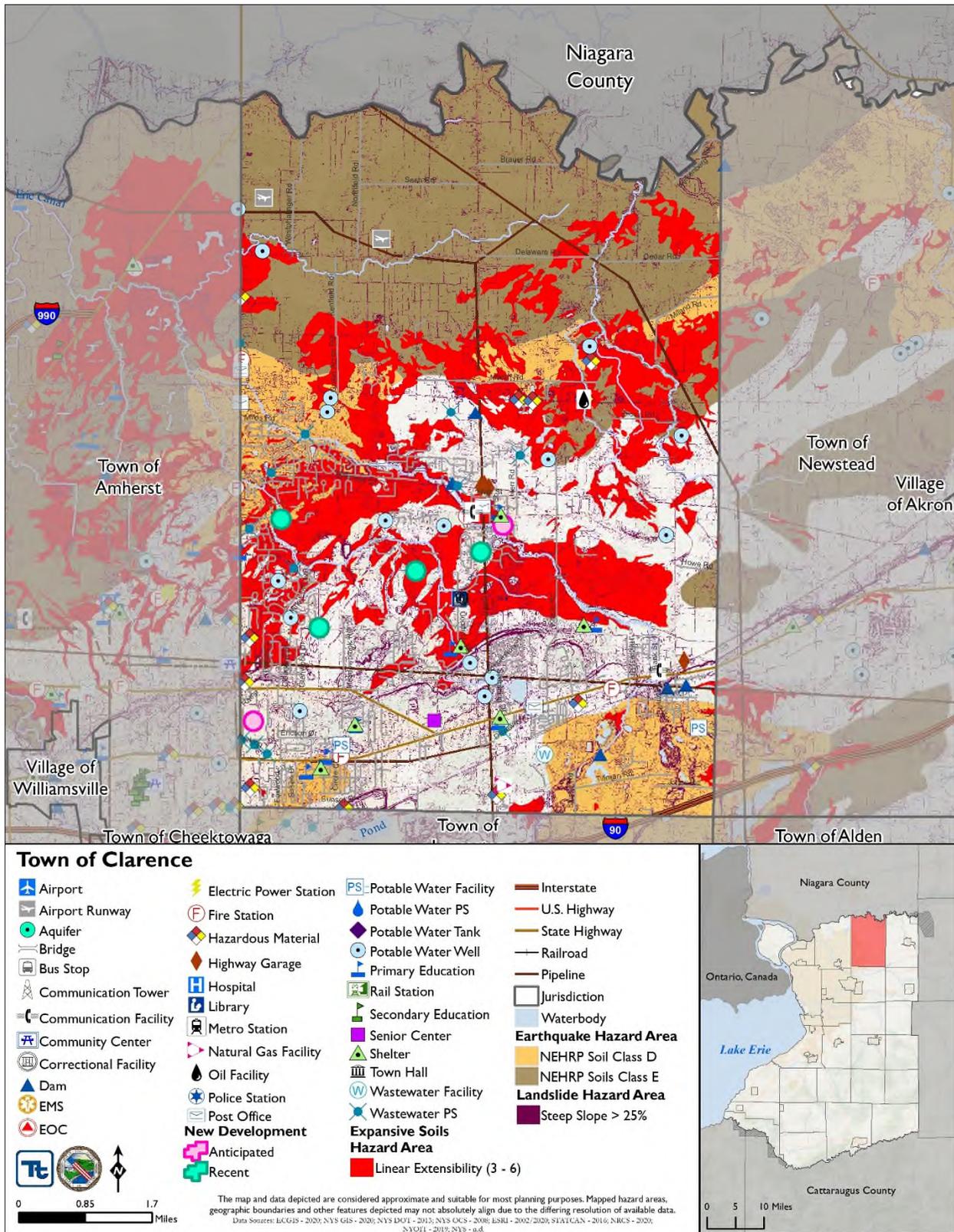
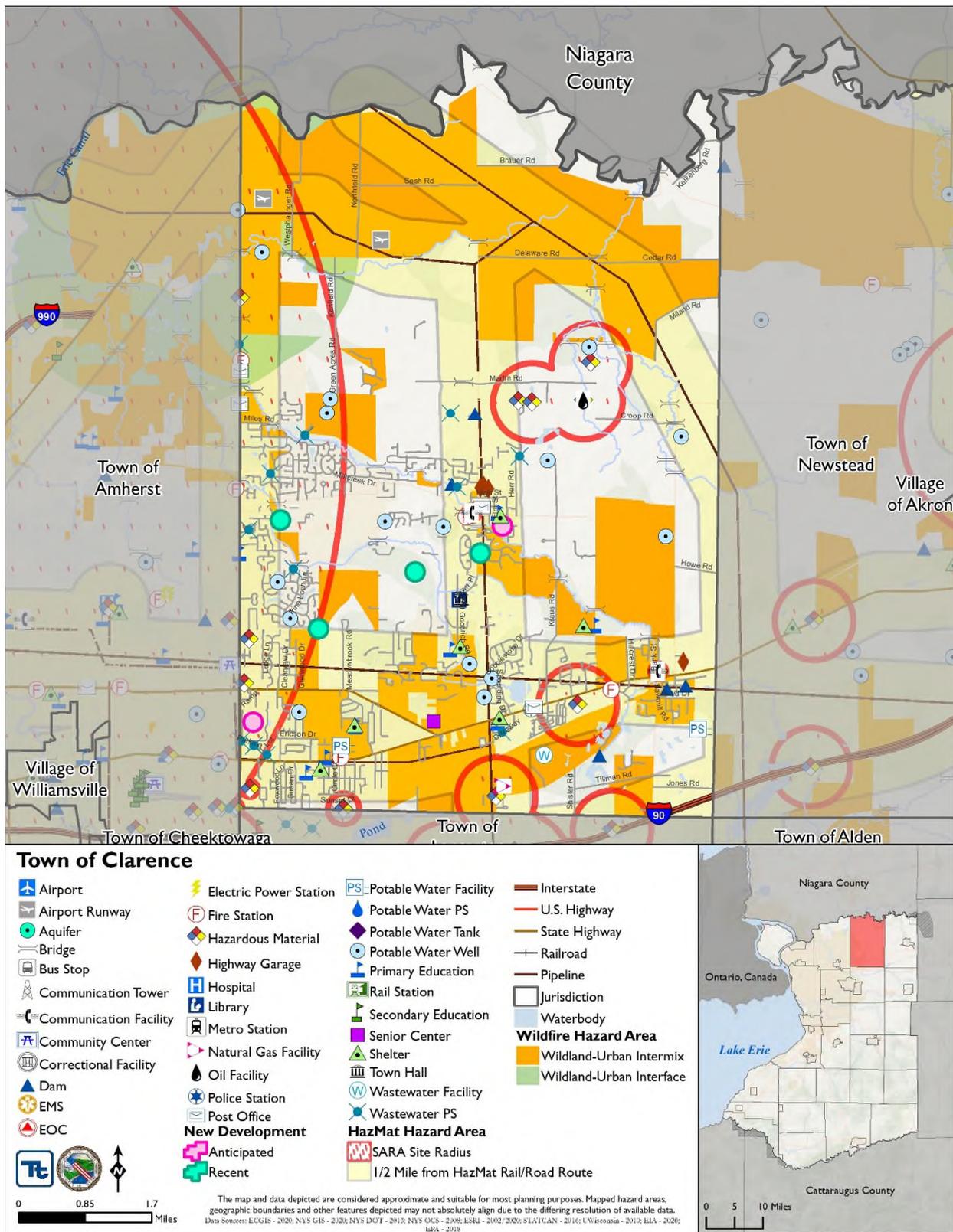




Figure 9.14-3. Town of Clarence Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Clarence’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.14-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.14-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Highway Department overtime
August 11-15, 2015	Flash Flood	No	The town did not report any damage associated with this hazard event.
October 28-29, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
November 6, 2015	Thunderstorm Wind	No	The town did not report any damage associated with this hazard event.
November 12, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
November 18, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
January 11, 2017	High Wind	No	The town did not report any damage associated with this hazard event.
March 8, 2017	High Wind	No	The town did not report any damage associated with this hazard event.
March 13, 2017	Winter Storm	No	The town did not report any damage associated with this hazard event.
July 20, 2017	Tornado	No	The town did not report any damage associated with this hazard event.
August 4, 2017	Thunderstorm Wind	No	The town did not report any damage associated with this hazard event.
December 10-15, 2017	Lake-effect Snow	No	Highway Department overtime
December 24-29, 2017	Lake-effect Snow	No	Highway Department overtime
January 2, 2018	Blizzard	No	The town did not report any damage associated with this hazard event.
October 6, 2018	Lightning	No	The town did not report any damage associated with this hazard event.
February 24, 2019	High Wind	No	The town did not report any damage associated with this hazard event.
February 24, 2019	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	The town did not report any damage associated with this hazard event.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Emergency services/Highway Department overtime
November 27, 2019	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
January 12, 2020	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
March 2020-Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Clarence’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Clarence. The Town of Clarence has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the earthquake hazard risk should be decreased from High to Medium and that the wildfire hazard should be decreased from High to Low. The Town believed that both hazards occur infrequently.

Table 9.14-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
N/A	Medium	Medium	Medium	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.14-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Clarence Center	Fire Station	X	X	2022-T Clarence-004
Clarence Northwest USID79866	Fire Station	X	X	2022-T Clarence-004
Stahley Road Pump station	Wastewater Pump Station	X	X	2022-T Clarence-011
Unnamed	Wastewater Pump Station	X	X	2022-T Clarence-011

Source: FEMA 2021

Identified Issues

After review of the Town of Clarence’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Clarence has identified the following vulnerabilities within their community:

- There are locations along Gott Creek that experience localized flooding
- Creek beds within the town are jammed with debris, trees and branches that impede the flow of stormwater and contribute to flooding.
- The town does not participate in the Community Rating System, denying affected community members the benefit of reduced flood insurance rates.
- The Clarence Center Fire Department is located within the SFHA
- Several critical facilities, including the Clarence Center Fire Department, are located within the SFHA and are at risk of flooding.
- The Post Office is located within the SFHA and at risk of flooding.
- Two runways at the Buffalo Airport are located within the SFHA, exposing them to potential flooding.
- Four Fire stations in the town store hazardous materials – these materials should be protected from leakage.
- Two public stations and St. Mary’s School are in the 0.2 percent chance flood zone
- Floodplain managers need training.
- The town may contain Repetitive Loss Properties.
- The town is unable to identify emergency shelters or to define the capacity of identified temporary housing locations.

9.14.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.



Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.14-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Sand Bagging Operation to protect old homes from Tonawanda, Beeman, Gott, Ransom, and Black Creeks as well as surrounding streams and subdivision retention ponds	Flood and Storm Events	Flooding of old houses in town in the areas east, west, and north of Wolcott Rd	Highway Dept	No Progress	Cost		1. Discontinue in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Completed task
	Prevention of dangerous travel in flood events through intergovernmental efforts for key presence at main intersections, town vehicles, large signage, barricades, and for larger events - driving ban regulations	Flood and Storm Events	Flooded roads become impassible and have a wake effect on nearby homes	Highway Dept, Emergency Services, Town Security	In Progress	Cost		1. Discontinued
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing
	Debris removal and maintenance	Flood and Storm Events	Jams that create possible flood conditions	Highway Supt. Jurisdiction	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2. Addressed by Proposed Action # 2022-Town of Clarence-002
						Damages Avoided; Evidence of Success		3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Engineering	Complete	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Completed project
	Join the Community Rating System (CRS)	Flood	Not Identified	Engineering	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> 1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Damages Avoided; Evidence of Success		3.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Clarence did not identify any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Clarence participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.14-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	-	-	-	-	-	-	-	-	X
Cyber Attack	X	-	-	-	-	-	-	-	-	X
Earthquake	X	-	-	-	-	-	-	-	-	X
Expansive Soils	X	-	-	-	-	-	-	-	-	X
Extreme Temperature	X	-	-	-	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	X	X	X
Hazardous Materials	X	X	-	X	X	X	-	-	-	X
Landslide	X	-	-	-	-	-	-	-	-	X
Pandemic	X	-	-	-	-	-	-	-	-	X
Severe Storm	X	-	-	-	-	-	-	-	-	X
Severe Winter Storm	X	-	-	-	-	-	-	-	-	X
Utility Failure	X	-	-	-	-	-	-	-	-	X
Wildfire	X	-	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.14-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Clarence would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.14-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence-001	Implement flood mitigation measures along Gott Creek	1	Flood	<p>Problem: There are locations along Gott Creek that experience localized flooding.</p> <p>Solution: In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek The town should pursue completion of these mitigation measures, such as floodwalls, levees, etc.</p>	No	Yes	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Gott Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP, SP
2022-T Clarence-002	Debris removal and maintenance Program	2	Flood	<p>Problem: Creek beds within the town are jammed with debris, trees and branches that impede the flow of stormwater and contribute to flooding.</p> <p>Solution: Town staff will regularly clear the creek bed of trees, branches, and debris</p>	No	No	Within 1 year, ongoing once established	Town Highway Department	\$10,000 annual cost	Reduce flood hazard from creek overflowing	Municipal budget	Medium	NSP	NR
2022-T Clarence-003	Join the Community Rating System	2	Flood	<p>Problem: The town does not participate in the CRS, denying affected community members the benefit of reduced flood insurance rates.</p> <p>Solution: The town will take steps necessary to join the CRS.</p>	No	No	Within 3 years	Town Engineer, Emergency Manager, Administration	Staff time	Heighten floodplain administration practices and standards.	Town budget	Medium	LPR	PR



Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence-004	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	1	Flood	<p>Problem: The Clarence Center Fire Department is located within the SFHA.</p> <p>Solution: The town will conduct a feasibility study and determine what protections are necessary and carry out the necessary upgrades.</p>	Yes ●	No	Within 3 years	Town Engineer, Town Fire Department	TBD by engineering feasibility study	Protect facility from flooding and potential release of hazardous material	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Clarence-005	Floodplain Administrator to attend training on floodplain management	3	Flood	<p>Problem: Floodplain Managers require training.</p> <p>Solution: Obtain/host training and certification for floodplain managers. To enable Certified Floodplain Manager/Town Engineer to maintain certification and to acquire latest best practices.</p>	No	No	Within 5 years	FPA, Town Board, County Emergency Management	\$3,000	Certified floodplain managers trained Floodplain management improved.	County and municipal budgets	High	LPR	PR
2022-T Clarence-006	Protect the East Amherst Post Office to the 0.2% annual chance flood event	1	Flood	<p>Problem: The Post Office is located within the SFHA and at risk of flooding.</p> <p>Solution: The town will contact the facility manager of this facility owned by the federal governmental and discuss options for protecting the facility to the 0.2 chance flood event.</p>	Yes ●	Yes	Within 3 years	Town engineer, Town Board	TBD by engineering feasibility analysis	Ensure operational continuity at this critical facility	Municipal budget	Medium	EAP	PI
2022-T Clarence-007	Protect St. Mary's School to the 0.2%	1	Flood	<p>Problem: The St. Mary's School is located within the SFHA.</p>	Yes ●	Yes	Within 5 years	Town Engineer, Town	\$1,000 staff time	Ensure operational continuity in	Municipal budget	High	EAP	PI



Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	annual chance flood event			Solution: The town will contact the facility managers of this facility and discuss options for protecting the facility to the 500-year flood level.				Emergency Manager		this critical facility				
2022-T Clarence-008	Protect four town fire stations from the hazardous materials risk	1	Haz Mat	<p>Problem: Four town Fire Departments are exposed to the Hazardous Materials risk; Clarence Fire Station, Clarence Center Fire Station, Harris Hill Fire Station, Swormville Fire Station</p> <p>Solutions: The town will conduct an engineering feasibility study to identify best mitigation actions to address the hazardous materials risk at each firehouse. The Town Emergency Manager will then work to implement recommendations of the study.</p>	Yes 💧	Yes	Within 5 years	Town Fire Department, Emergency Manager	TBD by engineering feasibility analysis	Ensure continuity of operations at this critical facility.	Municipal budget	High	SIP	PP
2022-T Clarence-009	Protect the Buffalo Airport runways to the 0.2% annual chance flood event	1	Flood	<p>Problem: Two runways at the Buffalo Airport are located within the 1% chance flood area, exposing them to potential flooding.</p> <p>Solution: The town will support the Airport Authority in ensuring that mitigation steps are taken to protect the</p>	Yes 💧	Yes	Within 5 years	Town Engineer, Emergency Manager	\$1,000 staff time	Ensure continuity of operations at this critical facility.	Town staff	Medium	EAP	PI



Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				two runways from flooding.										
2022-T Clarence-010	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share with homeowners	High	SIP	PP
	Protect two pump	1	Flood	<p>Problem: Two pump stations are in the SFHA. These include a station at</p>	Yes 💧	No	Within 2 years	Erie County Sewer District Number 5,	TBD by Engineering Analysis	Ensure services	HMGP, BRIC,	High	SIP	PR



Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence -011	stations to the 0.2% annual chance flood event			Stahley Road and another unnamed station.				Town Highway Department		continue at this critical facility	municipal budget			
				Solution: The Town Highway Department will determine and then implement recommended flood mitigation measures.										
2022-T Clarence -012	Identify Permanent Housing Locations	1	All Hazards	Problem: The town was unable to identify locations for permanent housing for use after natural hazards.	Yes	No	Within 2 years	FPA, Town Board	Staff time	Ensure secure locations for people to settle if displaced by natural hazard	Municipal Budget	High	LPR	ES
				Solution: The town will coordinate with county staff to identify locations for permanent housing to use after a natural hazard.										



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities





Table 9.14-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Clarence-001	Implement flood mitigation measures along Gott Creek	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-T Clarence-002	Debris removal and maintenance Program	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-003	Join the Community Rating System	1	1	1	1	1	1	0	1	1	0	0	1	1	0	10	High
2022-T Clarence-004	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-005	Floodplain Administrator to continue attending training on floodplain management to maintain certification	1	0	1	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-006	Protect the East Amherst Post Office to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-007	Protect St. Mary's School to the 0.2% annual chance flood event	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-008	Protect four town fire stations from the hazardous materials risk	1	1	1	1	1	1	1	1	1	1	0	0	1	0	11	High
2022-T Clarence-009	Encourage protection of the Buffalo Airport runways to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High



Table 9.14-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Clarence-010	Residential Property Flood Mitigation.	1	1	1	1	0	1	0	1	1	1	0	0	1	0	10	High
2022-T Clarence-011	Protect two pump stations to the 0.2% annual chance flood event	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-012	Identify Permanent Housing Locations	1	1	1	1	0	1	0	1	1	1	1	0	1	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.14.9 Action Worksheets

The following action worksheets have been developed by the Town of Clarence to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Clarence Action Worksheet			
Project Name:	Implement flood mitigation measures along Gott Creek		
Project Number:	2022-T Clarence-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	There are locations along Gott Creek that experience localized flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek. The town should pursue completion of specified mitigation measures such as floodwalls, levees, or other appropriate measures.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect properties from flooding.	Estimated Benefits (losses avoided):	Reduce risk of flooding along Gott Creek
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	TBD by feasibility engineering assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	3 years
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Highway Department, Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Remove roadways along creek	High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Implement flood mitigation measures along Gott Creek	
Project Number:	2022-T Clarence-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services on roadways along the creek
Property Protection	1	Project will protect adjacent properties from flood damage risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	1-5 years
Agency Champion	1	Town Highway Department, Town Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Clarence Action Worksheet			
Project Name:	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event		
Project Number:	2022-T Clarence-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The Clarence Center Fire Department is located within the SFHA. The pump station is vulnerable to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: The town will conduct a feasibility study and determine what protections are necessary and carry out the necessary upgrades.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations at the Fire Station
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	TBD by engineering feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Engineer, Town Fire Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new Fire Station	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	
Project Number:	2022-T Clarence-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the Clarence Center Fire Station.
Property Protection	1	Project will protect the Fire Station from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	1 year
Agency Champion	1	Town Fire Department Town Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.15 Town of Colden

This section presents the jurisdictional annex for the Town of Colden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the municipality’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.15.1 Hazard Mitigation Planning Team

The following individuals have been identified as the municipality’s hazard mitigation plan primary and alternate points of contact. The Town of Colden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Code Enforcement, and Emergency Management. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.15-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James P. DePasquale, Supervisor Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-474-0579 Email: james.depasquale@townofcolden.com	Name/Title: Patricia A. Zubrick, Deputy Town Supervisor Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-864-3897 Email: patricia.zubrick@townofcolden.com
NFIP Floodplain Administrator	
Name/Title: John Kotlarsz, Code Enforcement Officer Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-923-3454 Email: bsudyn@gmail.com	

9.15.2 Municipal Profile

Colden is in the southeastern part of Erie County. The town is 35 square miles in area and is bounded on the north by the Town of Aurora, on the west by the Town of Boston, on the south by the towns of Concord and Sardinia and to the west by the Town of Holland.

The first settler in Colden was Richard Buffum. Buffum purchased 2,000 acres of land from the Holland Purchase Company. The town was incorporated in 1828 and the first post office established in 1830 (Town of Colden 2021).

According to the U.S. Census, the 2010 population for the Town of Colden was 3,265. The estimated 2019 population was 3,328, a 1.9 percent increase from the 2010 Census. Data from the 2019 U.S. Census American





Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 19.0 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.15.3 Jurisdictional Capability Assessment and Integration

The Town of Colden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.15.3). The municipality’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Colden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.15-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 26 (Building Construction)	Local	Town CEO
Comment: <i>Building code used to determine whether building construction is suitable for jurisdiction and to create a standard to mitigate any avoidable damage or accidents.</i>					
Zoning Code	Yes	No	Chapter 108 (Zoning)	Local	Building/ Code Enforcement
Comment: <i>The purpose of the zoning code is to increase community resilience through the following measures. 1) Signs shall withstand a wind pressure load of at least 30 pounds per square foot. 2) Existing natural features, such as trees, brooks, drainage channels and views, shall be retained. Whenever such features interfere with the proposed use of such property, a retention of the maximum amount of such features consistent with the use of the property shall be required.</i>					
Subdivision Ordinance	Yes	No	Chapter 92 (Subdivision of Land)	Local	Building/ Code Enforcement
Comment: <i>The subdivision ordinance incorporates resilience related measures through the following means: 1) A preliminary plat shall include: all pertinent features, such as existing structures, streets, railroads, water bodies, streams, swamps and large trees, that may influence the design of the subdivision, and topography at contour interval of not more than five feet; proposed provision of water supply, fire protection, disposal of sanitary waste, stormwater drainage, street trees, streetlighting fixtures, street signs and sidewalks. 2) The Planning Board may require, where steep slopes exist, that present elevations of all proposed streets shall be shown every 100 feet at five points on a line at right angles to the center line of the street, and said elevation points shall be at the center line of the street, each property line and</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>points 30 feet inside each property line. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard.</i></p>					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
Comment:					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p><i>Comment: A property condition disclosure statement must be presented to the buyer of a property. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract.</i></p>					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 108 (Zoning)	Local	Town Planning
<p><i>Comment: Unless otherwise provided and as regulated by Chapter 92, Subdivision of Land, of the Town of Colden, a site plan review and a site plan approval shall be required for all uses, buildings and structures that require a building permit or certificate of compliance under this chapter and for which an application therefor has been made to the Town of Colden, except for a one-family dwelling or a two-family dwelling and its permitted accessory uses, buildings or structures, prior to the issuance of a building permit or certificate of compliance.</i></p>					
Environmental Protection Ordinance	Yes	Yes	Chapter 43 Environmental Quality Review, Local Law 1, Adopted 1980.	Local	Town Board
<p><i>Comment: No decision to carry out or approve an action other than an action listed in § 43-4 hereof or Section 617.12 of Title 6 of NYCRR as Type II action, or an exempt or administrative action (6 NYCRR 617.13) shall be made by the Town Board or by any department, board, commission, officer or employee of the town until there has been full compliance with all requirements of this chapter and Part 617 of Title 6 of NYCRR; provided, however, that nothing herein shall be construed as prohibiting:</i></p> <p><i>A. The conducting of contemporaneous environmental, engineering, economic feasibility or other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action which do not commit the town to approve, commence or engage in such action; or</i></p> <p><i>B. The granting of any part of an application which relates only to technical specifications and requirements, provided that no such partial approval shall entitle or permit the applicant to commence the action until all requirements of this chapter and Part 617 of Title 6 of NYCRR have been fulfilled.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 52 (Flood Damage Control)	Local	Town CEO
<p><i>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <p><i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i></p> <p><i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i></p> <p><i>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i></p> <p><i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</i></p> <p><i>E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i></p> <p><i>F. Qualify for and maintain participation in the National Flood Insurance Program.</i></p> <p><i>The Code Enforcement Officer is appointed local administrator to administer and implement the chapter by granting or denying floodplain development permits.</i></p> <p><i>Any new construction or substantial improvements of residential or non-residential properties located in the special flood hazard area must be elevated to at least two feet above the base flood elevation.</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	Yes	No	Agricultural district -within zoning	Local	Town Planning
Comment: <i>The Agricultural district is meant to manage the use of land under agricultural industry and provide guidance to farmers and other agricultural uses.</i>					
Planning Documents					
Comprehensive Plan	Yes	No	2002 Town of Colden Comprehensive Plan– will be updating 2021 Planning Board	Local	Town Planning
<p>Comment: <i>The plan provides background on the conditions in the town, by means of a Land Use Study conducted in 1990, which resulted in the creation of a land use map. Additional “special studies” were conducted and presented to the public through a series of public meetings. The primary focus of the master plan is guiding growth and development, particularly the residential population of Colden which like much of Erie County has experienced a trend of decline. The plan envisioned that the town would “remain in a basic rural status” (p. 6) and that no substantial growth was predicted. The plan describes Colden as rural and lacking any significant public infrastructure. This lack of public infrastructure makes large scale development impossible and reinforces the need for large lot residential in much of the town. Commercial and industrial development is recommended to take place in the Town’s denser hamlet area and along Route 240, a road that serves as the town’s major arterial.</i></p> <p><i>The plan also addresses preservation and protection of natural resources as per the goal to preserve the community characteristics and provide safe and environmental healthy areas to create a better community for all residents.</i></p>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: No information available at this time.					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – if shoreline exists	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	CEMP 2018	Local	Town OEM
Comment: The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	No	Conducted through ISO Assessment	Local	Town OEM



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: <i>The National Risk and Capability Assessment (NRCA) is a suite of assessment products that measures risk and capability across the nation in a standardized and coordinated process. The County had an assessment completed in recent years which covered the town.</i>					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Colden to oversee and track development.

Table 9.15-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department/Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town has limited growth capabilities.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Colden and their current responsibilities which contribute to hazard mitigation.

Table 9.15-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board – The Planning Board may approve, conditionally approve or disapprove subdivision plans for the purpose of providing for the orderly and wise development of the town and affording adequate facilities for housing, transportation, distribution, comfort, convenience, safety and the health and welfare of its population.
Zoning Board of Adjustments	Yes	Zoning Board - The primary role of the zoning board is to review and decide cases where a relaxation of the ordinance



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		is sought or where there is an alleged error in a zoning decision.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Environmental Advisory Board that is meant to provide oversight on environmental and open space related topics within the town.
Open Space Board/Committee	Yes	Environmental Advisory Board that is meant to provide oversight on environmental and open space related topics within the town.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department - The department mission is to provide a safe, well maintained and efficient operation of the town highway and bridge system.
Construction/Building/Code Enforcement Department	Yes	<p>Building and Code Enforcement - The Colden Building Department administers and enforces regulations, pertaining to use of property and the construction of buildings. The Department reviews plans and conducts filed inspections for compliance with various local and state, standards, particularly the Town Zoning Code and the New York State Uniform Fire Prevention and Building Code (NYSUFPBC). These codes apply to planning, zoning, building, plumbing, mechanical, electrical, fire, health and the environment.</p> <p>The Building Department receives and processes all applications for construction, alterations, additions, and accessory structures for residential and commercial projects, for compliance with the Town’s Code and Building Department requirements, in addition to the requirements of the New York State Fire Prevention and Building Code. Projects under review by the department are not permitted to begin prior to the issuance of the permit.</p> <p>Responsibilities of the Department and Code Enforcement Officers are as follows:</p> <ul style="list-style-type: none"> • Plan review for compliance with NYSFPBC, Town of Colden Code and applicable reference standards. • Issue permits for residential and commercial projects for new construction, additions, remodeling, accessory structures, change in use of buildings, installations or replacement of certain mechanical, fire safety and plumbing systems, back-up generators, demolition of structures, swimming pools, etc. • Conduct inspections for numerous phases of construction activity. • Issue Certificate of Occupancy or Certificate of Compliance for all permitted projects. • Conduct inspections based on complaints from citizens. • Respond to requests from the Town Fire Department pertaining to unsafe equipment or conditions, damage due to structure fires and illegal open burning.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<ul style="list-style-type: none"> Respond to structure fires for assistance to Fire Department command staff related to building design, contents, potential failure, damage estimates, origin and cause, determining if building can be occupied after the incident. Conduct fire safety inspections of existing buildings for compliance with the NYS Fire Code. Explain code requirements to permit applicants. Attend NYS Required annual training.
Emergency Management/Public Safety Department	Yes	Emergency Management – comprised of police, fire, and disaster relief department that deal with municipal and intermunicipal emergency response.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	<p>CodeRED – The purpose is to send critical communications to residents and businesses in Colden. The system provides the ability to quickly deliver messages to targeted areas or the entire town.</p> <p>The system will be activated for emergency public safety messages and important public notifications. Alerts may include, but are not limited to:</p> <ul style="list-style-type: none"> Extreme weather Missing and endangered persons Evacuations and lockdowns Water emergencies Chemical spills or release Security alerts
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stream management and highway department road maintenance
Mutual aid agreements	Yes	Highway Department and Fire District
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	GHD Engineering – contracted.
Engineers or professionals trained in building or infrastructure construction practices	Yes	GHD Engineering – contracted.
Planners or engineers with an understanding of natural hazards	Yes	GHD Engineering – contracted.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Emergency Manager trained in GIS and provides various services to town agencies and residents.
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Independent Contractors
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	Yes	GHD Engineering for stormwater engineering

Fiscal Capability

The table below summarizes financial resources available to the Town of Colden.



Table 9.15-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Colden.

Table 9.15-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Communications Officer
Personnel skilled or trained in website development	Yes	Contracted
Hazard mitigation information available on your website	Yes	The town’s website contains hazard-related information. During an event, they will post information under the ‘news’ section of the site. With the current COVID-19 pandemic, the town provides resources and information on the disease.
Social media for hazard mitigation education and outreach	Yes	The town operates a Facebook page where they provide information on upcoming meetings, events, emergency alerts, and other information.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	CodeRED, municipal website, and social media accounts
Warning systems for hazard events	Yes	CodeRED
Natural disaster/safety programs in place for schools	Yes	Evacuation site for school at Colden Senior Center
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Colden.

Table 9.15-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Class 4	2018
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.15-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak - NA
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.15.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Kotlarsz, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Colden.





Table 9.15-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Colden	5	8	\$6,758	7	0

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town describes flood-prone areas to be along creeks and farmland within the town. The town does not maintain a list of property owners interested in flood mitigation. There are currently no RiskMAP projects within the jurisdiction. As the code enforcement officer makes substantial damage determinations, there are no specific guidelines established and are determined on a case-by-case basis. There are no properties that have been mitigated within the town and the current flood maps adequately address the existing sites that have flooding.

NFIP Compliance

As per the town code, the Code Enforcement Officer is appointed as floodplain administrator for the Town of Colden. The code enforcement officer provides permit and site plan review, and inspection of whether proposed sites are located in a floodplain. At this time, there are no certified floodplain managers on staff. Due to the town’s size, part-time staff, and volunteers, training is not required nor relevant to increase the town’s capabilities.

Given the town’s size, the town does not have adequate resources to determine future flooding conditions from climate change

The town does not have specific guidelines to determine substantial damage determinations. At this time the town does not have any outstanding violation issues. The municipality is also not aware of any barriers to increasing the effectiveness of the NFIP program. The town’s most recent CAV date on record is January 21, 2020.

The town has documented that the local chapter for the flood damage prevention ordinance is titled “Flood Damage Control” Local Law 1 of 2019. The town along with its plans, programs, and other documents, meets the minimum requirements of the NFIP. The town is not interested in joining the FEMA Community Rating System (CRS) program.

9.15.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Colden has identified the following routes and procedures to evacuate residents prior to and during an event.

- State Route 240 (N/S)
- Center Street (County Route) (N/S)
- Boston/ Colden Road (County Route – E/W)
- Holland Glenwood Road (County Route E/W)



Sheltering

The Town of Colden has identified the following designated emergency shelters within the town.

Table 9.15-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Colden Elementary School	8263 Boston-Colden Road, Colden, NY	500	Yes	Yes	Yes	Provided by fire company	No
Colden Senior Center	8811 NY-240, Colden, NY	100	Yes	Yes	No – mitigation action - 009	Various	No

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Colden has identified the following sites suitable for placing temporary housing units.

Table 9.15-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kummer Park	Park Street-off Route 240	40 acres of usable land	Park	Power/ Water/ Septic	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Colden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.15-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kummer Park	Park Street- off Route 240	40 acres of usable land	Park	Power/ Water/ Septic	None



9.15.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.15-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.15-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	6	0	7	0	4	0	6	0	6	0	3	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	7	0	7	0	4	0	6	0	6	0	4	0
Property or Development Name	Type of Development		# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development			
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)
 * Only location-specific hazard zones or vulnerabilities identified.

9.15.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the municipality’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Colden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.15-2. Town of Colden Hazard Area Extent and Location Map 2

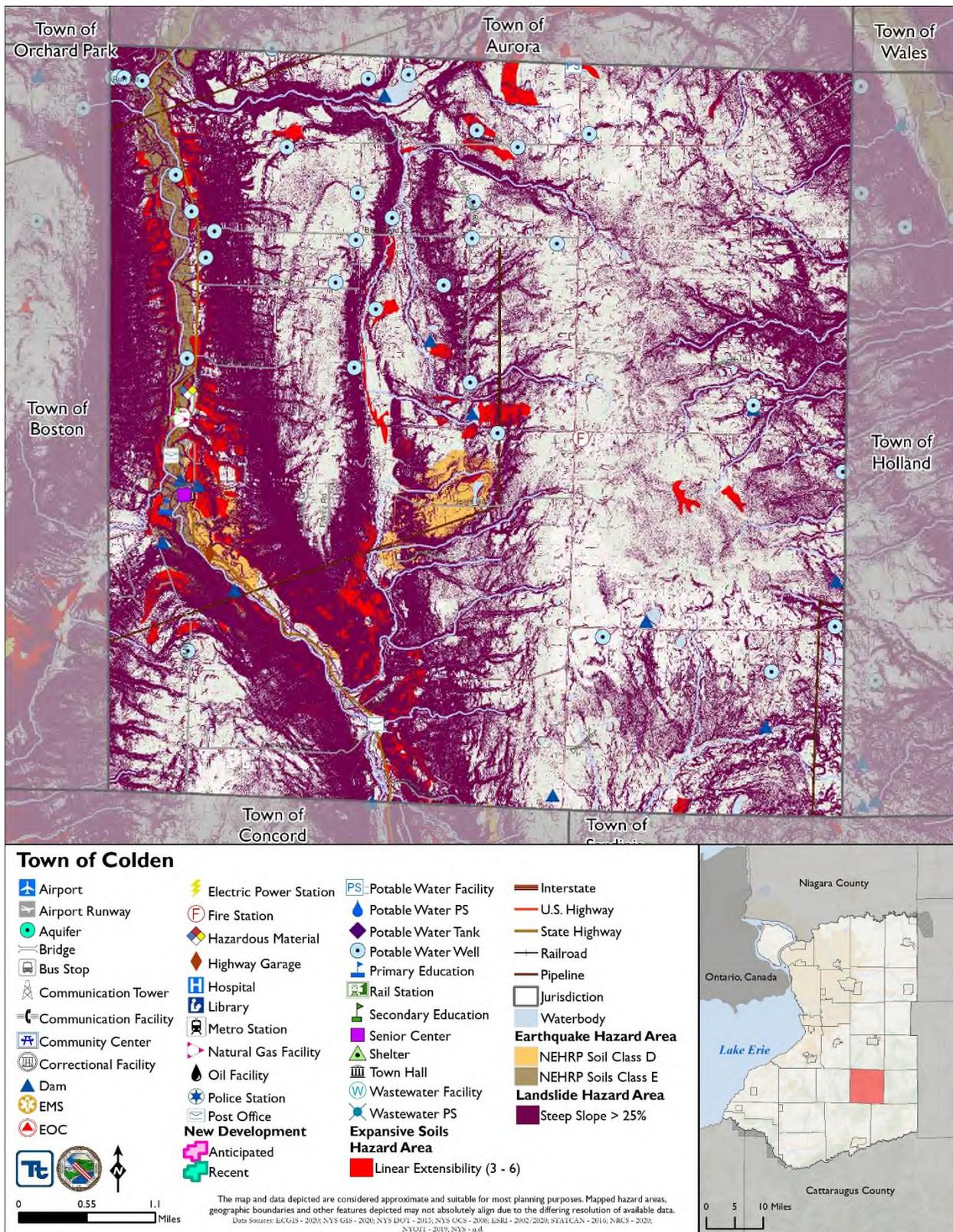
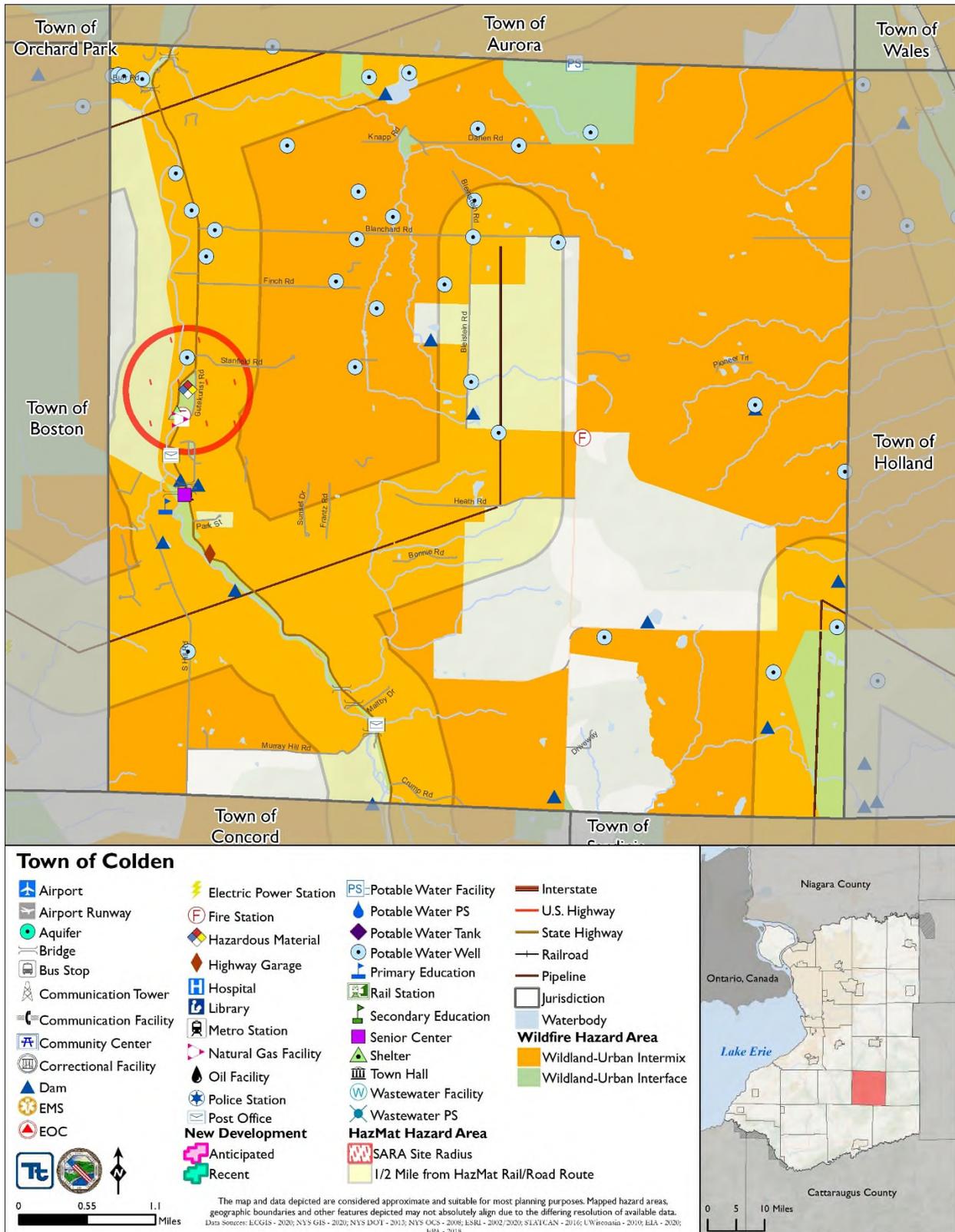




Figure 9.15-3. Town of Colden Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The municipality’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.15-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Ice Jam in Cazenovia Creek caused stream bank erosion and subsequent flooding
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The	Although the County was impacted, the town did not



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			track of the strong surface low was a classic high wind track for our region.	report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.



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Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
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January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the municipality’s risk assessment results and data used to determine the hazard ranking.





Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Colden. The Town of Colden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town has historically not been prone to earthquakes and thus rank the hazard from a medium to low.
- Wildfires have historically not been an issue for the town, thus decreasing the rank from high to medium, due to limited response capabilities but low overall threat.

Table 9.15-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Medium	Medium	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.15-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Millers Saw Mill Dam	Dam	X	X	007

Source: GIS 2021

Identified Issues

After review of the municipality’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Colden has identified the following vulnerabilities within their community:

- The town does not have a continuity of operations plan. In previous events, the town has struggled during hazard events because of no existing plan.
- The town currently has limited information on hazard identification and mitigation on its social media/ website. This is a recommendation by FEMA and other state and federal agencies and the town would like to comply with this recommendation.
- The Highway Garage, Town Hall, Senior Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events.
- West Branch of Cazenovia Creek has issues around streambank erosion, especially with ice jams during the winter months due to debris collecting and restricting the flow of water.
- Boston-Colden Road Buffalo Pittsburg Railroad Bridge entering the hamlet of Colden has major infrastructural issues regarding sightline and school evacuation route access. The bridge sidewalk is degraded and does not have the appropriate safety level for school children crossing the bridge.
- Currently, the town does not have any staff members that are Certified Floodplain Managers.
- The Millers Saw Mill Dam is located in a floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.
- The Colden Senior Center located at 8811 NY-240 is within the 100-year floodplain.

9.15.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.15-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Removal of debris and stabilization of creek banks	Flooding and erosion of property and roadways	Not Identified	Town of Colden Highway	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing project
	Determine severity of each culvert and set a replacement plan for culverts starting with worst condition and high flow culverts. Also determine which roads have been more prone to flooding conditions and provide proper drainage for these roads	Roadway and private property damage	Not Identified	Town of Colden Highway	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing project
	Trimming of brush and removal of trees 10-15 feet from shoulder	Long distance visibility to eliminate blind spots during driving	Not Identified	Town of Colden Highway	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing project
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Emergency Management, Planning	Complete	Low	Moderate	<ol style="list-style-type: none"> Discontinue Complete
	Designate/install a specific person to be your	Flooding	Not Identified		Complete	Low		<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Level of Protection	Damages Avoided; Evidence of Success	
	municipality's Floodplain Administrator			Emergency Management, Planning		Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	NFIP compliance	3. Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Emergency Management, Planning	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	Flood Mitigation	3. Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Emergency Management, Planning, Town Board	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. No longer relevant
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Emergency Management, Planning	In Progress	Cost	-	1. Include in the 2022 HMP
						Level of Protection	-	2. In progress - 006
						Damages Avoided; Evidence of Success	-	3.
	Join the Community Rating System (CRS)	Flooding	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not interested/ no longer viable.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Colden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Fall of 2020, conducted flood retrofitting for private residential housing within the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Colden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.15-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X		X			X		X	X
Cyber Attack	X	X		X			X		X	X
Earthquake	X	X		X			X		X	X
Expansive Soils	X	X		X			X		X	X
Extreme Temperature	X	X		X			X		X	X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X	X		X			X		X	X
Landslide	X	X		X			X		X	X
Pandemic	X	X		X			X		X	X
Severe Storm	X	X		X			X		X	X
Severe Winter Storm	X	X		X			X		X	X
Utility Failure	X	X		X			X		X	X
Wildfire	X	X		X			X		X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.15-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Colden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.15-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Colden Town-001	Continuity of Operations Plan	1, 2	All	<p>Problem: The town does not have a continuity of operations plan. In previous events, the town has struggled during hazard events because of no existing plan.</p> <p>Solution: The town will develop a continuity of operations plan for four municipal buildings (senior center, town hall, and highway garage, and park buildings). The plan will be implemented by the town and be developed and approved by the town board.</p>	No	No	1 year	Town Board	\$20,000	Increase preparedness	HMGP, Municipal Budget, Assistance to Firefighters Grant Program	High	LPR	ES
2022-Colden Town-002	Increase Hazard Awareness	1, 2, 4	All	<p>Problem: The town currently has limited information on hazard identification and mitigation on its social media/website. This is a recommendation by FEMA and other state and federal agencies and the town would like to comply with this recommendation.</p> <p>Solution: The town will include more information on the municipal Facebook page as well as the website on hazard mitigation and preparedness. Information will include flood mitigation measures, emergency preparedness guides, service helplines, warnings, and other services.</p>	No	No	2 years	Town Board and clerk	\$10,000	Increase awareness and preparedness	Municipal Budget, HMGP	High	EAP	PI
		1, 2	All	<p>Problem: The Highway Garage, Town Hall, Senior</p>	Yes	No	2 years	Town Supervisor,	\$500,000	Continuity of operations	HMGP, and municipal	High	SIP	ES





Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Colden Town-003	Generators for Critical Facilities and Shelters			<p>Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events.</p> <p>Solution: Install permanent backup power generators on site for each facility. Each generator would have the capacity to continue operations at all times, as they are all identified critical facilities. The town will contact each facility operator and provide guidance on how to determine the generator capacity needed. Once this information is compiled, the town will apply for FEMA grants for all facilities. The generators shall be installed by each facility manager and maintained by the various entities as needed and as time progresses.</p>				HIGHWAY DEPARTME NT, and Relevant Stakeholders			budget for preliminary assessment as needed			
2022-Colden Town-004	Streambank Restoration	1, 2	Flood	<p>Problem: West Branch of Cazenovia Creek has issues around streambank erosion, especially with ice jams during the winter months due to debris collecting and restricting the flow of water.</p> <p>Solution: The town will implement a long term streambank restoration project to reduce flooding</p>	No	No	5 years	Town Highway and SWCD	\$1 million	Flood Mitigation	HMGP, BRIC, Climate Smart Communities Grant, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement	High	NSP	NR





Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				along the creek. This will be a multiphase project. The town will first conduct a preliminary assessment of creek and restoration initiatives needed. The second phase will be to implement the plan at the same time conduct annual maintained as needed.							Project (WQIP) Program			
2022-Colden Town-005	Bridge Redevelopment and Retrofitting	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Boston-Colden Road Buffalo Pittsburg Railroad Bridge entering the hamlet of Colden has major infrastructural issues regarding sightline and school evacuation route access. The bridge sidewalk is degraded due to consistent flooding and erosion along the stormwater lines and does not have the appropriate safety level for school children crossing the bridge.</p> <p>Solution: The town will conduct an assessment regarding upgrades needed to redevelop the bridge to acceptable standards regarding safety and modern structural standards. The second phase will be to implement bridge redevelopment/redesign upgrades.</p>	No	No	3 years	Town Highway Department	\$1-2 million	Infrastructure Stabilization	BRIDGE NY, HMGP, BRIC, Climate Smart Communities Grant, Transportation Investment Generating Economic Recovery (TIGER)	High	SIP	PP
2022-Colden Town-006	CFM Certification	All	Flood	<p>Problem: Currently, the town does not have any staff members that are Certified Floodplain Managers.</p>	No	No	1 year	Code Enforcement Officer	Low	Have CFM staff; increase awareness and knowledge on	Municipal Budget	Medium	LPR	PR



Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).						floodplain management in the town				
2022-Colden Town-007	Dam Retrofitting	1,2	Flood	<p>Problem: The Millers Saw Mill Dam is located in a floodplain.</p> <p>Solution: While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Town Highway Department shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA and NYSDEC guidelines to withstand severe storms. If not, the town will apply for mitigation funding, accordingly.</p>	Yes	No	2 years	Town Board and Highway Department	Medium	High	HMGP	High	SIP	SP
2022-Colden Town-008	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP



Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood-prone areas that experience frequent flooding (high risk areas).										
2022-Colden Town-009	Senior Citizen Center Flood Mitigation	1	Flood	<p>Problem: The Colden Senior Center located at 8811 NY-240 is within the 100-year floodplain.</p> <p>Solution: The township must work with the facility operator to determine mitigation measures to reduce vulnerability to flooding. This might include retrofitting, elevation, and maybe even relocation if need be. The municipal officials, shall work with the facility operator to apply for FMA funding to increase the facility's resilience to future flooding.</p>	Yes 💧	No	3 years	Town Board along with the Senior Citizen Center Facility Manager	Moderate	High	FMA	High	SIP	SP

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV Community Assistance Visit
CRS Community Rating System
DPW Department of Public Works

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation





EHP Environmental Planning and Historic Preservation
 FEMA Federal Emergency Management Agency
 FPA Floodplain Administrator
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program
 OEM Office of Emergency Management

BRIC Building Resilient Infrastructure and Communities Program

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.15-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Colden Town-001	Continuity of Operations Plan	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Colden Town-002	Increase Hazard Awareness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Colden Town-003	Generators for Critical Facilities and Shelters	1	1	1	1	1	1	-1	0	1	0	1	1	1	1	10	High
2022-Colden Town-004	Streambank Restoration	1	1	1	0	1	1	-1	1	1	1	0	1	1	1	10	High
2022-Colden Town-005	Bridge Redevelopment and Retrofitting	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Colden Town-006	CFM Certification	1	1	1	0	0	0	1	0	0	0	0	1	1	1	7	Medium
2022-Colden Town-007	Dam Retrofitting	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Colden Town-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Colden Town-009	Senior Citizen Center Flood Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.15.9 Action Worksheets

The following action worksheets have been developed by the Town of Colden to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Generators for Critical Facilities and Shelters		
Project Number:	2022-Colden Town-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The Highway Garage, Town Hall, Senior Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events.		
Action or Project Intended for Implementation			
Description of the Solution:	Install permanent backup power generators on site for each facility. Each generator would have the capacity to continue operations at all times, as they are all identified critical facilities. The town will contact each facility operator and provide guidance on how to determine the generator capacity needed. Once this information is compiled, the town will apply for FEMA grants for all facilities. The generators shall be installed by each facility manager and maintained by the various entities as needed and as time progresses.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continuity of operations
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$0.5-2 million	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP and municipal budget for preliminary assessment as needed
Responsible Organization:	Town Supervisor, Highway Department, and Relevant Stakeholders	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar	High	Unreliable power
	Generator	High	Best alternative in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Generators for Critical Facilities and Shelters	
Project Number:	2022-Colden Town-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town Highway Department
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Dam Retrofitting		
Project Number:	2022-Colden Town-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Millers Saw Mill Dam is located in a 100 year floodplain and is identified as a critical facility.		
Action or Project Intended for Implementation			
Description of the Solution:	While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Town Highway Department shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA and NYSDEC guidelines to withstand severe storms. If not, the town will apply for mitigation funding, accordingly.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Safe route
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	Moderate	Mitigation Action Type:	Structural and Infrastructure project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP
Responsible Organization:	Town Board and Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Close road	Low	Would need to develop new route somewhere else – more expensive
	Bridge Redevelopment	High	Best and most cost effective in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Dam Retrofitting	
Project Number:	2022-Colden Town-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects life and property
Property Protection	1	Protects life and property
Cost-Effectiveness	1	This is most cost effective in long run
Technical	1	There are no technical issues
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	There is inadequate resources
Environmental	1	This has positive environmental impact
Social	1	This has positive social impact
Administrative	1	This has no administrative issues
Multi-Hazard	0	This addresses only a single hazard
Timeline	1	This timeline is feasible
Agency Champion	1	Town Highway Department
Other Community Objectives	1	This addresses multiple issues
Total	11	
Priority (High/Med/Low)	High	



9.16 Town of Collins

This section presents the jurisdictional annex for the Town of Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Collins’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.16.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Collins’s hazard mitigation plan primary and alternate points of contact. The Town of Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Emergency Management, Code Enforcement and Highway Department. . The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.16-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Kenneth E. Martin, Supervisor Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-532-4874 x 103 Email: ken.martin@townofcollins.com	Name/Title: Ron Paluch, Emergency Manager Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-425-5127 Email: rrpaluch@gmail.com
NFIP Floodplain Administrator	
Name/Title: Gene Degman, Code Enforcement Officer Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-532-4887 x 111 Email: accugene4@att.net	

9.16.2 Municipal Profile

The Town of Collins is the southernmost town in Erie County. The town is 48 square miles in area. The town is bordered by the Town of North Collins to the north, to the east by the Town of Sardinia, to the west by the Cattaraugus Indian Reservation, and to the south by the Towns of Persia, Otto, and East Otto which lie across the dramatic Zoar Valley of the Cattaraugus Creek. The town is approximately 30 miles from downtown Buffalo. Clear Creek is a significant waterway running through the town.

The town was first settled by whites in 1811. Many of the first settlers were Quakers. The town of Collins was created from a portion of the Town of Concord, and was named after the Collins’ dairying family. The town surrendered land to the formation of the new towns of Brant in 1839 and North Collins in 1852. Because of the



concentration of dairy farms, there were once ten cheese and milk factories in the town (Town of Collins website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of Collins was 5,626. The estimated 2019 population was 5,418, a 3.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.3 percent of the population is 5 years of age or younger and 11.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.16.3 Jurisdictional Capability Assessment and Integration

The Town of Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.16.3). The Town of Collins’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.16-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 144 – Construction Codes, Uniform Adopted 9/18/2006					
Zoning Code	Yes	No	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 305 – Zoning Adopted 6/15/1987					
Subdivision Ordinance	Yes	Yes	Town Code Adopted 6/15/1987	All	Code Enforcement
Comment: Chapter 267 – Subdivision of Land Adopted 1/5/2015 Also found in NYS Real Estate and Environmental Conservation Laws					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: None					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 166 – Flood Damage Prevention Adopted 8/4/2008 .Meets minimum requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	Yes	1999 Joint Master Plan for the Town of Collins and Village of Gowanda	Local	Town Board/Code Enforcement
Comment: 1999 Joint Master Plan for the Town of Collins and Village of Gowanda Adopted August 1999					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Collins to oversee and track development.

Table 9.16-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-



Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.16-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board – Site Plan Reviews
Zoning Board of Adjustments	Yes	Zoning Board of Appeals – Approval of Variances
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – Remove debris from streams and culverts
Construction/Building/Code Enforcement Department	Yes	Code Enforcement – Through approval of building permits in flood prone areas
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Highway Department – Agreements w/Erie County & neighboring municipalities
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer – 1 Approve permits in flood plain areas
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager – 1 Coordinate Response to disasters
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Collins.

Table 9.16-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Town Board
Capital improvements project funding	Yes – Town Board
Authority to levy taxes for specific purposes	Yes – Town Board
User fees for water, sewer, gas or electric service	Yes – Town Board
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – Town Board
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes – Town Board
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Town Board

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Collins.

Table 9.16-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook



Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Collins.

Table 9.16-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.16-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Strong
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Strong
Hazardous Materials	Moderate
Landslide	Moderate



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Utility Failure	Moderate
Wildfire	Moderate

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.16.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gene Degman, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Collins.

Table 9.16-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Collins	3	6	\$74,714	0	2

Source: FEMA 2019
 Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town has identified areas along Cattaraugus and Clear Creeks and Floodprone. The town does not maintain a list of properties that have been damaged by flooding, nor a list of property owners interested in mitigation. There are no RiskMAP projects currently underway. Flood maps accurately address flood risk within the town.

NFIP Compliance

The Code Enforcement Department is responsible for flood mitigation within the town, however there are no certified floodplain managers currently on staff. Code Enforcement is responsible for permit review and inspections as well as NFIP administration. The Flood Damage Prevention Ordinance is located in Chapter 166 of the Town Code, and was last update don April 15, 2019. The last Community Assistance Visit (CAV) was on January 16, 2018. There are no outstanding compliance issues.

9.16.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Collins has identified the following routes and procedures to evacuate residents prior to and during an event.

- The Town of Collins does not have an Evacuation & Sheltering Plan outside of the Village of Gowanda. There is an old elementary school building with nine classrooms & a gym which could act as a shelter, but it is currently not equipped for sheltering.

Sheltering

The Town of Collins has identified the following designated emergency shelters within the Town.

Table 9.16-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Gowanda High School	10674 Prospect St, Gowanda, NY	As needed	Optional	Yes	Yes	As Needed	Food
Gowanda Elementary School	450 Aldrich St, Gowanda, NY	As needed	Optional	Yes	Yes	As needed	Food
Gowanda Fire Hall	230 Aldrich Street, Gowanda, NY	As needed	Optional	Yes	Yes	As needed	Food

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Collins has identified the following sites suitable for placing temporary housing units.

Table 9.16-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-T. Collins-#001.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Collins has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.16-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-T. Collins-#001.					

9.16.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.16-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.16-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	0	0	0	2	0	4	0	3	0	3	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	59	0	63	0	47	0	68	0	46	0	76	0
Total Permits Issued	61	0	63	0	49	0	72	0	49	0	79	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Indicated												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.16.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Collins’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.





Figure 9.16-1. Town of Collins Hazard Area Extent and Location Map 1

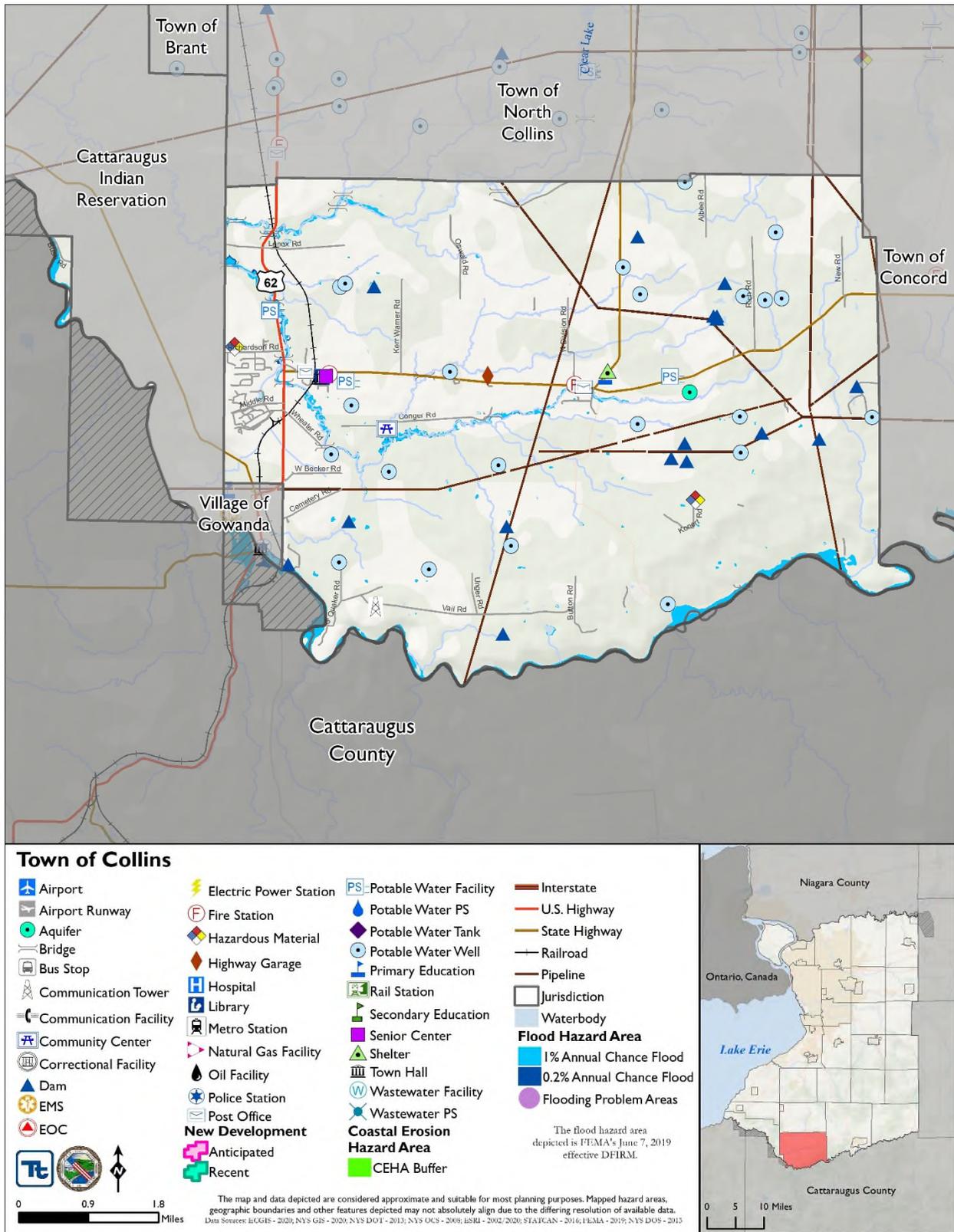




Figure 9.16-2. Town of Collins Hazard Area Extent and Location Map 2

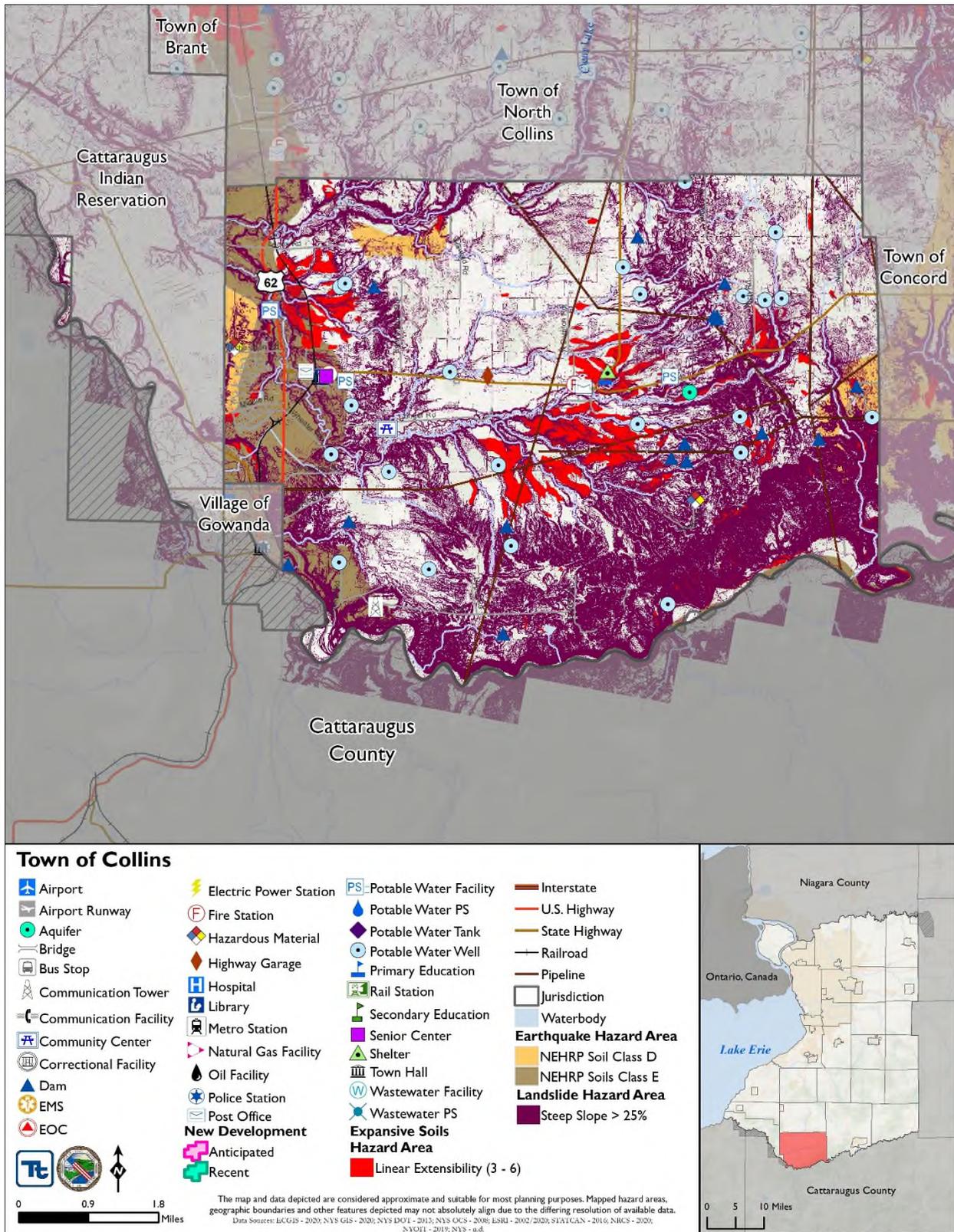
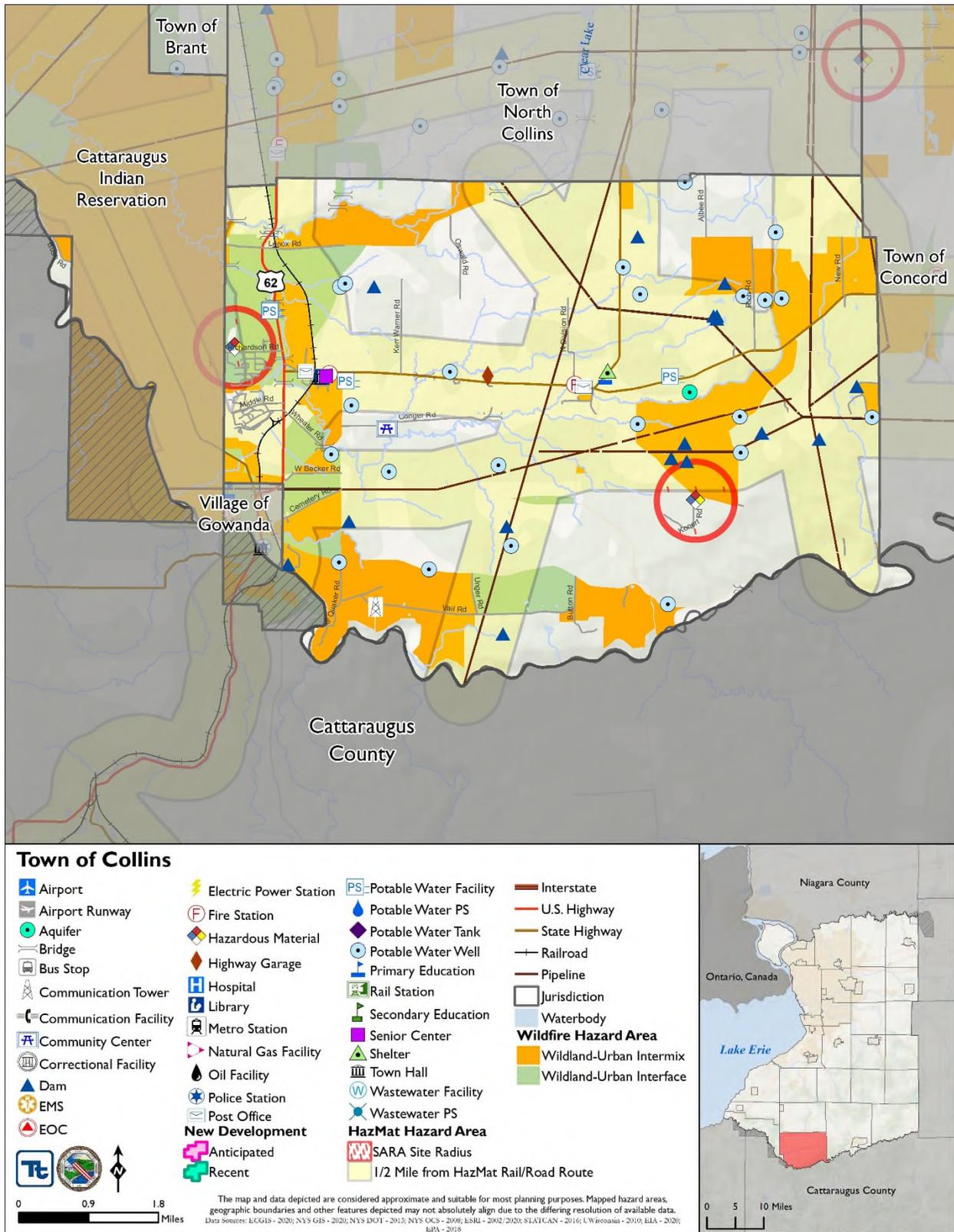




Figure 9.16-3. Town of Collins Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Collins’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.16-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.16-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the town did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the town did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the town did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the town did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the town did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the town did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the town did not report damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the town did not report damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Collins’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Collins. The Town of Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.16-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Medium	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.16-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Gowanda Country Club Dam	Dam	A	X	2022-T. Collins-002

Source: Effective DFIRM

Identified Issues

After review of the Town of Collins’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Collins has identified the following vulnerabilities within their community:

- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- The Gowanda Country Club Dam is located within the 1% SFHA (100-year floodplain).
- Creeks and streams within the town become inundated with debris during and after hazard events and exacerbates damages and flooding along the banks.
- Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA.
- Town of Collins Water Districts #1 and #3 pump houses need back-up generators.

9.16.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.





Table 9.16-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
-	Creek/Stream Debris Removal Program	Flood	Not Identified	Highway	In Progress	Level of Protection		<ol style="list-style-type: none"> Include in the 2022 HMP 2022-T. Collins-003
-	Bridge/Culvert Inspection Program	Flood, Transportation	Not Identified	Highway	In Progress	Level of Protection		<ol style="list-style-type: none"> Include in the 2022 HMP 2022-T. Collins-004
-	WO #1 Pump House Flood Control Project	Flood, Water Supply	Not Identified	Town Water Board	Complete	Cost	\$163,962	<ol style="list-style-type: none"> Discontinue Complete
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Code Enforcement	Complete	Level of Protection		<ol style="list-style-type: none"> Discontinue Complete
-	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Code Enforcement	Ongoing Capability	Level of Protection		<ol style="list-style-type: none"> Discontinue Ongoing Capability of the Town
-	Join the Community Rating System (CRS)	Flood	Not Identified	Code Enforcement	Ongoing Capability	Level of Protection		<ol style="list-style-type: none"> Discontinue Ongoing Capability of the Town



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.16-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X								X
Cyber Attack	X	X								X
Earthquake	X	X								X
Expansive Soils	X	X								X
Extreme Temperature	X	X								X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X	X								X
Landslide	X	X								X
Pandemic	X	X								X
Severe Storm	X	X	X		X			X	X	X
Severe Winter Storm	X	X	X		X			X		X
Utility Failure	X	X								X
Wildfire	X	X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.16-19 summarizes the comprehensive-range of specific mitigation initiatives the Town of Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.16-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.16-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Collins-001	Temporary and Permanent Housing	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.</p>	No	No	Short term	Town of Collins, Erie County	Low-Medium	High, ensures alternative housing locations for displaced residents	Municipal Budget, CDBG	High	LPR	ES
2022-T. Collins-002	Gowanda Country Club Dam	1, 2, 3	Flood	<p>Problem: The Gowanda Country Club Dam is located within the 1% SFHA (100-year floodplain).</p> <p>Solution: The Dam is privately owned and classified as a class A “low hazard” dam. The town will conduct outreach to the owners about the location within the floodplain and potential risks of increased flooding or failure, and support inspections or updates as deemed necessary by NYSDEC Dam Safety.</p>	Yes 💧	No	Short term	Town of Collins, Gowanda Country Club	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-T. Collins-003	Creek/Stream Debris	1, 2	Flood, Severe Storm,	Problem: Creeks and streams within the town become inundated with debris during and after hazard events	No	No	Ongoing once established	Town of Collins Highway	Medium	High, reduces flooding	Municipal Budget, HMA	High	LPR, NSP	PR, NR



Table 9.16-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Removal Program		Severe Winter Storm	and exacerbates damages and flooding along the banks. Solution: The Town Highway Department will begin to implement a debris removal program after hazard events. The town will ensure that trees are monitored before storms and maintained to reduce impacts during events. After heavy storms, the town will assess damages and remove debris to ensure water flow and reduce backup.										
2022-T. Collins-004	Bridge/Culvert Inspection Program	1, 2	Flood, Severe Storm, Severe Winter Storm	Problem: Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA. Solution: The Town Highway Department will begin to implement a bridge and culvert inspection and maintenance program to reduce road closures and roadway flooding. As damages are identified and reported, the town will seek funding to upsize and repair and replace culverts and bridges according to the needs.	No	No	Ongoing once established	Town of Collins Highway	Medium	High, reduces flooding	Municipal Budget, HMA	High	LPR, SIP	PR, SP
2022-T. Collins-005	Emergency Generators	1, 2	All Hazards	Problem: Town of Collins Water Districts #1 and #3 pump houses need back-up generators. Solution: The town will seek funding to install automatic, permanent generators at the above locations. The town will ensure that generators are placed in locations way from additional hazards (i.e. flooding, storm damages, etc.).	Yes	No	Short	Town of Collins	Medium, estimated \$50,000/generator	High, ensures continuity of operations at critical facilities	Municipal Budget, CDBG	High	SIP	ES



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.16-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Collins-001	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Collins-002	Gowanda Country Club Dam	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Collins-003	Creek/Stream Debris Removal Program	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
2022-T. Collins-004	Bridge/Culvert Inspection Program	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-T. Collins-005	Emergency Generators	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.16.9 Action Worksheets

The following action worksheets have been developed by the Town of Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Creek/Stream Debris Removal Program		
Project Number:	2022-T. Collins-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Creeks and streams within the town become inundated with debris during and after hazard events and exacerbates damages and flooding along the banks.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Department will begin to implement a debris removal program after hazard events. The town will ensure that trees are monitored before storms and maintained to reduce impacts during events. After heavy storms, the town will assess damages and remove debris to ensure water flow and reduce backup.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, reduces flooding
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Medium	Mitigation Action Type:	Local Plans and Regulations., Natural Systems Protection.
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	Ongoing once established	Potential Funding Sources:	Municipal Budget, HMA
Responsible Organization:	Town of Collins Highway	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Ask residents to alert town to dangerous trees	\$1,000	Reactive. Likely to miss most trees.
	Remove all trees along areas near creek/streams	N/A	Not feasible/environmentally damaging
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Creek/Stream Debris Removal Program	
Project Number:	2022-T. Collins-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces damages from debris
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	Town of Collins Highway
Political	1	
Legal	1	
Fiscal	1	
Environmental	0	Town will ensure to meet environmental requirements
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	Ongoing once established
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Bridge/Culvert Inspection Program		
Project Number:	2022-T. Collins-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Department will begin to implement a bridge and culvert inspection and maintenance program to reduce road closures and roadway flooding. As damages are identified and reported, the town will seek funding to upsize and repair and replace culverts and bridges according to the needs.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, reduces flooding
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Medium	Mitigation Action Type:	Local Plans and Regulations.PR, Natural Systems Protection.SP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	Ongoing once established	Potential Funding Sources:	Municipal Budget, HMA
Responsible Organization:	Town of Collins Highway	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	\$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Bridge/Culvert Inspection Program	
Project Number:	2022-T. Collins-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces damages from storm events
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	Town of Collins Highway
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding to upsize/replace culverts
Environmental	0	Town will ensure to meet environmental requirements
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	Ongoing once established
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Emergency Generators		
Project Number:	2022-T. Collins-005		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Town of Collins Water Districts #1 and #3 pump houses need back-up generators.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will seek funding to install automatic, permanent generators at the above locations. The town will ensure that generators are placed in locations way from additional hazards (i.e. flooding, storm damages, etc.).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures continuity of operations at critical facilities
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Medium, estimated \$50,000/generator	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Municipal Budget, HMA
Responsible Organization:	Town of Collins	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Emergency Generators	
Project Number:	2022-T. Collins-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe water
Property Protection	1	Critical Facility
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



9.17 Town of Concord

This section presents the jurisdictional annex for the Town of Concord. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Concord’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.17.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Concord’s hazard mitigation plan primary and alternate points of contact. The Town of Concord followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: The Emergency Management and Supervisor’s office. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.17-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael Willibey, Emergency Manager Address: 86 Franklin Street, Springville, NY Phone Number: 716-998-0925 Email: Cd153oem@gmail.com	Name/Title: Clyde Drake, Supervisor Address: 86 Franklin Street, Springville, NY Phone Number: 716-592-4946 Email: concordtownsupervisor@gmail.com
NFIP Floodplain Administrator	
Name/Title: Jeffrey Singleton, Code Enforcement Officer Address: 86 Franklin Street, Springville, NY Phone Number: 716-592-4946 Email: concordcode@gmail.com	

9.17.2 Municipal Profile

The Town of Concord is situated in southern Erie County and contains the Village of Springville plus the hamlet’s of Morton’s Corners, East Concord, Fowlerville, Glenwood and Wyandale. The town is approximately 70 square miles in area and is approximately 30 miles from downtown Buffalo. The town’s southern boundary is the pristine Zoar Valley of the Cattaraugus Creek which is a well-known recreational attraction. The Towns of Collins and North Collins are Concord’s western border. The Towns of Boston and Colden form the northern boundary and the Town of Sardinia are the eastern border. The upper reaches of the Eighteen Mile Creek are within the town.

The town was first settled by Europeans in 1807 and incorporated in 1812. The town was originally much larger, stretching across the entire south part of the county. The town, however, was reduced by formation of the towns





of Collins, North Collins, and Sardinia. The town is believed to be named after Concord, Massachusetts, by early settlers from New England (Town of Concord 2016). Historically, Springville was the center of a prosperous agricultural district, providing services and goods to farmers in the countryside and serving as a market for agricultural products. Today, agricultural value to the local economy is diminishing. Commercial and industrial enterprises within the town exist in and around the Village of Springville. Kissing Bridge, a popular ski resort, is located within the town. In the early 1980's of US Route 219 was constructed as a limited access highway from Buffalo south to Springville which spurred development of a modern "big box" retail area (Town of Concord 2016). NYS Routes 39 also traverses the town.

According to the U.S. Census, the 2010 population for the Town of Concord was 4,198. The estimated 2019 population was 4,186, a nearly zero percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.1 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.17.3 Jurisdictional Capability Assessment and Integration

The Town of Concord performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.17.3). The Town of Concord’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Concord. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.17-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL3-1986, Town of Concord. 1986. Fire Prevention and	Local	Code Enforcement Officer



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
			Building Construction., Chapter 72		
<p>Comment: Provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Concord. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this article. The Building Code requires that new structures be built to minimize exposure to natural hazards.</p>					
Zoning Code	Yes	No	Town of Concord. 2005. Zoning, Chapter 150.	Local	Code Enforcement Officer and Planning Board
<p>Comment: Comprehensive Zoning Plan is hereby established for the area of the Town of Concord outside the Village of Springville by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The Comprehensive Zoning Plan, set forth in the text and map which constitute this chapter, is adopted to promote, and protect public health, safety, comfort, convenience, prosperity, and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets or roads; to secure safety from fire, flood, panic and other dangers; to enhance the environment by the conservation of certain open land or wetland areas with certain desirable or unique characteristics worthy of preservation; to facilitate the adequate provision of transportation, parks, schools and other public requirements, including the transmission of power; and to preserve and promote the attractiveness of the Town of Concord.</p>					
Subdivision Ordinance	Yes	No	Local Law 1-1997; Subdivision Ordinance, Chapter 129	Local	Code Enforcement Office and Planning Board
<p>Comment: It is declared to be the policy of the Town of Concord to consider land subdivision plats as part of a plan for the orderly, efficient, and economical development of the Town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.</p>					
Stormwater Management Ordinance	No	Yes	-	-	-
<p>Comment: None</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	No	-	-	-
<p>Comment: While the town does not have a standalone ordinance for growth management, it is referenced in the Comprehensive Plan.</p>					
Site Plan Review	Yes	No	Town of Concord. 2005; Chapter 150 Zoning, Article XXXIII site Plan Review	Local	Planning Board
<p>Comment: Unless otherwise provided and as regulated by the Subdivision Regulations of the Town of Concord, a site plan review and a site plan approval shall be required for all uses, buildings and structures that require a building permit or certificate of zoning compliance under this chapter and for which an application therefor has been made to the Town of Concord, except for a single-family dwelling or a two-family dwelling and its permitted accessory uses, buildings or structures, prior to the issuance of a building permit or certificate of zoning compliance. Site plans shall include: Site grading and landscape design; preliminary engineering plans of storm drainage system, public utility extensions, water supply, and sanitary sewer facilities</p>					
Environmental Protection Ordinance	No	Yes	-	-	-
<p>Comment:</p>					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Local Law 1-1987; Flood Damage Prevention	Local	FPA
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program. <p>The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Local Law 2-1993; Stormwater Management	Local	Town Highway Department
<p>Comment: The general purpose of this chapter is to provide for efficient, economic, environmentally safe, and legal operation of the Town's publicly owned treatment works (POTW). More specifically, there is a purpose to prevent the introduction of substances into the town's publicly owned treatment works (POTW) that will:</p> <ul style="list-style-type: none"> • Interfere with the POTW in any way. • Pass through the POTW to the state's waters and cause contravention of standards for those waters or cause violation of the POTW's State Pollutant Discharge Elimination System (SPDES) permit. • Increase the cost or otherwise hamper the disposal of POTW sludge and/or residuals. • Endanger municipal employees. • Cause air pollution or groundwater pollution, directly or indirectly. • Cause, directly or indirectly, any public nuisance condition. 					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	LL3-1995, Chapter 59 Unsafe Buildings	Local	Code Enforcement
<p>Comment: Unsafe buildings pose a threat to life and property in the Town of Concord. Buildings and structures may become unsafe by reason of damage by fire, the elements, age, or general deterioration. Vacant buildings not properly secured at doorways and windows also serve as an attractive nuisance for young children who may be injured therein, as well as a point of congregation by vagrants and transients. A dilapidated building may also serve as a place of rodent infestation, thereby creating a health menace to the community. Debris, rubble, or parts of buildings left on the ground and not removed constitute a dangerous, unhealthy, and unsightly condition. It is the purpose of this chapter to provide for the safety, health, protection and general welfare of persons and property in the Town of Concord by requiring such unsafe buildings to be repaired or demolished or removed.</p>					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Concord and Village of Springville Joint Comprehensive Plan, 1999	Local	Planning Board, Code Enforcement
Comment: The Comprehensive Plan has the goals					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
1) to preserve, protect, and enhance sensitive environmental conditions, including woodlands, steep slopes, waterways, habitat areas, and scenic resources. 2) In conjunction with Erie and Cattaraugus Counties, advocate for environmental protection and enhancement of the Zoar Valley and the town's other stream and creek valleys, including support for the Eighteen Mile Creek Watershed Plan being prepared by the Western New York Land Conservancy. 3) Continue to maintain and enhance village water and sewer facilities, including the program of reducing storm water infiltration into the sanitary sewer system.					
Capital Improvement Plan	Yes	No	Town Capital Improvement Plan	Local	Town Board
Comment: The town can progress hazard mitigation projects through its CIP.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County Comprehensive Emergency Plan	County	County
Comment: The CEMP improves emergency coordination and response.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Concord to oversee and track development.

Table 9.17-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The level of buildout in the town is unknown.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Concord and their current responsibilities which contribute to hazard mitigation.

Table 9.17-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Town Highway Department staff ensure safe passage over town roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Town Highway Department staff coordinate emergency response
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRed
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Highway Department
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Highway staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Town Highway Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Consulting Engineer



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	CEO and Consulting Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	Yes	Consulting Engineer
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	Yes	Consultants
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Consulting Engineer

Fiscal Capability

The table below summarizes financial resources available to the Town of Concord.

Table 9.17-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Concord.

Table 9.17-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-



Outreach Resources	Available? (Yes/No)	Comment:
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Links to established agency websites
Warning systems for hazard events	Yes	CodeRed
Natural disaster/safety programs in place for schools	Yes	School System/Board of Cooperative Education Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Concord.

Table 9.17-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	8, 9	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.17-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong





Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.17.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Jeffrey Singleton, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Concord.

Table 9.17-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Concord	4	8	\$58,398	4	4

Source: FEMA 2020a and 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas prone to flooding in the town are mainly agricultural fields. There are not any Risk MAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction. The town relies upon consulting engineers for guidance to address future flooding due to climate change.

NFIP Compliance

The Town of Concord does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in January 2011. The Code Enforcement Office is responsible for floodplain administration and the CEO is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that its floodplain management staff would benefit from assistance or training to support its floodplain



management program. The town makes Substantial Damage determinations at time of plan review. The town’s floodplain management meets minimum requirements. The Planning Board considers flood risk when reviewing development proposals.

9.17.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Concord has identified the following routes and procedures to evacuate residents prior to and during an event.

- The town utilizes Route 219 and Route 240 as north-south evacuation routes, and Route 39 and Genesee Road as east-west routes. As evacuation proceeds, the town will continually coordinate with county officials.

Sheltering

The Town of Concord has identified the following designated emergency shelters within the town.

Table 9.17-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Commerce Drive	100	Unknown	Yes	Yes	No	Shelter
East Concord Fire Department	Genesee Road	100	Unknown	Unknown	No	No	Warming
Morton County Fire Department	Morton’s Corners Road	80	Unknown	Unknown	No	No	Warming

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Concord has identified the following sites suitable for placing temporary housing units.

Table 9.17-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. Town will work to identify suitable temporary housing locations per Proposed Mitigation Action #007					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning



requirements and floodplain laws. The Town of Concord has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.17-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. Town will work to identify suitable permanent housing locations, per Proposed Mitigation Action #007					

9.17.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.17-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.17-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	81	0	88	0	83	0	65	0	81	0	92	0
Multi-Family	0	0	0	0	0	0	0	0	1	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	81	0	88	0	83	0	65	0	82	0	92	0
Recent Major Development and Infrastructure from 2015 to Present												
Gas Transmission Line	Commercial	Pipeline	West end of town		HAZMAT		Tennessee Gas transmission line					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Genesee Road Solar	Commercial	350-megawatt solar farm	Concord/Sardinia line		Unknown		Solar farm					

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.17.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Concord’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified



using mapping techniques and technologies and for which the Town of Concord has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.17-1. Town of Concord Hazard Area Extent and Location Map 1

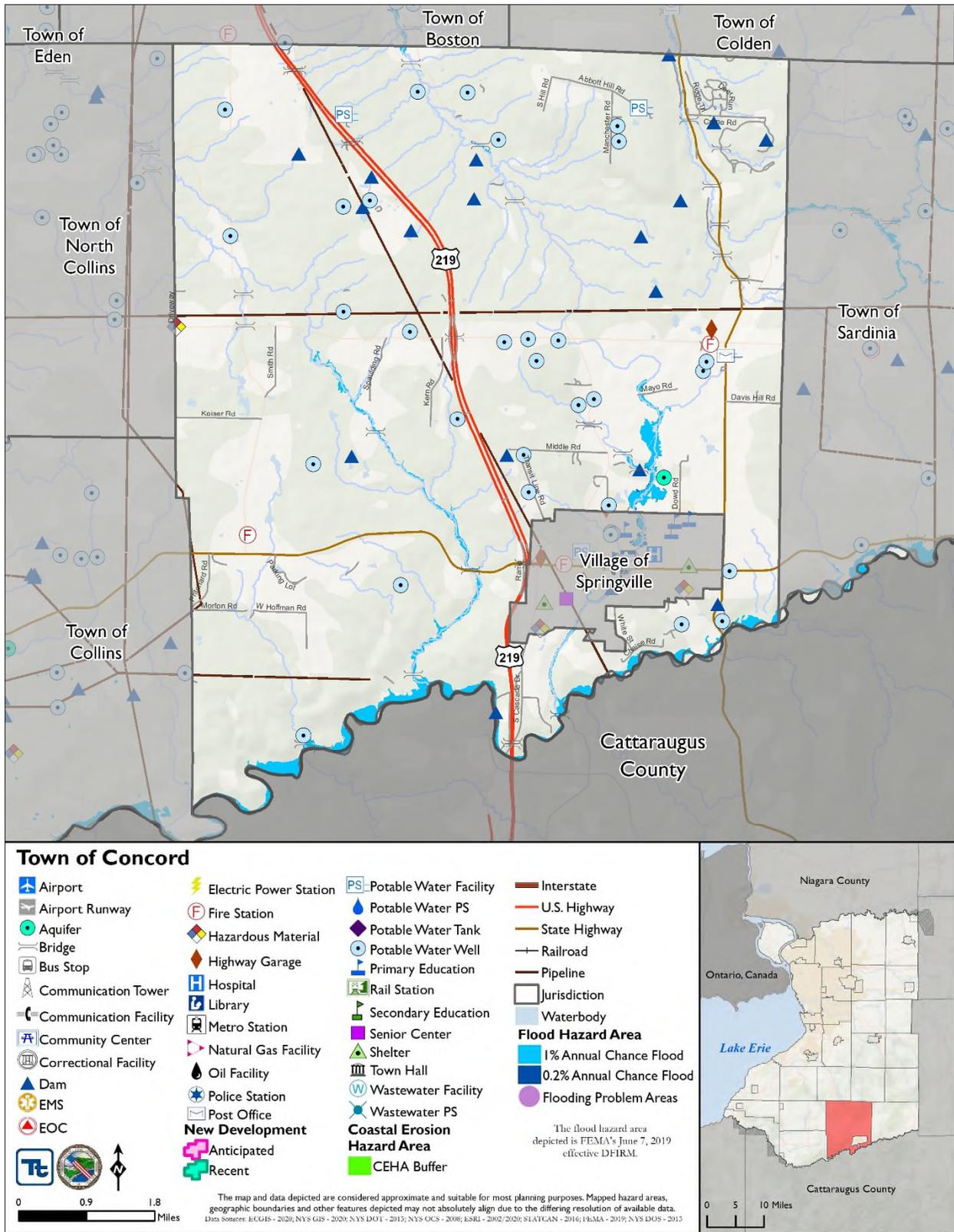




Figure 9.17-2. Town of Concord Hazard Area Extent and Location Map 2

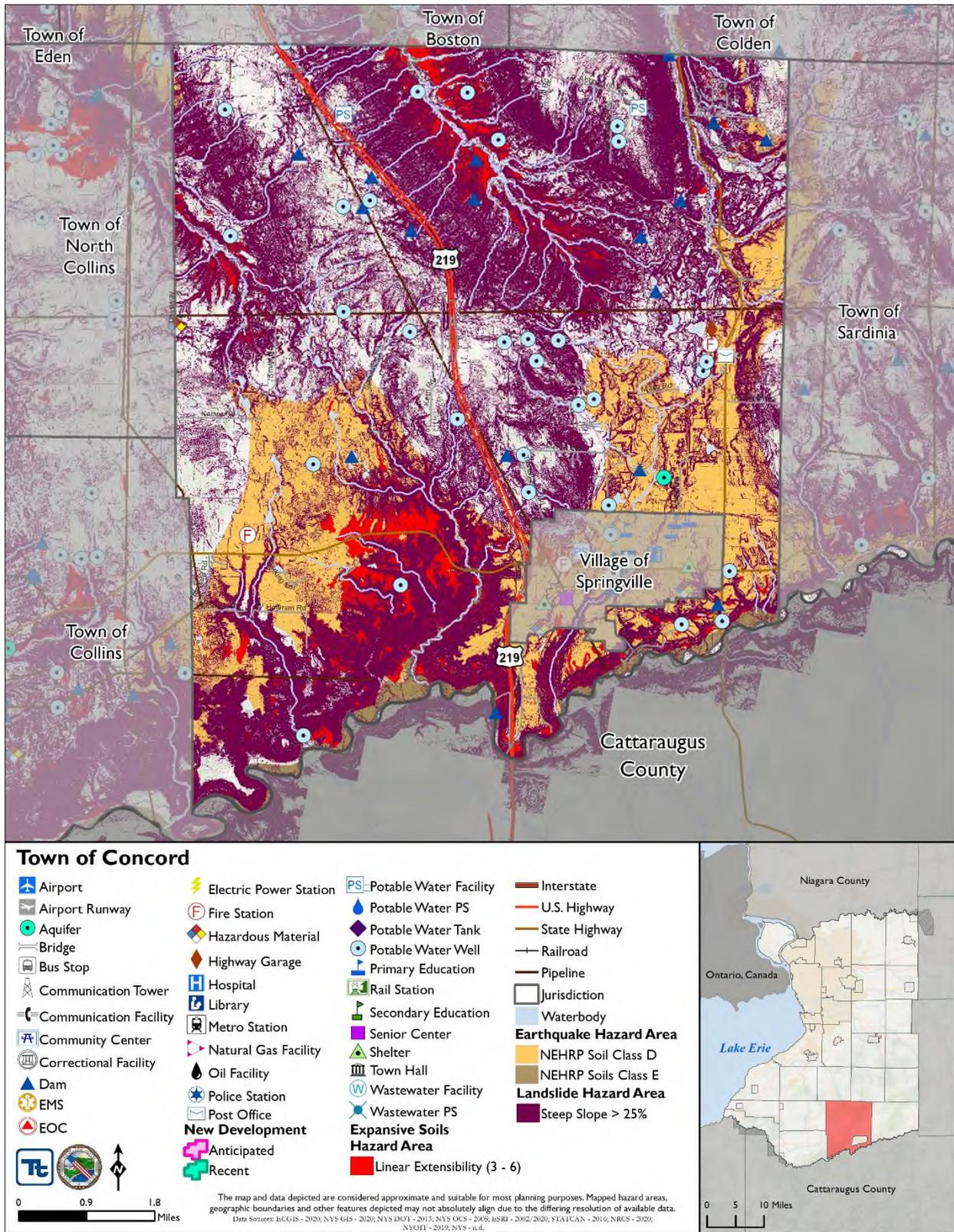
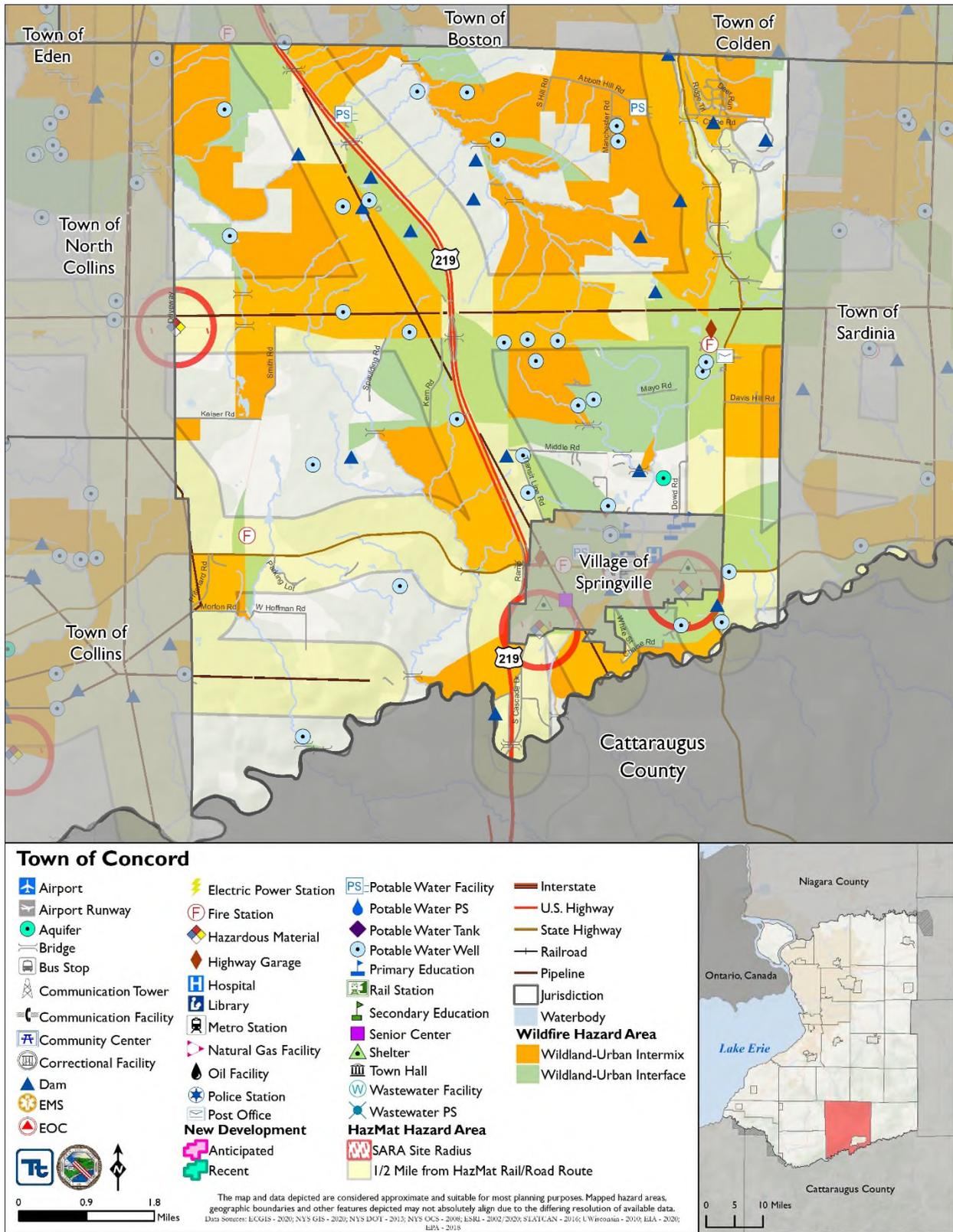




Figure 9.17-3. Town of Concord Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Concord’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.17-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.17-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, town did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, town did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, town did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, town did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, town did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, town did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Concord’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Concord. The Town of Concord has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated agreement with the following Hazard Rankings:

Table 9.17-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Medium	High	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.17-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Springville Dam	Dam	X	X	2022-Town of Concord-003

Source: FEMA 2021

Identified Issues

After review of the Town of Concord’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Concord has identified the following vulnerabilities within their community:

- There is erosion occurring on county highways.
- The town hall facility lacks backup power and is a critical facility.
- The Springville dam is a recognized high hazard dam and is identified as being in the Special Flood Hazard.
- Culverts are undersized on several roadways.
- Tree trimming is needed in specified locations to prevent power failure.
- Locations for temporary and permanent housing have not been identified.
- There are four Repetitive Loss Properties in the town

9.17.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.





Table 9.17-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Continue maintenance of drainage ditches, culverts and related structures	Flood	Not Identified	Highway	Ongoing	Cost		<ol style="list-style-type: none"> Discontinued Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
	The Town will continue evaluate land that may be purchased that falls within the flood plain areas of the Town for recreation and stormwater management purposes	Flood	Not Identified	Town Board	Ongoing	Cost		<ol style="list-style-type: none"> Include in 2022 HMP Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Legal, Town Board, Code Enforcement	Ongoing	Cost		<ol style="list-style-type: none"> Include in 2022 HMP Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Concord has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The town coordinates with the County Highway Department to reduce damage from landslides and erosion throughout the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Concord participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (FEMA 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.17-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	-		-	-	-	X
Cyber Attack	-	X	-	-	-		-	-	-	X
Earthquake	-	X	-	-	-		-	-	-	X
Expansive Soils	-	X	-	-	-		-	-	-	X
Extreme Temperature	-	X	-	-	-		-	-	-	X
Flood	-	X	-	X	-	X	X	X	X	X
Hazardous Materials	-	X	-	-	-		-	-	-	X
Landslide	-	X	-	-	-		-	-	-	X
Pandemic	-	X	-	-	-		-	-	-	X
Severe Storm	-	X	-	-	-	X	-	-	-	X
Severe Winter Storm	-	X	-	-	-		-	X	-	X
Utility Failure	-	X	X	-	-		-	X	-	X
Wildfire	-	X	-	-	-		-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.17-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Concord would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number. Table 9.17-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Concord-001	Protect town hall and town highway barns from risk of power failure	1	All Hazards	<p>Problem: The Town Hall facility and Town Highway barns lack backup power, and these are critical facilities.</p> <p>Solution: The Town Highway Department and engineer will determine which size generators to purchase and will then install it at Town Hall and/or the Highway Barns.</p>	Yes	No	Within 5 years	Town Highway Department, Town Engineer, Town Board	~\$75,000 estimated cost to install generator	Ensure continued operations at this critical facility	HMGP, BRIC, Municipal Budget	High	SIP	ES
2022-Town of Concord-002	Erosion along county roadways	1	Flood, Severe Storms	<p>Problem: Several roadways owned by the county are eroding due to flood events. Grote Road, Trevett Road, Mill Street, Route 240, Cattaraugus Street, Belscher Road.</p> <p>Solution: The county will address erosion and flooding issues along county roadways.</p>	No	No	Within 3 years	County Highway Department	TBD by engineering analysis	Ensure continued emergency access over these roads	County, HMGP, BRIC, Municipal Budget	High	SIP	PP
2022-Town of Concord-003	Protect the Springville Dam from exposure to the 0.2% annual chance flood event	1	Flood	<p>Problem: The Springville dam is county owned and identified as being in the Special Flood Hazard Area.</p> <p>Solution: The town will contact the county and encourage completion of a</p>	Yes 💧	No	Within 5 years	Town Highway Department, County Public Works	TBD by engineering analysis	Ensure continuity of flood protection services at this critical facility.	High Hazard Potential Dam grant, HMGP, BRIC, county budget	High	EAP	PI



Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				survey to determine needed actions to protect the dam.										
2022-Town of Concord-004	Replace undersized/blocked culverts along several roadways that flood during heavy rainfall	1,2	Flood	<p>Problem: Culverts along several roadways including Springville-Boston Road (county), Sharp Street (county) Morton Road (town), Kaiser Road (town) Route 240/Middle Road (county) and Ross Road (town) are undersized and blocked.</p> <p>Solution: Town staff will determine the correct repair for each roadway, which may include culvert replacement. Town Highway Department will implement these mitigation measures. The town will encourage the county to address culvert issues on county-owned road.</p>	No	No	Within 5 years	Town Highway Department, County Highway Department	TBD by engineering analysis per road segment	Continued service and access by emergency access vehicles	BRIC, HMGP, CHIPS, Town budget, county budget	High	SIP	SP
2022-Town of Concord-005	Tree Trimming along roadways to prevent utility outages	1	Utility Failure	<p>Problem: Several roadways in the town are vulnerable to power failure due to trees falling on utility lines during storms/wind events.</p>	No	No	Ongoing once established	Town Highway Department, County Highway Department	Ongoing annual costs	Prevent utility failure and ensure continued service	County and Town Budget	High	NSP	NR



Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will work to trim trees away from utilities.										
2022-Town of Concord-006	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.</p>	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Help residents to live elsewhere than flood prone housing.	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP
2022-Town of Concord-007	Identify locations for temporary and permanent housing	2	All Hazards	Problem: The town cannot identify locations for temporary and permanent housing	No	No	Within 5 years	CEO, FPA	Staff Time	Improve health and safety of residents who	Municipal Budget, HMGP	High	SIP	ES



Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				when needed after a disaster. Solution: The CEO and FPA will work with the county to identify and potentially secure access to sites to locate temporary and permanent housing						are displaced by a disaster				

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.17-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Concord-001	Protect town hall and town highway barns facility from risk of power failure	1	1	1	1	1	1	1	1	1	1	1	0	1	0	12	High
2022-Town of Concord-002	Erosion along county roadways	1	1	1	1	0	1	0	1	1	1	1	1	1	1	12	High
2022-Town of Concord-003	Protect the Springville Dam from exposure to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Town of Concord-004	Replace undersized/blocked culverts along several roadways, town-owned and county-owned	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-Town of Concord-005	Tree Trimming along roadways to prevent utility outages	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Town of Concord-006	Residential Property Flood Mitigation.	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High
2022-Town of Concord-007	Identify locations for temporary and permanent housing	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.17.9 Action Worksheets

The following action worksheets have been developed by the Town of Concord to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Concord Action Worksheet			
Project Name:	Protect town hall facility and town highway garage from risk of power failure		
Project Number:	2022-Town of Concord-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Town Hall facility lacks backup power, and these are critical facilities.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will determine the correct generator to install at the Town hall to provide protection from power failure. The Department will then install it at the Town Hall and or Highway garage.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect the town hall from power failure	Estimated Benefits (losses avoided):	Ensure continuity of services from these critical facilities
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	~\$75,000	Mitigation Action Type:	Structure and Infrastructure Project
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	HMGP, BRIC, Municipal budget
Responsible Organization:	Town Highway Department, Town Engineer, Town Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues
	Construct solar field	High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect town hall facility from risk of power failure	
Project Number:	2022-Town of Concord-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will preserve critical services provided at the town facilities
Property Protection	1	Project will protect town facilities from damage during power outages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	5 years
Agency Champion	1	Town Highway Department, Town Engineer, Town Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Concord Action Worksheet			
Project Name:	Replace undersized/blocked culverts along several roadways		
Project Number:	2022-Town of Concord-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Culverts along several roadways including Springville-Boston Road (county), Sharp Street (county) Morton Road (town), Kaiser Road (town) Route 240/Middle Road (county) and Ross Road (town) are undersized and blocked.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will determine the correct repair for each roadway, which may include culvert replacement. The Town Highway Department will conduct a feasibility study and then implement the mitigation measures chosen. The town will encourage the county to address hazard issues along county roadways.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood hazard	Estimated Benefits (losses avoided):	Ensure continuity of services along these critical roadways
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by engineering analysis	Mitigation Action Type:	Structure and Infrastructure Project
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	HMGP, BRIC, town budget
Responsible Organization:	Town Highway Department, County Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues
	Construct solar field	High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Replace undersized/blocked culverts along several roadways	
Project Number:	2022-Town of Concord-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will preserve passageway over important town roadways
Property Protection	1	Project will protect passage along public roadways
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	5 years
Agency Champion	1	Town Highway Department, County Highway Department
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



9.18 Village of Depew

This section presents the jurisdictional annex for the Village of Depew. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Depew’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.18.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Depew’s hazard mitigation plan primary and alternate points of contact. The Village of Depew followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Code Enforcement, Administrator, Mayor, and Emergency Manager. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.18-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: RJ Neiman, Emergency Manager Address: 85 Manitou St. Depew, NY 14043 Phone Number: 716-683-1400 Email: rniewman@villageofdepew.org	Name/Title: Kevin Peterson, Mayor Address: 85 Manitou St. Depew, NY 14043 Phone Number: (716) 683-7451 Email: kpeterson@villageofdepew.org
NFIP Floodplain Administrator	
Name/Title: Anthony Fischione, Code Enforcement Officer Address: 85 Manitou St. Depew, NY 14043 Phone Number: (716) 683-7451 Email: afischione@villageofdepew.org	

9.18.2 Municipal Profile

The Village of Depew straddles two towns: it is divided by Transit Road, the boundary between the Town of Lancaster and the Town of Cheektowaga. The village also shares a border with the Village of Lancaster. The village is 11 miles east of downtown Buffalo.

The village area was first settled by members of the Erie Indian tribe and later by the Seneca. One of the earliest white settlers in the area was Appolos Hitchcock, who arrived in 1808. The 1825 opening of the Erie Canal spurred rapid settlement as farmers were now able to ship their crops to large cities like New York. In the late 1830s, large numbers of German immigrants moved into the area. In the late 1840s, immigrants from Ireland and Britain arrived seeking work on the railroads. Dutch immigrants settled in the village in the mid-1800s and Hungarians and Ukrainian emigrants arrived after 1913. Construction of the New York Central Railroad repair





shops spurred large-scale development in Depew. By 1893, the National Car Wheel Works, the Gould Coupler Works, the Union Car company, and the Brassworks were built and in operation. By 1900, the New York Central shops employed 1,000 men.

The village incorporated in 1894 at which time the population was 2,000 residents. In 1912, after moving back and forth between the north and south halves of Depew, village hall was finally settled permanently within the village’s south side Growth of the village slowed during the Great Depression but the Second World War revived the economy as factories produced mass amounts of war material (Village of Depew 2018).

According to the U.S. Census, the 2010 population for the Village of Depew was 15,303. The estimated 2019 population was 15,102, a 1.3 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.0 percent of the population is 5 years of age or younger and 19.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.18.3 Jurisdictional Capability Assessment and Integration

The Village of Depew performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.18.3). The Village of Depew’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Depew. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.18-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 76 Local Law No. 9-2011	Local	Building Inspection/Code Enforcement



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.</p>					
Zoning Code	Yes	No	Chapter 260 Local Law No. 5-2012	Local	Building Inspection/Code Enforcement
<p>Comment: The purpose of this chapter is to provide for the orderly growth of the Village of Depew by setting minimum requirements in accordance with a comprehensive plan, designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. Specifically, the Zoning Law is adopted to:</p> <p>1) Filling of vacant or improved land of any size shall not occur without a grading and drainage plan approved by the Code Enforcement Officer.</p> <p>2) The construction of earthen berms and similar significant landscaping features, including retaining walls, requires grading drainage plan to be approved by the Code Enforcement Officer.</p> <p>3) The landscape plan shall show the location of all existing trees to be preserved and/or removed, the location of all trees and low level plantings, a planting schedule indicating the number of plant species, their size and common name. The plan shall also include typical planting details for trees and shrubs and specifications for ground cover with germination rates.</p> <p>4) Signs must be anchored to prevent overturning or becoming windblown.</p> <p>5) Site plan shall have a rough sketch (to scale), showing the locations and dimensions of principal and accessory structures, parking areas, vehicular ingress and egress points, proposed signage, existing and proposed vegetation, any other proposed exterior site features, anticipated changes in topography and natural site features, including floodplains, floodways and/or regulated wetlands or water bodies.</p>					
Subdivision Ordinance	No	No	-	-	-
<p>Comment:</p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 188 Local Law No. 1-2008	Local	DPW and Stormwater Management Officer
<p>Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 188-2A. This chapter seeks to meet those purposes by achieving the following objectives: 1) To establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 188-2A. 2) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels. 3) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: A property condition disclosure statement must be presented to the buyer of a property. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract.</p>					
Growth Management	Yes	No	Chapter 260 Local Law No. 5-2012	Local	Building Department
<p>Comment: The purpose of this chapter is to provide for the orderly growth of the Village of Depew by setting minimum requirements in accordance with a comprehensive plan, designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.</p>					
Site Plan Review	Yes	No	260-48 through 53 Local Law No. 5-2012	Local	Planning Board
<p>Comment: The goals and objective of site plan review include the following: 1) Filling of vacant or improved land of any size shall not occur without a grading and drainage plan approved by the Code Enforcement Officer. 2) The construction of earthen berms and similar significant landscaping features, including retaining walls, requires grading drainage plan to be approved by the Code Enforcement Officer. 3) The landscape plan shall show the location of all existing trees to be preserved and/or removed, the location of all trees and low level plantings, a planting schedule indicating the number of plant species, their size and common name. The plan shall also include typical planting details for trees and shrubs and specifications for ground cover with germination rates. 4) Signs must be anchored to prevent overturning or becoming windblown. 5) Site plan shall have a rough sketch (to scale), showing the locations and dimensions of principal and accessory structures, parking areas, vehicular ingress and egress points, proposed signage, existing and proposed vegetation, any other proposed exterior site</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<i>features, anticipated changes in topography and natural site features, including floodplains, floodways and/or regulated wetlands or water bodies.</i>					
Environmental Protection Ordinance	Yes	Yes	Chapter 98 Local Law No. 2-1979	Local	Village Planning Board
Comment: <i>The purpose of this chapter is to implement for the Village of Depew SEQR and Part 617.</i>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 109 Local Law No. 1-2019	Local	Building Inspections/Code Enforcement
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <ul style="list-style-type: none"> A. <i>Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i> B. <i>Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i> C. <i>Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i> D. <i>Control filling, grading, dredging and other development which may increase erosion or flood damages;</i> E. <i>Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and;</i> F. <i>Qualify and maintain for participation in the National Flood Insurance Program.</i> <p><i>§109-16 and 17 provide standards for new and substantially approved residential and non-residential structures. If new or substantially improved structures are located in the SFHA, the structure must have their lowest floor elevated to or above two feet above the BFE.</i></p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 187 (Sewer Use), Section 42; amended by Local Law No. 4-1988	Local	DPW and Stormwater Management Officer
Comment: <i>The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Village of Depew through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4, in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02.</i>					
Emergency Management Ordinance	Yes	Yes	Chapter 106 Fire Safety Local Law Number 2 of 1971.	Local	Fire Department
Comment: <i>The law deals with the local fire and emergency response as well as clean up of hazardous waste during disaster event. The law also states the need for municipal intervention during a natural disaster event to reduce community exposure to hazard.</i>					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	Yes	No	Chapter 76 (Building Construction and Fire Prevention); adopted on November 28, 2011	Local	Code Enforcement Officer
Comment: <i>This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.</i>					
Disaster Reconstruction Ordinance	Yes	No	Chapter 76 (Building Construction and Fire Prevention); adopted on November 28, 2011	Local	Code Enforcement Officer
Comment: <i>This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.</i>					
Other	No	-	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster, Village of Lancaster, and the Village of Depew Joint Comprehensive Plan, 2018	Local	Village Planning
<p>Comment: <i>The Comprehensive Plan serves as the legal foundation for all zoning and land use regulation decisions made in each municipality. New York State Law dictates that Town and Village planning, zoning, capital budgeting and other decisions should be based on a comprehensive plan that represents the community's vision for its future. This Plan's articulation of the shared vision for the three communities helps ensure that land use regulations are built on a solid foundation. The goals of the 2018 Comprehensive Plan include:</i></p> <ol style="list-style-type: none"> 1) <i>Prioritize a list of critical open spaces to preserve the community's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements.</i> 2) <i>Allow conservation development in the Town code.</i> 3) <i>The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features.</i> 4) <i>The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities.</i> 5) <i>Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities.</i> 6) <i>Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought.</i> 7) <i>Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters.</i> 8) <i>Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects.</i> 9) <i>The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.</i> 					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Village of Depew Stormwater Management Plan, May 1, 2015- April 30, 2017	Local	Village Planning
<p>Comment: <i>The SWMP Plan is based on the Federal Stormwater Phase II rule, issued in 1999, which requires municipal separate storm sewer system (MS4) owners and operators, in U.S. Census-defined urbanized areas, to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures, include: 1. Public Education and Outreach 2. Public Involvement / Participation 3. Illicit Discharge Detection and Elimination 4. Construction Site Runoff Control 5. Post-Construction Stormwater Management 6. Pollution Prevention / Good Housekeeping for Municipal Operations.</i></p>					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	Yes	No	Village of Depew Stormwater Management Plan, May 1, 2015- April 30, 2017	Local	Village Planning
<p>Comment: <i>The Western New York Stormwater Coalition (WNYSC) Stormwater Management Program (SWMP) Plan has been developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-10-002). It is a shared SWMP Plan providing policy and management guidance to the regulated municipalities and agencies that are members of the WNYSC. The Village of Depew is a member of the Western New York Stormwater Coalition and a party to this SWMP Plan.</i></p>					
Habitat Conservation Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	No	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County CEMP	County	Village Planning and County OEM
Comment: <i>No information available at this time</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Depew to oversee and track development.

Table 9.18-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is relatively urbanized and built out – no land available for relocation within jurisdiction.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Depew and their current responsibilities which contribute to hazard mitigation.

Table 9.18-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The planning board may approve, conditionally approve or disapprove subdivision plans for the purpose of providing for the orderly and wise development of the village and affording adequate facilities for housing, transportation, distribution, comfort, convenience, safety and the health and welfare of its population.
Zoning Board of Adjustments	Yes	The primary role of the zoning board is to review and decide cases where a relaxation of the ordinance is sought or where there is an alleged error in a zoning decision.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	<p>The DPW handles the following services for the village:</p> <ul style="list-style-type: none"> • Garbage Collection & Recycling • Large Appliance Disposal • Used Tire Recycling • Leaf Pick Up • Loose Branch Pickup (call 683-5700 for pickup) • Carcass Removal (on residential streets only) • Street Maintenance & Pothole Repair • Road Signs/Markings and Maintenance • ROW Tree Removal and Trimming • Storm & Sanitary Sewer Maintenance • Illicit Discharge Complaints • Snow Plowing/Snow Removal
Construction/Building/Code Enforcement Department	Yes	<p>The Building Inspection/Code Enforcement Department provides the following services:</p> <ul style="list-style-type: none"> • Residential and Commercial Building Inspection and Plumbing Inspection • Sewer Certificate of Compliance - needed to sell your home • Information on building permits for building, remodeling, fences, swimming pools, storage sheds, signs (all types), decks and porches • Village code enforcement • Liaison to Zoning Board and Planning Board • Floodplain development
Emergency Management/Public Safety Department	Yes	<p>Staffed by volunteers from the community, the primary functions of the Depew Office Emergency Management are to:</p> <ul style="list-style-type: none"> • Identify, assess and prioritize local vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them. • Outline short, medium and long range measures to improve the Village's capability to manage hazards. • Provide that Village government will take appropriate actions to prevent or mitigate effects of hazards and be prepared to respond to and recover from them when an emergency or disaster occurs and provide for the efficient utilization of all available resources during an emergency. • To provide for the utilization and coordination of Village, County, State and federal programs to assist disaster victims, and to prioritize the response to the needs of the elderly, disabled, low income, and other groups which may be inordinately affected. • Provide for the utilization and coordination of Village state and federal programs for recovery from a disaster with attention to the development of mitigative programs.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	<p style="text-align: center;">Garbage Collection & Recycling Large Appliance Disposal Used Tire Recycling Leaf Pick Up Loose Branch Pickup (call 683-5700 for pickup) Carcass Removal (on residential streets only) Street Maintenance & Pothole Repair Road Signs/Markings and Maintenance</p>



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		ROW Tree Removal and Trimming Storm & Sanitary Sewer Maintenance Illicit Discharge Complaints Snow Plowing/Snow Removal
Mutual aid agreements	Yes	Fire
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Department of Building Inspection/ Code Enforcement offers the following services: <ul style="list-style-type: none"> Residential and Commercial Building Inspection and Plumbing Inspection Sewer Certificate of Compliance - needed to sell your home Information on building permits for building, remodeling, fences, swimming pools, storage sheds, signs (all types), decks and porches Village code enforcement Liaison to Zoning Board and Planning Board Flood Plain Development
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Contracted
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Depew.

Table 9.18-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Depew.

Table 9.18-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk is in charge of website updating
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Village website is the main source for this information
Social media for hazard mitigation education and outreach	Yes	The village maintains a Facebook page where they provide events and municipal updates.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Ready Erie Preparedness App, NY Alert, Social media/media outlets – have Facebook and mostly reliant on Erie OEM social media.
Natural disaster/safety programs in place for schools	Yes	Schools have their own safety programs.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Depew.

Table 9.18-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-



Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.18-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Strong
Pandemic	Strong
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.18.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Anthony Fischione, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Depew.

Table 9.18-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Depew	14	33	\$23,675	0	4

Source: FEMA 2020a, FEMA 2020b
 RL Repetitive Loss; SRL Severe Repetitive Loss



Flood Vulnerability Summary

Areas that are prone to flooding within the village are within the designated floodplains. The village maintains a list of properties that have been damaged by flooding by using the floodplain maps. The village does not maintain a list of property owners interested in flood mitigation. The village does not have any RiskMAP projects underway. The Village of Depew makes Substantial Damage determinations by using the NFIP guidance. So far, no properties were declared substantially damaged for recent flood events. There have not been any mitigation projects within the village. The village's flood hazard maps adequately address the flood risk within the village.

NFIP Compliance

The Building Inspection/Code Enforcement Department is responsible for floodplain management. At this time, there are no staff members that are certified floodplain managers. The Village of Depew does not have access to resources to determine possible future flooding conditions from climate change. The floodplain management staff needs assistance to support its floodplain management program including NFIP updates for 2020. The village provides engineering capabilities for their NFIP administration services. The village would determine if proposed development on an existing structure would qualify as a substantial improvement by using NFIP resources.

The Village of Depew expressed resources as being a barrier to running an effective NFIP program. The village does not have any outstanding NFIP compliance violations. The most recent Community Assistance Contact (CAC) was on July 22, 1997. The most recent Community Assistance Visit (CAV) was on February 22, 2008. Ch #109 Local Law 2019 is the flood damage prevention ordinance and there are various other plans and programs that support the floodplain management. The floodplain management program meets the minimum requirements. The jurisdiction does not participate in the CRS program.

9.18.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Depew has identified the following routes and procedures to evacuate residents prior to and during an event. Escape Routes.

- Transit Road – State Route 78
- Broadway – State Route 20
- Walden Ave – State Route 33

Sheltering

The Village of Depew has identified the following designated emergency shelters within the village.



Table 9.18-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	85 Manitou Street, Depew	25-50	Yes	Yes	Yes	Urgent Care	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Depew has identified the following sites suitable for placing temporary housing units.

Table 9.18-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Depew High School	5201 Transit Road	20-30	Parking lot	Water/ Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Depew has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.18-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Depew High School	5201 Transit Road	20-30	Parking lot/ Vacant Lot	Water/ Electric	None

9.18.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.18-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.18-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	2	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	2	0	1	0	0	0
Other (commercial, mixed-use, etc.)	1	0	0	0	3	0	2	0	1	0	0	0
Total Permits Issued	2	0	2	0	3	0	3	0	2	0	2	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Broadway Apartment	Multi Residential	36 units/5 structures		4510 Broadway (103.76-1-1.1)	0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		Planning					
Landfill Solar	Utility	5 MW 24.97 acres		4293 Broadway (103.19-1-10, 103.19-1-13)	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		Planning					

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.18.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Depew’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified



using mapping techniques and technologies and for which the Village of Depew has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.18-1. Village of Depew Hazard Area Extent and Location Map 1

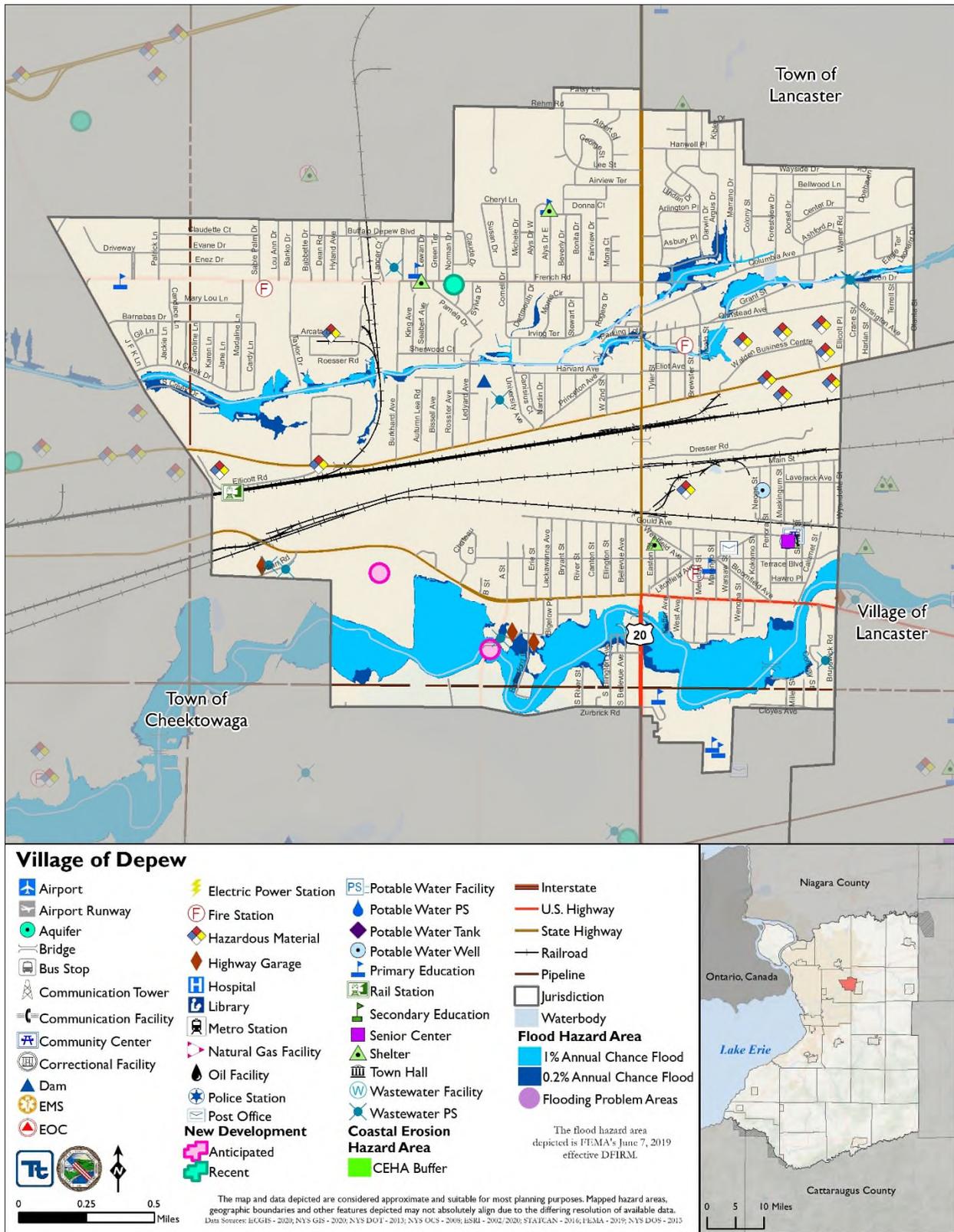




Figure 9.18-2. Village of Depew Hazard Area Extent and Location Map 2

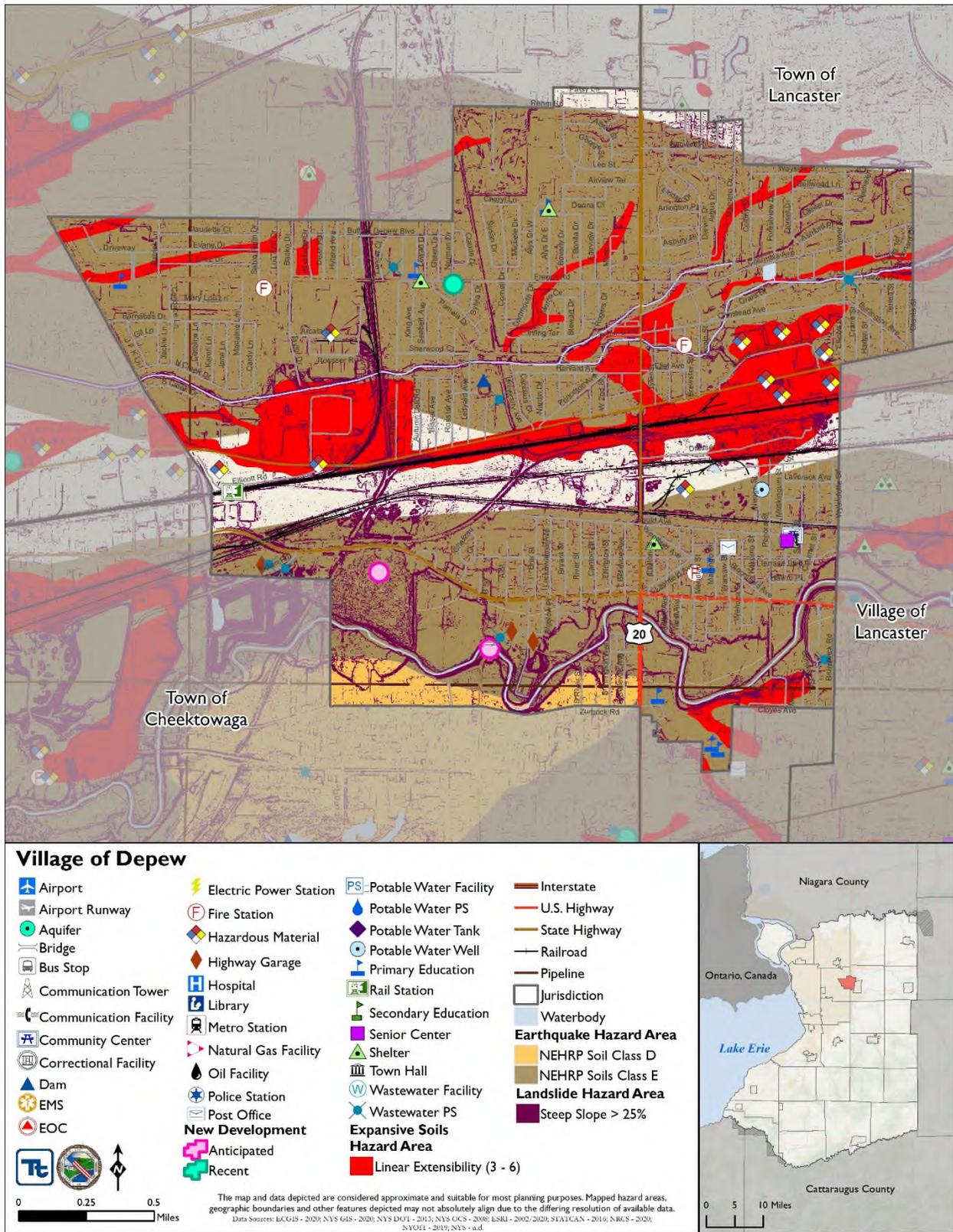
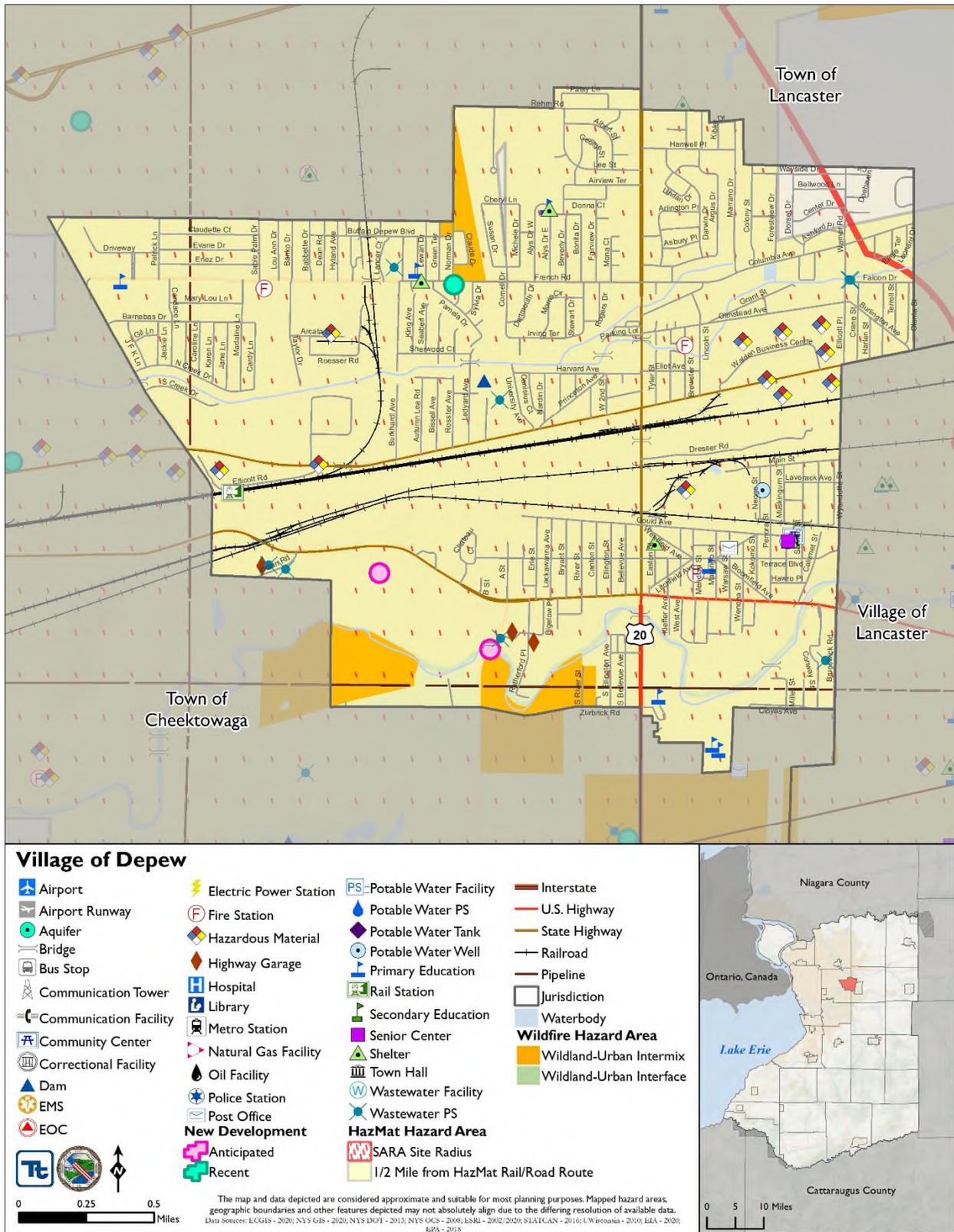




Figure 9.18-3. Village of Depew Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Depew’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.18-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.18-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No major loss – downed trees
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the village did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the village did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the village did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the village did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the village did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the village did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the village did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the village did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the village did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the village did not report damages
December 10-15, 2017	Lake-effect Snow	No	Although the County was impacted, the village did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the County was impacted, the village did not report damages
January 2, 2018	Blizzard	No	Although the County was impacted, the village did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the village did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the village did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the village did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the village did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
2020-21	COVID -19	No	The village was subject to closures and masking/social distancing requirements. Various losses not quantifiable

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Depew’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Depew. The Village of Depew has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village changed flood from low to high due to frequent flooding in various parts of the community.
- The village changed hazardous material incidents from low to medium. The village has many trains and tractor trailers that come through the village carrying various hazardous materials. A transfer station (located in Cheektowaga) is also located next to Cayuga Creek and threatens cascading water contamination.
 - Municipal Landfill is also adjacent to Cayuga Creek and threatens water quality.
- While storms are a major issue, the municipality has the capacity to respond and will revised the rankings for Severe Storms, Severe Winter Storms, and Utility Failure from high to medium.
- The village has historically not been threatened by earthquakes and will adjust the ranking from high to low.

Table 9.18-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	High	Medium





Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Medium	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.18-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Wastewater Pump Station (unnamed)	Wastewater Pump Station		X	Yes
Warner Road #4 PS	Wastewater Pump Station		X	Yes

Source: 2021 GIS

Identified Issues

After review of the Village of Depew’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Depew has identified the following vulnerabilities within their community:

- The Wastewater Pump Station is in the 0.2% annual chance flood event.
- The Warner Road #4 PS Wastewater Pump Station is in the 0.2% annual chance flood event.
- Several, hazardous material facilities and private schools are in the earthquake hazard area
- There are several hazardous material facilities in the Village of Depew that may be at risk of experiencing damages caused by expansive soils.
- The Fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.
- The Fire department building at 45 Meridian St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.



- The Fire department building at 2325 George Urban Blvd. is old and needs to be renovated and expanded onto in order to increase capacity and comply with state regulations.
- The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.18-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Implementation of a radio system for the Fire Department and Office of Emergency Management that is interoperable with neighboring agencies and Erie County. Project will involve the application for a UHF system as well as the replacement of equipment that is not narrowband capable (as per FCC requirements). This will be located in each fire station, vehicle, and the Village EOC.	All Hazards	Not Identified	Fire Department	In Progress	Cost	-	1. Discontinue 2. 3. Close to completion
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Debris cleanings in Cayuga and Scajaquada Creeks. Would be done periodically by the Dept. of Public Works to reduce the possibility of obstructions which could result in flooding.	Flooding	Not Identified	Public Works	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Remediation and restoration of Cayuga Creek stream bank and public infrastructure at Zurbrick Rd. Stream bank is currently eroding and poses a hazard to existing homes and property located close to the bank, in addition to a village road that has partially collapsed as a result.	Flooding	Not Identified	Public Works	In Progress	Cost	-	1. Discontinue 2. 3. Depew landfill under construction for land stabilization.
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Planning Board, Village Board	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Recently adopted update 2019, but discontinue, for future plans
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Village Board	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue Staff member indicated that it is not within the village's capacity to have someone get certified at this time.
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Depew has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

The village has worked on streambank restoration.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Depew participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.18-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X		X			X		X	
Expansive Soils		X		X			X		X	
Extreme Temperature		X							X	
Flood		X		X		X	X		X	
Hazardous Materials		X							X	
Landslide		X							X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X							X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.18-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Depew would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.18-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Depew -001	Earthquake mitigation	1,2	Earthquake	Problem: Several, hazardous material facilities and private schools are in the earthquake hazard area.	Yes	None	Within 6 months for outreach	Village of Depew	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Village Budget	High	EAP	PI
				Solution: The village public works shall work with the property owners and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes										
2022-Village of Depew -002	Expansive soil mitigation	1,2	Expansive Soils	Problem: There are several hazardous material facilities in the Village of Depew that may be at risk of experiencing damages caused by expansive soils.	Yes	None	Within 6 months for outreach	Village of Depew	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the hazardous material facilities from expansive soils	Village Budget	High	EAP	PI
				Solution: Work with the facility owner to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.										
2022-Village of Depew -003	Fire Department Expansion #1	1,2	All	Problem: The Fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land. Solution: The village will renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The Brewster St. facility shall undergo an assessment to understand the existing	Yes	Yes	3 years	OEM	\$1 million	Expanded OEM capacity	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding.	High	SIP	PP



Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				surrounding land that are not viable for development. Once suitable sites have been determined, the facility shall undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage.										
2022-Village of Depew -004	Fire Department Expansion #2	1,2	All	<p>Problem: The Fire department building at 45 Meridian St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.</p> <p>Solution: The village renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. Once suitable sites have been determined, the facility will undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage. The Meridian Street facility is confined by space so will only undergo a roof elevation to accommodate for the larger new vehicles.</p>	Yes	Yes	3 years	OEM	\$1 million	Expanded OEM capacity	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding.	High	SIP	PP
2022-Village of	Fire Department	1,2	All	<p>Problem: The Fire department building at 2325 George Urban Blvd. is old and needs to be renovated and expanded</p>	Yes	Yes	3 years	OEM	\$1 million	Expanded OEM capacity	HMGP, Municipal funding,	High	SIP	PP



Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Depew-005	Expansion #3			<p>onto in order to increase capacity and comply with state regulations.</p> <p>Solution: The village renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The new building shall be retrofitted to reduce any potential to flood damage. And finally, the George Urban facility shall be renovated and expanded to accommodate for new equipment, vehicles, shelter space, generator, and office space.</p>							BRIC, FEMA Fire Fighters Funding.			
2022-Village of Depew-006	BAS System Upgrade	1,2,4	Flood	<p>Problem: The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance.</p> <p>Solution: The village will acquire a new BAS system to be installed and used by Code Enforcement and the Department of Public Works. The system will be utilized between departments to facilitate work and determine specific areas of concern that might be in need of consultation or hazard mitigation measures.</p>	No	No	1 year	Village CEO	\$60,000	Facilitated work for flood mitigation and code compliance	HMGP, BRIC	High	LPR	PR



Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Depew -007	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Floodplain Administrator	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:





Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) – These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) – Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) – These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) – Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) – Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) – Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) – Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.18-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Depew-001	Earthquake Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Depew-002	Expansive Soil Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Depew-003	Fire Department Expansion #1	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Village of Depew-004	Fire Department Expansion #2	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-005	Fire Department Expansion #3	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-006	BAS System Upgrade	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.18.8 Action Worksheets

The following action worksheets have been developed by the Village of Depew to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Fire Department Expansion #1		
Project Number:	2022-Village of Depew-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The Brewster St. facility shall undergo an assessment to understand the existing surrounding land that are not viable for development. Once suitable sites have been determined, the facility shall undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Reduced flood danger and increased capacity
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$1 Million	Mitigation Action Type:	Structural and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding
Responsible Organization:	OEM	Local Planning Mechanisms to be Used in Implementation if any:	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Rebuild an entire new facility	High	Expensive and no space
	Retrofit and rebuild	High	Most feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Fire Department Expansion #1	
Project Number:	2022-Village of Depew-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective
Technical	1	The project is technically feasible
Political	1	No political opposition
Legal	1	No legal complications
Fiscal	-1	Need financial resources
Environmental	1	No environmental issues
Social	1	Positive social impact
Administrative	1	Have administrative support
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	The village OEM
Other Community Objectives	1	Various
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	BAS System Upgrade		
Project Number:	2022-Village of Depew-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will acquire a new BAS system to be installed and used by Code Enforcement and the Department of Public Works. The system will be utilized between departments to facilitate work and determine specific areas of concern that might be in need of consultation or hazard mitigation measures.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Facilitated work for flood mitigation and code compliance
Useful Life:	10 years	Goals Met:	1, 2, 4
Estimated Cost:	\$60,000	Mitigation Action Type:	Local Plans and Regulations
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, municipal budget, BRIC
Responsible Organization:	CEO	Local Planning Mechanisms to be Used in Implementation if any:	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Work with neighboring municipal systems	Low	Not as effective
	Purchase new BAS	Moderate	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	BAS System Upgrade	
Project Number:	2022-Village of Depew-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective
Technical	1	The project is technically feasible
Political	1	No political opposition
Legal	1	No legal complications
Fiscal	-1	Need financial resources
Environmental	1	No environmental issues
Social	1	Positive social impact
Administrative	1	Have administrative support
Multi-Hazard	0	Addresses single hazard
Timeline	1	Timeline is feasible
Agency Champion	1	The village CEO
Other Community Objectives	1	Various
Total	12	
Priority (High/Med/Low)	High	



9.19 Village of East Aurora

This section presents the jurisdictional annex for the Village of East Aurora. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of East Aurora’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.19.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of East Aurora’s hazard mitigation plan primary and alternate points of contact. The Village of East Aurora followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Clerk and Highway Department. The Village Administrator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.19-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Cathryn Thomas, Village Administrator Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: cathie.thomas@east-aurora.ny.us	Name/Title: Matthew Hoeh, Supt. Public Works Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: matt.hoeh@east-aurora.ny.us
NFIP Floodplain Administrator	
Name/Title: Elizabeth Cassidy, Floodplain Administrator Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: building@townofaurora.com	

9.19.2 Municipal Profile

The Village of East Aurora is located 25 miles from downtown Buffalo and is entirely contained within the Town of Aurora. The Buffalo Creek runs through the village. The village is 2.5 square miles in size. East Aurora was first settled by whites in 1804 and incorporated as a village in 1874. The village became home to U.S. President Millard Fillmore, the nation's 13th president, who built the Millard Fillmore House while a country lawyer. The village is the birthplace of the Roycroft Arts & Crafts movement and home to Fisher-Price Toys. During the late 1800s and early 1900s, East Aurora was a very popular place for horse races in New York State. The most famous track in East Aurora, the Jewett Farm track was an innovative, one-of-a-kind track at that time. (Town of Aurora/ Village of East Aurora 2012)



According to the U.S. Census, the 2010 population for the Village of East Aurora was 6,236. The estimated 2019 population was 6,184, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.0 percent of the population is 5 years of age or younger and 23.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.19.3 Jurisdictional Capability Assessment and Integration

The Village of East Aurora performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.19.3). The Village of East Aurora’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of East Aurora. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.19-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 108 Building Construction and Fire Prevention, Adopted 2020	Local	Code Enforcement
<i>Comment: This article shall provide for administration and enforcement of the New York State Uniform Fire Prevention and Building Code (Uniform Code) in the Village of East Aurora. This article is adopted pursuant to § 10 of Article 2 of the Municipal Home Rule Law. Except as otherwise provided within this article, state law, or within the Uniform Code, all premises regardless of use are subject to the provisions which follow.</i>					
Zoning Code	Yes	No	Chapter 285 of the East Aurora Village Code	Local	Code Enforcement
<i>Comment: The goals and intent of the zoning ordinance are as follows: 1) The design of off-street parking and loading spaces shall be graded so as to provide for the proper mitigation of stormwater and runoff. 2) The landscape plan shall delineate the location and description of all existing and proposed trees, shrubs, and plantings. To ensure proper protection of plantings and planted areas, landscape materials to be used on the site shall be identified in a planting schedule to be included on the landscape plan with the following information: Type; Common and botanical names; size; quantity; and pit or bed treatment. 3) The location of all existing and proposed topography features, including, but not limited to, site grading, open spaces, woodlands, watercourses, steep slopes, wetlands, floodplains, and watersheds.</i>					



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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	Yes	No	Chapter 227 Subdivision of Land Amended 2020	Local	Village Board
<i>Comment: The guidance and intent of the subdivision ordinance are as follows: 1) Where a subdivision is traversed by a watercourse, drainageway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of such watercourse and of such further width or construction, or both, as will be adequate for the purpose. Adequacy will be determined by the village board.</i>					
Stormwater Management Ordinance	Yes	Yes	Chapter 220 Stormwater Management, Updated 2019	Local	Stormwater Management Officer
<i>Comment: 1) Use of separate storm sewers and sanitary sewers is mandatory for all future construction in the village. Construction of combined sewers will not be allowed. 2) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.</i>					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment:					
Growth Management	No	-	-	-	-
Comment:					
Site Plan Review	Yes	No	Chapter 285 of the East Aurora Village Code	-	Village Board
<i>Comment: The intent of the site plan review process is to preserve and enhance the character of a neighborhood, achieve compatibility with adjacent development, mitigate potentially negative impacts on traffic, parking, drainage, and similar environmental concerns, improve the overall visual and aesthetic quality of the Village, and increase the capability of the Zoning Code to adapt to a variety of unique circumstances.</i>					
Environmental Protection Ordinance	Yes	No	LL7-2019 – Environmental Review Process.	Local	-
<i>Comment: The goals of the Environmental Protection Law are as follows: 1) Discourage the use of non-compostable plastic beverage straws and stirrers by banning their use by food service establishments using non-compostable plastic straws and stir sticks, which furthers the village's goal of reducing nonbiodegradable litter and protecting the village's important natural resources.</i>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 142 of the East Aurora Village Code	Local	Floodplain Administrator
<i>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i> <i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i> <i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i> <i>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i> <i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</i> <i>E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i> <i>F. Qualify and maintain for participation in the National Flood Insurance Program.</i>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 220 of the East Aurora Village Stormwater Code	Local	Village Engineer
<i>Comment: Stormwater carries sediment, oil, grease, nitrogen, phosphorus, and other pollutants into storm drains and then, untreated, into nearby waterbodies. MS4 regulated municipalities such as East Aurora must prepare and implement a stormwater management program to comply with state and federal stormwater regulations.</i>					
Emergency Management Ordinance	No	-	-	-	-





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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Climate Change Ordinance	No	-	-	-	-
Comment:					
Disaster Recovery Ordinance	No	-	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment:					
Other: Historic Preservation	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	Yes	Town and Village of East Aurora Regional Comprehensive Plan December 2004	Local	Village and Town of Aurora
Comment: <i>The intent of the Regional Comprehensive Plan is to provide a regional planning document for the communities to increase resilience and safety as well as the general well being of community members. The Plan will be individually adopted by each municipality, and it will be the responsibility of the municipalities to act upon and implement the items pertaining to their respective communities.</i>					
Capital Improvement Plan	No	-	-	-	-
Comment:					
Disaster Debris Management Plan	No	-	-	-	-
Comment:					
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No				
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	Yes	No	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora, 2012	Local	Village



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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>Comment: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control for all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems. 7) Prepare open space plans to identify and prioritize important environmental features such as wetlands, floodplains, steep slopes, and watersheds.</i></p>					
Shoreline Management Plan	No	-	-	-	-
Comment:					
Community Wildfire Protection Plan	No	-	-	-	-
Comment:					
Forest Management Plan	No	-	-	-	-
Comment:					
Transportation Plan	No	-	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment:					
Agriculture Plan	No	-	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Village/Town Emergency Operations Plan	Local and Federal	Village Emergency Management.
<p><i>Comment: East Aurora's Comprehensive Emergency Management Plan (CEMP) establishes policies and introduces a concept of operations spanning the direction and control of an emergency from initial monitoring through post-disaster response, recovery and mitigation.</i></p>					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment:					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of East Aurora to oversee and track development.

Table 9.19-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Village Board approval
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	There are several large parcels zoned commercial and residential available for development.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of East Aurora and their current responsibilities which contribute to hazard mitigation.

Table 9.19-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	<p>Planning Commission - The Village Planning Commission was originally established by village board resolution on February 22, 1926 pursuant to Article 12A of General Municipal Law.</p> <p>Members of the planning commission are appointed by the Mayor and Village Board; each of the members serve a staggered three term.</p> <p>Duties include the review of development plans, special permits and other special projects referred to the commission by the Village Board.</p> <p>A statute adopted by the New York State Legislature, effective January 1, 2007, requires that that members of planning boards and commissions and zoning board of appeals receive a minimum of four hours of training per year.</p>



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Zoning Board of Adjustments	Yes	<p>Zoning Board of Appeals - Generally, the primary purpose of the ZBA is to hold public hearings and render decisions on applications seeking relief from the Village Zoning Ordinance. Specific duties and permitted actions by the ZBA are defined under §285-68 of the East Aurora Village Code, as well as Village Law §7-712-B.</p> <p>Each of the five Zoning Board of Appeals members serves a five-year term (staggered). Appointments are made by the Mayor with the approval of the Village Board of Trustees. New York State Law requires that ZBA members receive a minimum of four hours of training per year. Training must be completed in order for members to be eligible for reappointment.</p>
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	<p>Planning Commission and new Environmental Stewardship Committee - The East Aurora Environmental Stewardship Advisory Committee is a citizen advisory group comprised of students, residents, businesses, and government representatives. Our mission is to act in good faith and integrity for the stewardship of our planet and all its inhabitants for today and for future generations. Through a thoughtful and respectful exchange of ideas, we will help educate residents and propose ideas and practices to Village leaders regarding sustainability and environmental matters to achieve zero waste and climate action.</p>
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The department conducts various work on local infrastructure related projects
Construction/Building/Code Enforcement Department	Yes	<p>The Building Department serves the Town of Aurora along with the Village of East Aurora. The department handles complaints for both zoning and property maintenance issues, conducts fire inspections, and enforces building and energy code regulations as well as zoning regulations of the municipalities. The department completes plan reviews and inspections on all permits to ensure compliance with the 2020 New York State codes, and the Town of Aurora and Village of East Aurora zoning ordinances. The daily goal of the department is to ensure that all ordinances handled by this office are enforced as fairly and efficiently as possible.</p>
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Some	Use of County mass notification system
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW
Mutual aid agreements	Yes	DPW
Other	Yes	<p>Tree Board and Historical Commission.- The board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development.</p> <p>This board also makes recommendations regarding proposed changes to the ordinance and has assisted in the development of a master development plan for the town.</p>



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		Zoning and development issues are handled through the Building and Code Enforcement Department.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Consulting Firm
Engineers or professionals trained in building or infrastructure construction practices	Yes	Consulting Firm
Planners or engineers with an understanding of natural hazards	Yes	Consulting Firm
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of East Aurora.

Table 9.19-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Very limited – seniors/handicapped
Capital improvements project funding	Limited
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of East Aurora.

Table 9.19-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	Yes	Village Administrator and Web Master and Consulting Firm
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Fire Hall outdoor signal; use of County mass notification system
Natural disaster/safety programs in place for schools	Yes	Each school has its own safety program
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of East Aurora.

Table 9.19-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	5	2011
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	2011
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,



future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.19-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak - NA
Cyber Attack	Moderate
Earthquake	Weak - NA
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.19.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Bill Kramer, Floodplain Administrator

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of East Aurora.

Table 9.19-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of East Aurora	27	37	184,988	6	13

Source: FEMA 2020a, FEMA 2020b

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village has flood prone areas along Tannery Brook from the east village line to Oakwood Avenue. There is no list of properties that have been damaged nor interested in flood mitigation. There are no RISK Map projects currently underway and the village has not made any substantial determinations. No properties have been mitigated, and the flood maps adequately address the flood prone areas in the village.

NFIP Compliance

The village relies on the Town of Aurora Code Enforcement office for floodplain management. The village does not have any certified floodplain managers (current NFIP Administrator not certified) nor does the municipality



have adequate resources to address climate change. The village would like to have occasional training in basics of floodplain management to keep staff informed and refreshed. The NFIP administrator conducts permit review and determines substantial mitigation improvement by reviewing plans and code information. The village does not have any barriers to running the NFIP program and does not have any outstanding violations. The village had a CAV on April 22, 2020. The flood damage prevention ordinance is Chapter 142 of the village code. Last amended September of 2019. The village program meets the program requirements of the NFIP and does not have any additional ordinances or programs that support the program. The village is not interested in participating in the CRS program at this time.

9.19.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Procedurally, East Aurora Police will ensure orderly traffic flow for any evacuation and may be supplemented by personnel from the village DPW and the East Aurora Fire Department. Main evacuation routes include Route 20A, Route 400, Route 16, Route 78, Route 241, and Route 33.

Sheltering

The Village of East Aurora has identified the following designated emergency shelters within the village.

Table 9.19-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	101 King Street	100	No	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of East Aurora has identified the following sites suitable for placing temporary housing units.

Table 9.19-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Parking lot/fields	1003 Center Street	50-100 spots	Parking lot/fields	All	None	Eauf School District
Park	Emery Road east of Underhill	20-30 spots	Park	All	None	Erie County
Baseball fields	300 Glead Avenue	50-100 spots	Baseball fields	All	None	Town of Aurora



Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Park	736 Warren Drive	50-100 spots	Park	All	None	Town of Aurora
Park	401 West Falls Road	50-100 spots	Park	All	None	Town of Aurora
Park	Buffalo Road west of village line;	50-100 spots	Park	All	None	NYS Office of Parks
Park	Knox Road west of village line; south side of road	50-100 spots	Park	Electric and Gas	None	NYS Office of Parks - managed by Town of Aurora
Field	Girard Avenue at Buffalo Road	50-100 spots	Field	All	None	Fisher Price Inc./Mattel
Parking lot/field	141 Girard Avenue	50-100 spots	Parking lot/field	All	None	EAUF School District

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The village would rely on County, State and Federal guidance, along with Red Cross and FEMA guidance, as to where to place temporary and/or permanent housing units in the event of an occurrence that would require these units. The village believes it should not designate a site that is not owned by the village i.e., school grounds, private property, county property or state property. Most of the large tracts of land that would/could accommodate the units are village, County or State parks. Water, gas, and electric are available at the road throughout most of the Village of East Aurora. Public sewer is available in limited areas that are already developed with residential housing. The location of private septic systems is a function of the Erie County Health Department.

Table 9.19-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Field	Girard Avenue at Buffalo Road	50-100 spots	Field	All	None

9.19.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.19-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.19-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	3	0	1	0	1	0	1	0	0	0
Multi-Family	0	0		0	0	0		0	1	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0		0	1	0		0		0
Total Permits Issued	0	0	3	0	1	0	2	0	2	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Aurora Mills	Res	85		10 Aurora Mills Dr, Aurora, NY 14052		None		50% complete				
Reed Hill	Res	33		18 Reed Hill Drive		None		50% complete				
Hamlin Farms	Res.	8		37 Hamlin Ave.		None		75% complete				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.19.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of East Aurora’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of East Aurora has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.19-1. Village of East Aurora Hazard Area Extent and Location Map 1

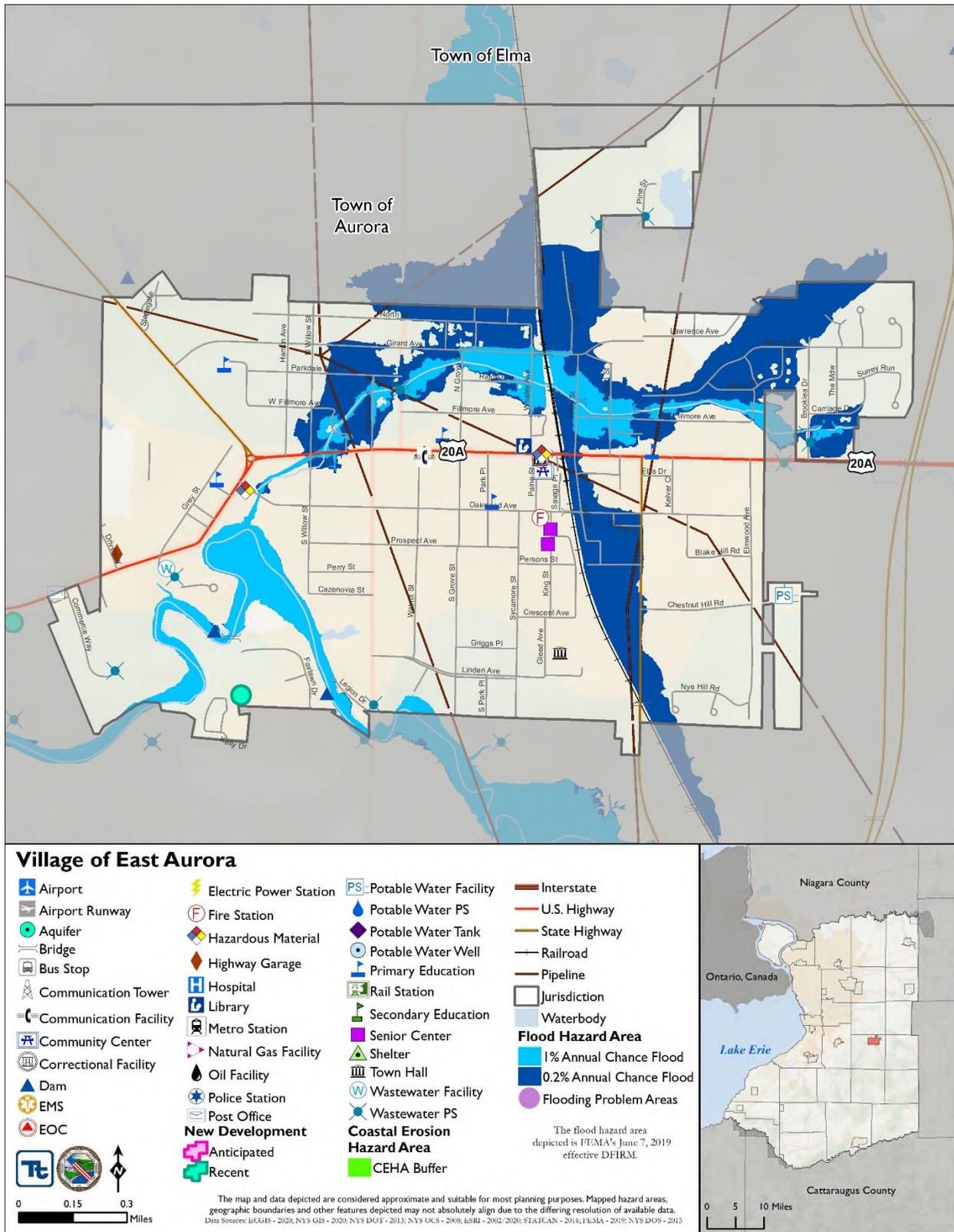




Figure 9.19-2. Village of East Aurora Hazard Area Extent and Location Map 2

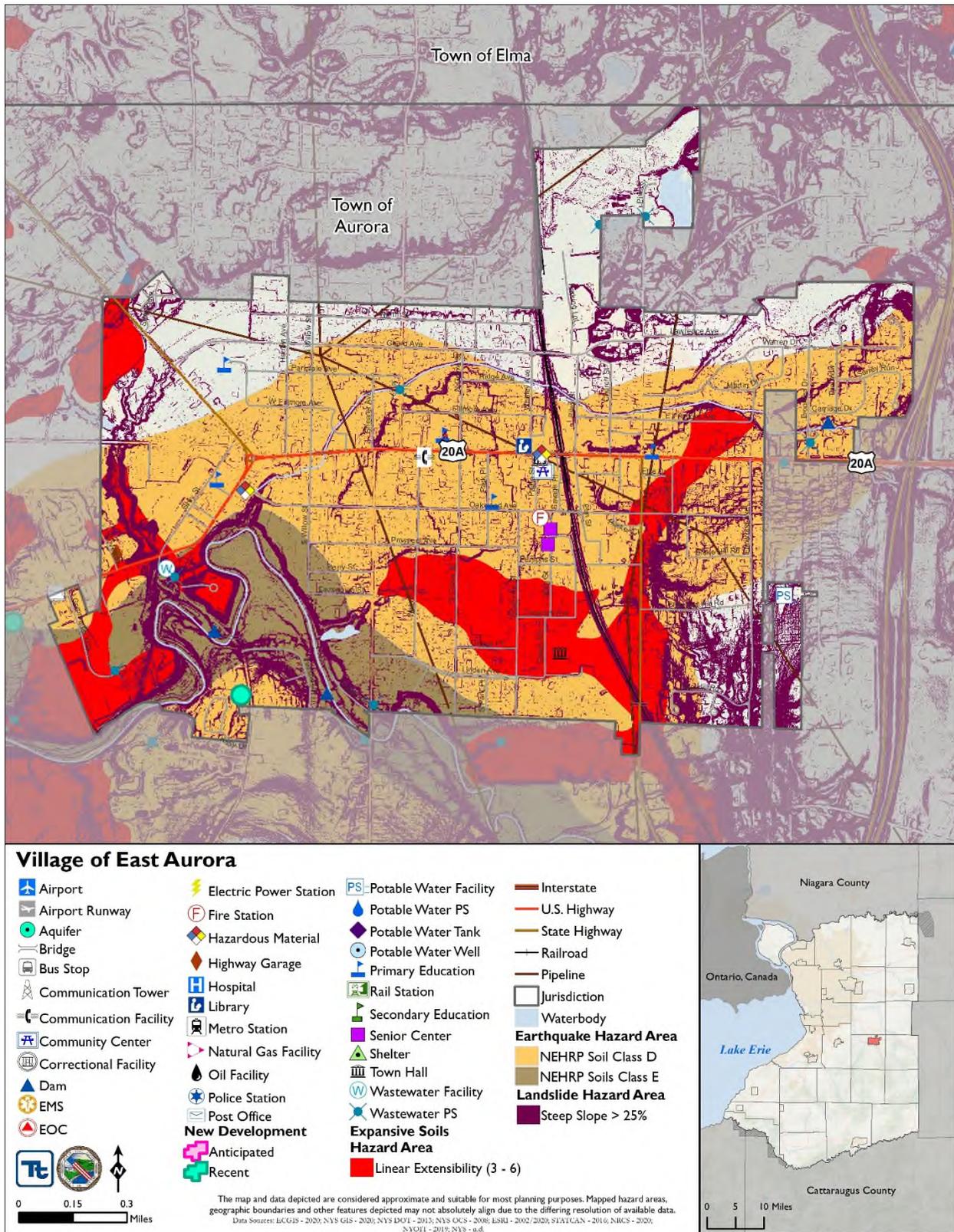
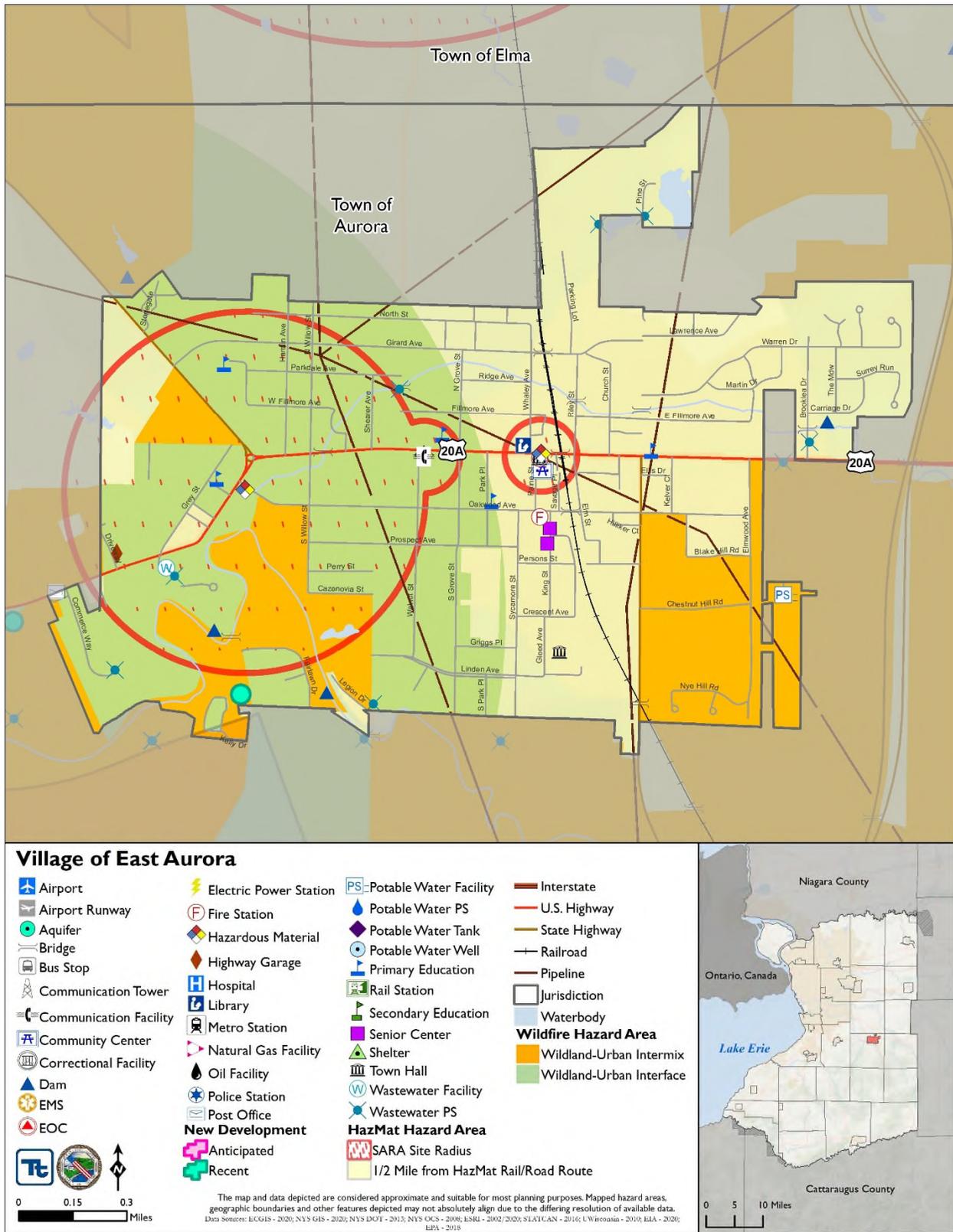




Figure 9.19-3. Village of East Aurora Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of East Aurora’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.19-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.19-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the village did not report impacts.
August 11-15, 2015	Flash Flood	Yes	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the village did not report impacts.
October 28-29, 2015	High Wind	Yes	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the village did not report impacts.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 6, 2015	Thunderstorm Wind	Yes	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the village did not report impacts.
November 12, 2015	High Wind	Yes	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the village did not report impacts.
November 18, 2015	High Wind	Yes	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the village did not report impacts.
January 11, 2017	High Wind	Yes	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The	Yes – approx.. \$400 DPW labor costs



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	Yes	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Yes – approx. \$1,400 DPW labor costs
March 13, 2017	Winter Storm	Yes	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Yes – approx. \$2,800 DPW labor costs
July 20, 2017	Tornado	Yes	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the village did not report impacts.
August 4, 2017	Thunderstorm Wind	Yes	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the village did not report impacts.
December 10-15, 2017	Lake-effect Snow	Yes	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was	Yes – approx. \$17,000 DPW labor costs



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	
December 24-29, 2017	Lake-effect Snow	Yes	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	The village included approximately \$6,500 in DPW labor costs.
January 2, 2018	Blizzard	Yes	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	The village included approximately \$1,200 in DPW labor costs.
October 6, 2018	Lightning	Yes	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the village did not report impacts.
February 24, 2019	High Wind	Yes	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the village did not report impacts.
February 24, 2019	Lakeshore Flooding	Yes	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the village did not report impacts.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the	The event resulted in a need for brush chipping.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	The event resulted in a need for brush chipping.
November 27, 2019	Lakeshore Flooding	Yes	<p>Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north.</p> <p>Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.</p>	Although the County was impacted, the village did not report impacts.
January 12, 2020	Lakeshore Flooding	Yes	<p>Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.</p>	Although the County was impacted, the village did not report impacts.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 18, 2020	Lakeshore Flooding	Yes	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the village did not report impacts.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of East Aurora’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of East Aurora. The Village of East Aurora has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- Earthquakes have historically not been an issue for the community and will be re ranked from high to low.

Table 9.19-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low





Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.19-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Depew & Lancaster Co Dam	Dam	X	X	007

Source: 2020 GIS

Identified Issues

After review of the Village of East Aurora’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of East Aurora has identified the following vulnerabilities within their community:

- Tannery Brook has had continuous flooding issues.
- Stormwater rightsizing is needed across village.
- The village critical facilities lack backup power.
- The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room.
- The Village of East Aurora has a tree inventory that was developed in the early 2000s to manage the existing tree maintenance within the village. While the inventory is still used by the village DPW, it is outdated as trees have been cut and new ones have been planted since the last inventory and plan update was conducted. Additionally, because of the age of the plan, the information in the document is largely irrelevant and not as useful for the village when conducting annual tree maintenance.
- The village has continued issues around debris clogging stormwater infrastructure, causing subsequent flooding and drainage issues.
- The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure.



- The village comprehensive plan is outdated and therefore no longer useful to the village planning activities. With increasing population overall, however, the village would need to develop an economic development and climate change-related strategy to guarantee the further expansion and improvement of municipal services and life in general.
- The village has recently passed the resolution to become a climate smart community and would like to become a bronze or silver climate smart community.
- The Depew/ Lancaster Dam is located in the 100-year floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.19.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.19-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
1	Nursing Home Vulnerability: Revise Emergency Response Plan	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Complete	Low	Low	<ol style="list-style-type: none"> Discontinue Complete
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Flood and other hazard mitigation	
2	Nursing Home Vulnerability: Mitigate flooding potential along Tannery Brook	Flooding	Not Identified	Emergency Management	In Progress	-	-	<ol style="list-style-type: none"> Discontinue Currently in progress and will be complete before plan is over.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Nursing Home Vulnerability: Conduct evacuation exercise	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Ongoing Capability	-	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Flood Control: Clearing of accumulating debris along Tannery Brook from Pine St to Whaley Ave	Flooding	Not Identified	DPW/Highway	Complete	High	High	<ol style="list-style-type: none"> Discontinue Complete
						Level of Protection	High	
						Damages Avoided; Evidence of Success	No flooding	
5	Flood Control: Surveil and, as necessary, take immediate action clear the Main St grates for Tannery Brook underpass to prevent destructive erosion of Main St and to prevent inundation flooding of large nursing home.	Flooding	Not Identified	DPW/Highway	Complete	High	High	<ol style="list-style-type: none"> Discontinue Complete
						Level of Protection	High	
						Damages Avoided; Evidence of Success	No flooding	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
6	Flood Control: Enlarge and reinforce culvert on Benning Road	Flooding	Not Identified	DPW/Highway	No Progress	-	-	<ol style="list-style-type: none"> Discontinue Not for East Aurora Village Plan
7	School Vulnerability: Conduct an all-hazards vulnerability study of the eight primary-secondary schools and the one college in accordance with the Federal Readiness and Emergency Management in Schools (REMS)	All Hazards	Not Identified	Emergency Management	No Progress	-	-	<ol style="list-style-type: none"> Discontinue Not under village jurisdiction
8	School Vulnerability: Prepare mitigation recommendations for all schools	All Hazards	Not Identified	Emergency Management	No Progress	-	-	<ol style="list-style-type: none"> Discontinue Not under village jurisdiction
9	Potable Water Infrastructure Protection Plan: Conduct a specific all-hazards vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	Complete	High	High	<ol style="list-style-type: none"> Discontinue Complete
10	Potable Water Infrastructure Protection Plan: Prepare mitigation recommendations from vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	Complete	Moderate	High	<ol style="list-style-type: none"> Discontinue Recommendations have been done
11	Potable Water Infrastructure	Water Supply Contamination	Not Identified	DPW/Highway	No Progress	-	-	<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Protection Plan: Obtain funding for mitigation actions					Level of Protection	-	2. 3. N/A - County responsibility
						Damages Avoided; Evidence of Success	-	
12	Special Needs Population: Utilizing three area CERT/Auxiliary teams analyze the population of the Township to determine all those who will require special services during a major emergency	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue 2. 3. Not village responsibility
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
13	Special Needs Populations: Prepare a modern database of the special needs population for input to the Township's GIS	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue 2. 3. Not village responsibility
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Not Identified	OEM	Complete	Cost	Low	1. Discontinue 2. 3. Complete - Local Law Adopted/Village Code Section Chapter 142
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Compliance with State	
15	Designate/install a specific person to be your municipality's Floodplain Administrator.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue 2. 3. Complete. Appointment made
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Compliance with State	
16		Flood			No Progress	Cost	-	1. Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Level of Protection	Damages Avoided; Evidence of Success	
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.		Not Identified	Code Enforcement Officer		Level of Protection	-	<ol style="list-style-type: none"> Not feasible
						Damages Avoided; Evidence of Success	-	
17	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	<ol style="list-style-type: none"> Discontinue Complete. Local Law Adopted/Village Code Section Chapter 142
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Compliance with state	
18	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	<ol style="list-style-type: none"> Discontinue Complete
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Compliance with State	
19	Very low financial or political incentive to take action given the current fiscal climate	Not Identified	Local Fiscal Climate	Code Enforcement Officer	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue No longer relevant
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of East Aurora has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The village has completed the Oakwood project to fix drainage issues along Oakwood Road to mitigate flooding.
- The village has spent approximately \$45,000 to mitigate the spread of Ash Borer as well as Japanese knotweed within the village and the surrounding town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of East Aurora participated in a mitigation action workshop in and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.19-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X	X		X			
Cyber Attack	X			X	X		X			
Earthquake	X			X	X		X			
Expansive Soils	X			X	X		X			
Extreme Temperature	X			X	X		X			
Flood	X	X	X	X	X	X	X	X		
Hazardous Materials	X			X	X		X			
Landslide	X			X	X		X			
Pandemic	X			X	X		X			
Severe Storm	X	X		X	X	X	X	X		
Severe Winter Storm	X	X		X	X	X	X	X		
Utility Failure	X	X		X	X	X	X			
Wildfire	X			X	X		X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.19-19 summarizes the comprehensive range of specific mitigation initiatives the Village of East Aurora would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.19-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -001	Village Generator Installation	1, 2	Flood Severe Storm Severe Winter Storm Utility Failure	<p>Problem: -The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room.</p> <p>Solution: Conduct a structural assessment of municipal building to determine whether the generator can be located elsewhere besides outside. Potential locations proposed by the village are in the basement or on the roof. Once location is determined, the village or town engineer would need to determine the remaining backup power needed for the municipal office. Given the municipality purchased 2 new generators that power different parts of the building, the third generator would need to power the remaining office space during a severe storm event. All generators shall be installed after the assessment of the buildings are complete by the municipal engineer, which will be over multiple years once funding secured.</p>	Yes	No	2 years	Town of Aurora DPW/ Village of East Aurora Engineer	\$100,000	Continued operation	HMGP, Community Facilities Grant Program, Municipal budget	High	SIP	ES



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -002	Tree Inventory/ Plan Update	1, 3, 4	Severe Storms, Severe Winter Storms	<p>Problem: The Village of East Aurora has a tree inventory that was developed in the early 2000s to manage the existing tree maintenance within the village. While the inventory is still used by the village DPW, it is outdated as trees have been cut and new ones have been planted since the last inventory and plan update was conducted. Additionally, because of the age of the plan, the information in the document is largely irrelevant and not as useful for the village when conducting annual tree maintenance.</p> <p>Solution: Update the existing plan and inventory to include the most recent trees within the village. The village DPW shall take charge of implementing this project with oversight from the village planning committee. Additional assistance can be provided by the Soil and Water conservation District which could provide guidance as to what are the most up to date strategies in regard to tree maintenance. Additionally, the village would like to purchase a 75-foot-long tree maintenance truck to increase capacity around clean up after severe storms.</p>	No	No	1 year	Village DPW and SWCD	\$50k + \$100k for truck	Reduced property damage from fallen trees	Tree Cities USA, Environmental Protection & Improvement Grants, Municipal Budget	High	LP R, NS P	NR



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -003	Purchase Vacuum Truck	1, 2	Flood, Severe Storms	<p>Problem: The village has continued issues around debris clogging stormwater infrastructure, causing subsequent flooding and drainage issues.</p> <p>Solution: The village would like to purchase a vacuum truck to facilitate the response to residents who are having stormwater drainage issues. By having this truck, the village would not have to conduct dredging (which takes a lot of time) and could respond quickly to residents complaining about their clogged stormwater infrastructure.</p>	No	No	1 year	Village DPW	\$150k	High	municipal budget	High	SIP	PR



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -004	Stormwater drainage infrastructure rightsizing.	2,3,4	Flood	<p>Problem: The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure.</p> <p>Solution: The village shall conduct a multi-phase project. The first phase would be to conduct a professional engineering study that evaluates the existing undersized stormwater infrastructure in the village and provide guidance and strategy as to how the municipality could increase overall capacity across the board. The study would need to be specific and provide specific, detailed location-based evaluations as to which pieces of infrastructure need to be upgraded. The second phase of the project would then for the village to apply for funding to implement the proposals given in the assessment study. This would likely be a multi-year/ multi-million-dollar project but would prepare the village to increase overall resilience in the long run.</p>	No	No	5 years	Village DPW, Engineer, Village Board	High	High	BRIC, HMGP, FMA, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG), Climate Smart Communities Grant	High	SIP	SP



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -005	Update village comprehensive plan	3, 4	All	<p>Problem: The village comprehensive plan is outdated and therefore no longer useful to the village planning activities. With increasing population overall, however, the village would need to develop an economic development and climate change-related strategy to guarantee the further expansion and improvement of municipal services and life in general.</p> <p>Solution: The village would like to hire a consulting firm to conduct a comprehensive plan for the community. This would require applying for grant funding and developing strategy for future economic development and climate adaptation strategies.</p>	No	No	Long	Village Board and Planning	\$150k	New and improved comprehensive plan	NYS Climate Smart Communities	High	LP R	PR
2022-V. East Aurora -006	Becoming a bronze climate Smart community	All	All	<p>Problem: The village has recently passed the resolution to become a climate smart community and would like to become a bronze or silver climate smart community.</p> <p>Solution: The village would like to execute actions suggested by the CSC program that range from greenhouse gas reduction to increasing climate resilience and preparedness. The village would need supplemental funding to execute some of these projects. To begin, the village would need to contact the NYSERDA regional coordinator who could provide guidance as to how to municipality can work towards becoming a Bronze certified climate smart community.</p>	No	No	3 years	Village Board, NYSERDA	High	High	Climate Smart Communities Program, Clean Energy Communities Program, HMA	Medium	EA P	PI



Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -007	Dam Retrofitting	1, 2	Flood	<p>Problem: The Depew/ Lancaster Dam is located in the 100-year floodplain.</p> <p>Solution: While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Village DPW shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA guidelines to withstand severe storms. If not, the village will apply for mitigation funding, accordingly.</p>	Yes 💧	No	2 years	Village DPW	Moderate	High	HMGP	High	SIP	SP
2022-V. East Aurora -008	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV Community Assistance Visit
 CRS Community Rating System
 DPW Department of Public Works
 EHP Environmental Planning and Historic Preservation
 FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:





FPA Floodplain Administrator
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.19-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. East Aurora-001	Village Generator Installation	1	1	1	1	1	0	-1	0	1	0	1	1	1	1	9	High
2022-V. East Aurora-002	Tree Inventory/ Plan Update	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-V. East Aurora-003	Purchase Vacuum Truck	1	1	1	1	1	1	0	1	1	0	1	0	1	1	11	High
2022-V. East Aurora-004	Stormwater drainage infrastructure rightsizing.	1	1	1	0	1	1	-1	1	1	1	0	0	1	1	9	High
2022-V. East Aurora-005	Update village comprehensive plan	1	1	1	0	0	1	0	1	1	0	1	1	1	1	10	High
2022-V. East Aurora-006	Becoming a bronze climate Smart community	1	1	1	0	0	0	0	1	1	0	1	0	1	1	8	Medium
2022-V. East Aurora-007	Dam Retrofitting	1	1	1	1	1	1	-1	1	1	0	0	1	1	1	10	High
2022-V. East Aurora-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.19.9 Action Worksheets

The following action worksheets have been developed by the Village of East Aurora to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Village Generator Installation		
Project Number:	2022-V. East Aurora-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct a structural assessment of municipal building to determine whether the generator can be located elsewhere besides outside. Potential locations proposed by the village are in the basement or on the roof. Once location is determined, the village or town engineer would need to determine the remaining backup power needed for the municipal office. Given the municipality purchased 2 new generators that power different parts of the building, the third generator would need to power the remaining office space during a severe storm event. All generators shall be installed after the assessment of the buildings are complete by the municipal engineer, which will be over multiple years as funding is secured.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$100,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding received
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP
Responsible Organization:	Town of Aurora DPW/ Village of East Aurora Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management.
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best Option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Village Generator Installation	
Project Number:	2022-V. East Aurora-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	0	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	0	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Stormwater drainage infrastructure rightsizing.		
Project Number:	2022-V. East Aurora-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure.		
Action or Project Intended for Implementation			
Description of the Solution:	The village shall conduct a multi-phase project. The first phase would be to conduct a professional engineering study that evaluates the existing undersized stormwater infrastructure in the village and provide guidance and strategy as to how the municipality could increase overall capacity across the board. The study would need to be specific and provide specific, detailed location-based evaluations as to which pieces of infrastructure need to be upgraded. The second phase of the project would then for the village to apply for funding to implement the proposals given in the assessment study. This would likely be a multi-year/ multi-million-dollar project but would prepare the village to increase overall resilience in the long run.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Flood Vulnerability Reduction
Useful Life:	25 years	Goals Met:	1, 3, 4
Estimated Cost:	High	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding received
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	BRIC, HMGP, FMA, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG), Climate Smart Communities Grant
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Develop a new stormwater system	High	Extremely high cost
	Stormwater project	High	Less costly – best alternative
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Stormwater drainage infrastructure rightsizing.	
Project Number:	2022-V. East Aurora-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project will increase capacity to protect life
Property Protection	1	This project helps protect life
Cost-Effectiveness	1	This is the most cost-effective option in the long run
Technical	0	The technical aspects have not been fully realized
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	The town does not have adequate resources to address this issue
Environmental	1	This has a positive impact on the environment
Social	1	This has a positive impact on the community
Administrative	1	There are no administrative issues
Multi-Hazard	0	This addresses concerns to multiple hazards
Timeline	0	Timeline is not yet solidified
Agency Champion	1	The DPW
Other Community Objectives	1	Reduces exposure to rain and loss of salt
Total	9	
Priority (High/Med/Low)	High	



9.20 Town of Eden

This section presents the jurisdictional annex for the Town of Eden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Eden’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.20.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Eden’s hazard mitigation plan primary and alternate points of contact. The Town of Eden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Emergency Management, Highway Department, and Code Enforcement. The Town Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.20-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Brian Burgstahler, Emergency Manager Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-525-2654 Email: emergencyservices@edenny.gov	Name/Title:Melissa Hartman, Town Supervisor Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-992-3408 ext. 1 Email: mhartman@edenny.gov
NFIP Floodplain Administrator	
Name/Title: David Rice, Code Enforcement Official Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-992-3408 ext. 2	
Additional Contributors	
Name/Title: Ron Maggs, Highway Supervisor Method of Participation: Provided data and information	

9.20.2 Municipal Profile

The Town of Eden is one of the county’s "Southtowns", lying in the south-central part of the county. The Town of Eden is four square miles in area and was formed from a larger original town called Willink. Later, Eden surrendered territory to form the towns of Evans and Hamburg and is 40 square miles in size. The Town is bordered on the north by the Town of Hamburg, on the west by the Town of Evans, on the south by the Town of North Collins and on the east by the Town of Boston (Town of Eden website, accessed 2020). US Route 62 and NYS Route 75 traverse the town.



Deacon Samuel Tubbs was the first white settler to the town in 1808 (Town of Eden website, accessed 2020). Eden surrendered land was named "Hill's Corners" until 1822 at which point the first post office was established and the name changed to Eden. The productive farmland and the Eighteen Mile Creek made the area attractive for settlement. Through the 1800s Eden's three milling communities at Eden Valley, Toad Hollow and Clarksburg grew steadily. The expansion of rail lines served the town's farming and industrial business community (Town of Eden Comprehensive Plan, 2015).

According to the U.S. Census, the 2010 population for the Town of Eden was 7,688. The estimated 2019 population was 7,631, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.6 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.20.3 Jurisdictional Capability Assessment and Integration

The Town of Eden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.20.3). The Town of Eden's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Eden. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.20-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	110 Building Construction	Local	Building Dept
Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	225 Zoning	Local	Building Dept
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan" ¹¹ or "in accordance with a comprehensive plan." ¹² Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan" requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level					
Subdivision Ordinance	Yes	No	184 Subdivision of Land	Local	Building Dept/Planning Board
Comment: Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified in a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).					
Stormwater Management Ordinance	Yes	Yes	Western NY Storm water Coalition	Local	Highway Department
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department					
Post-Disaster Recovery Ordinance	Yes	Yes	Disaster Emergency Plan 4/24/2012	Local	Supervisor
Comment: It is the objective of this guideline to give the residents in the Town of Eden a central location of information to assist them in preparing for different types of Disasters that may occur.					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Not Indicated	Local	Not Indicated
Comment: In New York State, virtually all land use regulation, which is the primarily tool for Smart Growth, takes place at the municipal level (i.e., in a city, village or town government). Land use planning is also primarily a municipal function. While State law provides for certain planning functions at the county or regional level, these mechanisms are largely advisory, whereas municipal planning is directly related to land use regulation.					
Site Plan Review	Yes	No		Local	Planning Board
Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc. <ul style="list-style-type: none"> The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations. 					
Environmental Protection Ordinance	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 114, Flood Damage Prevention, adopted 4/10/2019	Local	Code Enforcement
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. <ul style="list-style-type: none"> It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation. 					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Western NY Stormwater Coalition	Local	Code Enforcement
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	Yes	Yes	See disaster recovery above	Local	Highway Department
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.					
Climate Change Ordinance	No	-	-	-	-
Comment: The environmental conservation law was amended by adding ARTICLE 75 - CLIMATE CHANGE under Assembly Bill A. 8429 and Senate Bill S. 6599, dated June 18, 2019.					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Cultivate Eden 2018	Local	Supervisors Office
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	-	-	-	-
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: Based on past experience with disaster management, it is apparent that local municipalities that have an Emergency Debris Management Plan in place are able to manage their emergency response in a more comprehensive and coordinated manner and are able to address recovery and clean up faster and more efficiently than those without plans. With that in mind, the Department developed an Emergency Management Plan Tool Kit. The NYSDEC (Department) strongly urges all municipal officials to conduct pre-disaster planning and prepare emergency debris management plans. The Department recommends that these plans should be reviewed and updated annually.					
Floodplain or Watershed Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	November 2010	Local	Western New York Stormwater Coalition/ Town of Eden Highway
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses.					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: Laws related to habit protection and biodiversity control the use and application of certain pesticides, demolition projects and clearing of vegetated areas. Identifying certain critical habitat areas could be included in the Comprehensive Plan. Critical Habitat is a part of certain State and Federal Permitting. The State had a Wildlife Action Plan requires to maintain eligibility for the State Wildlife Grant Program.					
Economic Development Plan	No	-	-	-	-
Comment: An Economic Development Plan may be prepared by a local government and be included or separate from the Comprehensive plan.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones.					
Shoreline Management Plan	N/A	-	-	-	-
Comment: Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: Under the federal Farm Bill, every 10 years each state must submit a State Forest Action Plan to the U.S. Forest Service. The Plan must be approved by the State Forester, who in New York is the director of DEC's Division of Lands and Forests. The next update of the Plan must be submitted to the Forest Service by June 2020.					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Agricultural and Farmland Protection Plan 2008	Local	Supervisors Office
Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	No	Erie County CEMP	County	Erie County OEM
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: HIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the State's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment: According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations.					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Eden to oversee and track development.

Table 9.20-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	This is tracked with town building permits
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	This is tracked with town building permits
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Eden and their current responsibilities which contribute to hazard mitigation.



Table 9.20-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. Follow Master Plan with improvements in the town
Zoning Board of Adjustments	Yes	Zoning Board of Adjustments. Adjust the Zoning Code if needed
Planning Department	Yes	Building Department and Planning consultant
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Conservation Board
Open Space Board/Committee	Yes	Conservation Board
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Superintendent
Construction/Building/Code Enforcement Department	Yes	Building Construction and Code Enforcement
Emergency Management/Public Safety Department	Yes	Emergency Coordinator
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red and Outdoor warning signals
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department and Off-road Drainage Committee
Mutual aid agreements	Yes	State, County, multiple surrounding towns
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering and planning consultants
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering and planning consultants
Planners or engineers with an understanding of natural hazards	Yes	Engineering and planning consultants
Staff with expertise or training in benefit/cost analysis	Yes	County
Professionals trained in conducting damage assessments	Yes	Highway and Consultants
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Highway and GIS Consultant
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	EM Office
Grant writer(s)	Yes	Consultants
Resilience Officer	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Eden.

Table 9.20-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Unknown
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Eden.

Table 9.20-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor
Personnel skilled or trained in website development	Yes	Consultant
Hazard mitigation information available on your website	Yes	Highway Superintendent
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Emergency Management team
Other programs already in place that could be used to communicate hazard-related information	Yes	Emergency Management



Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	Eden Central Schools
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Eden.

Table 9.20-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.20-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

*Strong Capacity exists and is in use



Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.20.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Rice, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Eden.

Table 9.20-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Eden	4	6	\$35,311	2	0

Source: FEMA, 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

There are no areas prone to flooding or floodplains within the Town. Therefore, the town does not maintain a list of property owners that are interested in flood mitigation projects, nor are there any RiskMAP projects currently underway. The flood hazard maps for the Town adequately address the flood risk. There have been zero homes that have previously been mitigated against flood damages. The Code Enforcement Officer makes Substantial Damage determinations based on if the repair cost of a home is 50 percent or more of the market value, excluding land.

NFIP Compliance

The Town of Eden Code Enforcement Officer is responsible for floodplain management within the Town. There are no certified floodplain managers within the Town, but floodplain management staff are open to any training or assistance available.

Chapter 114 (Local Law 2-2019) of the Town of Eden Code refers to the Flood Damage Prevention Ordinance, which meets minimum requirements. The FDPO was most recently updated on April 10, 2019. The Town Planning Board and ZBA review floodplain areas in order to supports floodplain management and discourage development within flood-prone areas.

There are no outstanding NFIP compliance issues within the Town.

9.20.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Eden has identified the following routes and procedures to evacuate residents prior to and during an event.

- US 20, 62 & 75, Northbound and Southbound
- East Eden Road, Northbound and Southbound
- East and West Church Streets, Eastbound and Westbound
- Shadagee Road, Eastbound and Westbound

Sheltering

The Town of Eden has identified the following designated emergency shelters within the Town.

Table 9.20-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Eden JR/SR HS	3000 Schoolview Rd Eden NY 14057	250	Yes	Yes	Yes	None	None
Eden Town Hall	2795 East Church Street Eden NY 14057	40	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Eden has identified the following sites suitable for placing temporary housing units.

Table 9.20-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Eden American Legion	2912 Legion Drive Eden NY 14057	40	FEMA Trailers	Fully outfitted for all utilities	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Eden has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.20-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Evergreen Acres	Beverly Drive, Eden NY 14057	40	Empty lots staked out for housing	None. Utilities would have to be installed	Yes
Pleasant Ave and Weller Dr subdivision	Pleasant Ave and Weller Dr, Eden NY 14057	20	Empty lots staked out for housing	None. Utilities would have to be installed	Yes

9.20.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.20-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.20-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	10	-	7	-	9	-	8	-	10	-	4	-
Multi-Family	0	-	0	-	3	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	3	-	1	-	5	-	1	-	0	-	3	-
Total Permits Issued	13	-	8	-	17	-	9	-	10	-	7	-
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
Timac Agro USA Inc.	Commercial	1		8639 Depot St	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area		Commercial fertilizer plant/ Completed					
Kelly’s Place	Residential	18		8121 N Main St	None		1) 8 unit apartment, 2) 5 unit town houses/ Completed					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Eden Solar	Commercial	1		7501 Sisson Hgwy	½ Mile Buffer from HazMat Roadways, Expansive Soils Hazard Area		5.16 megawatt solar farm/planning					

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.





9.20.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Eden's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Eden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.20-1. Town of Eden Hazard Area Extent and Location Map 1

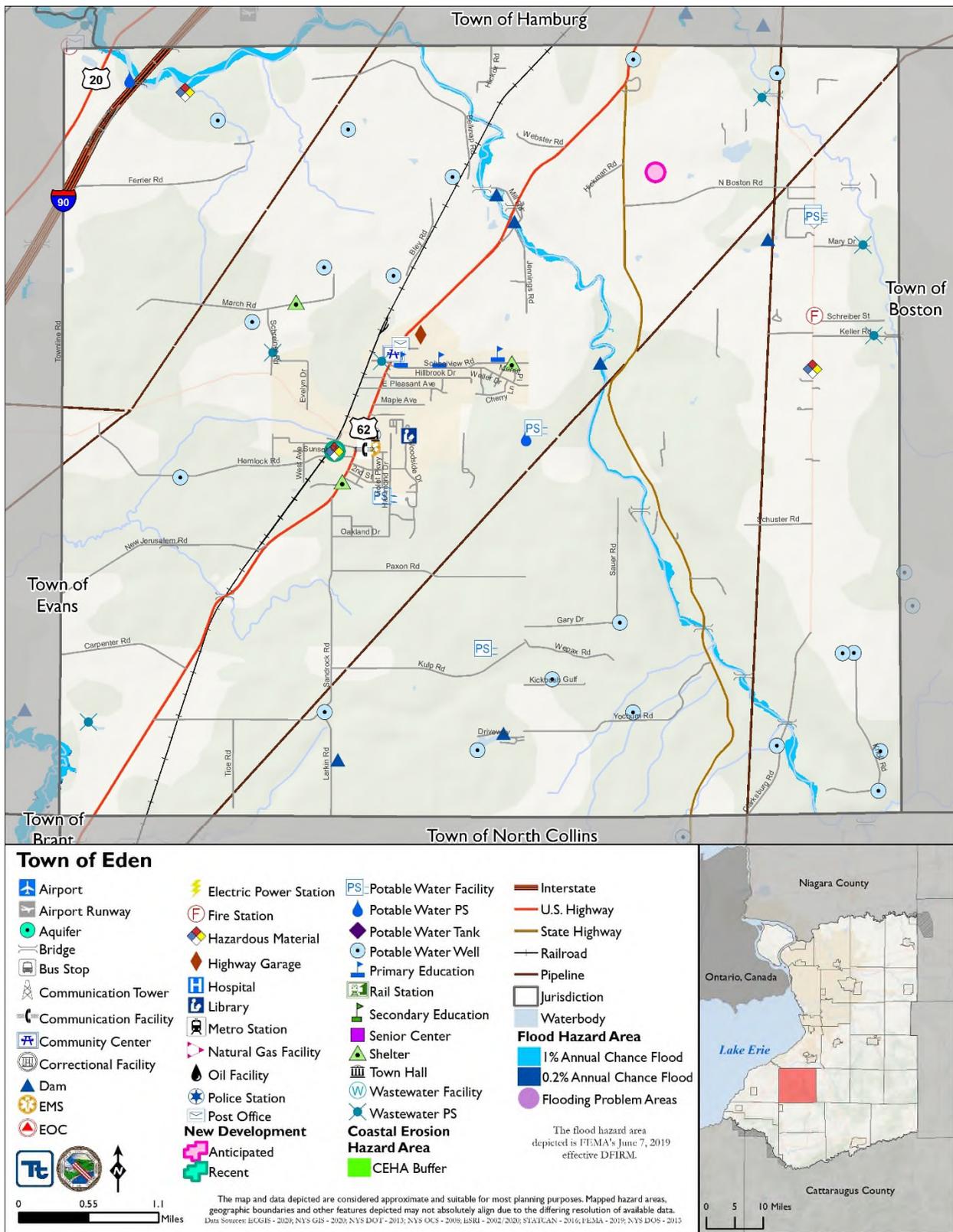




Figure 9.20-2. Town of Eden Hazard Area Extent and Location Map 2

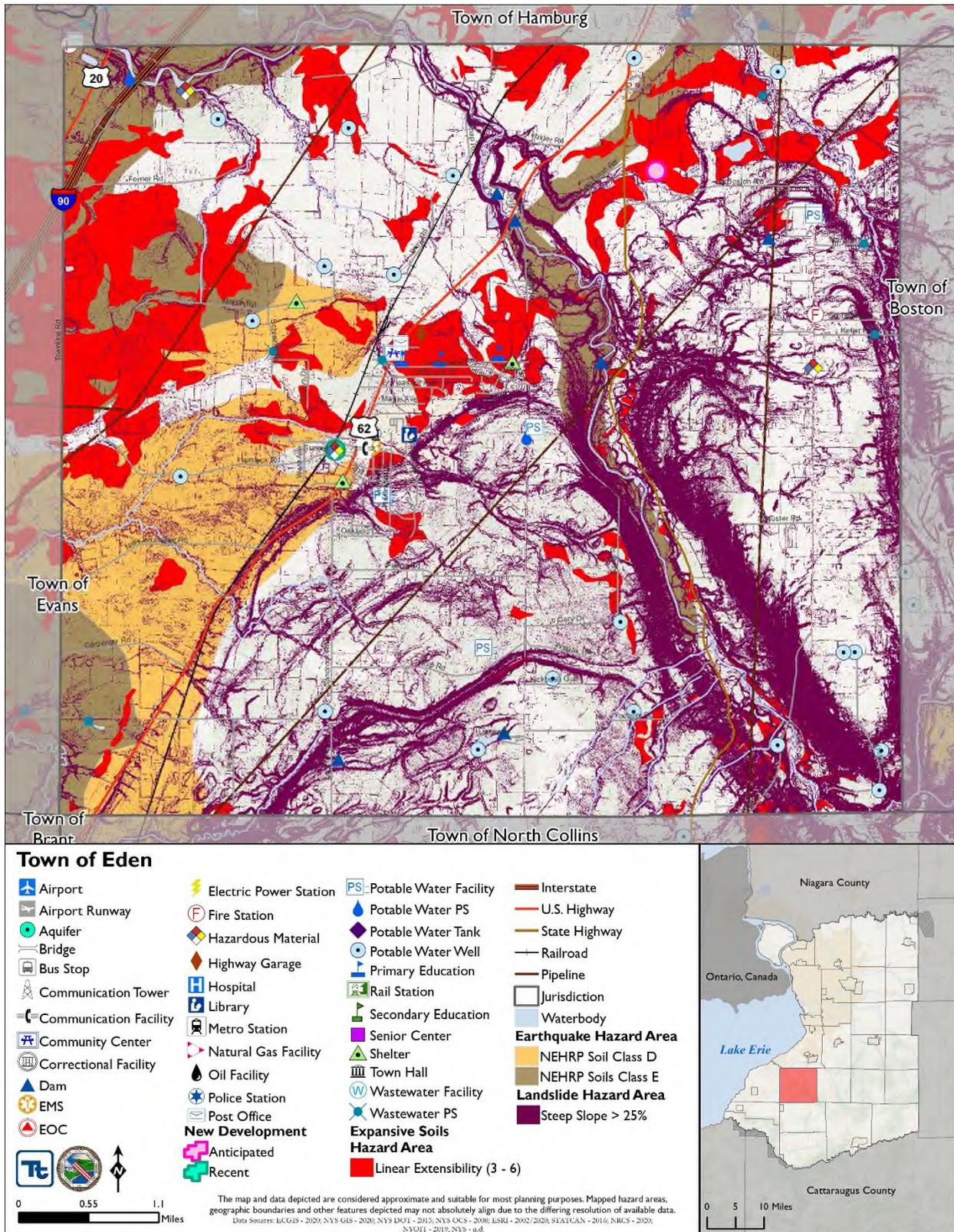
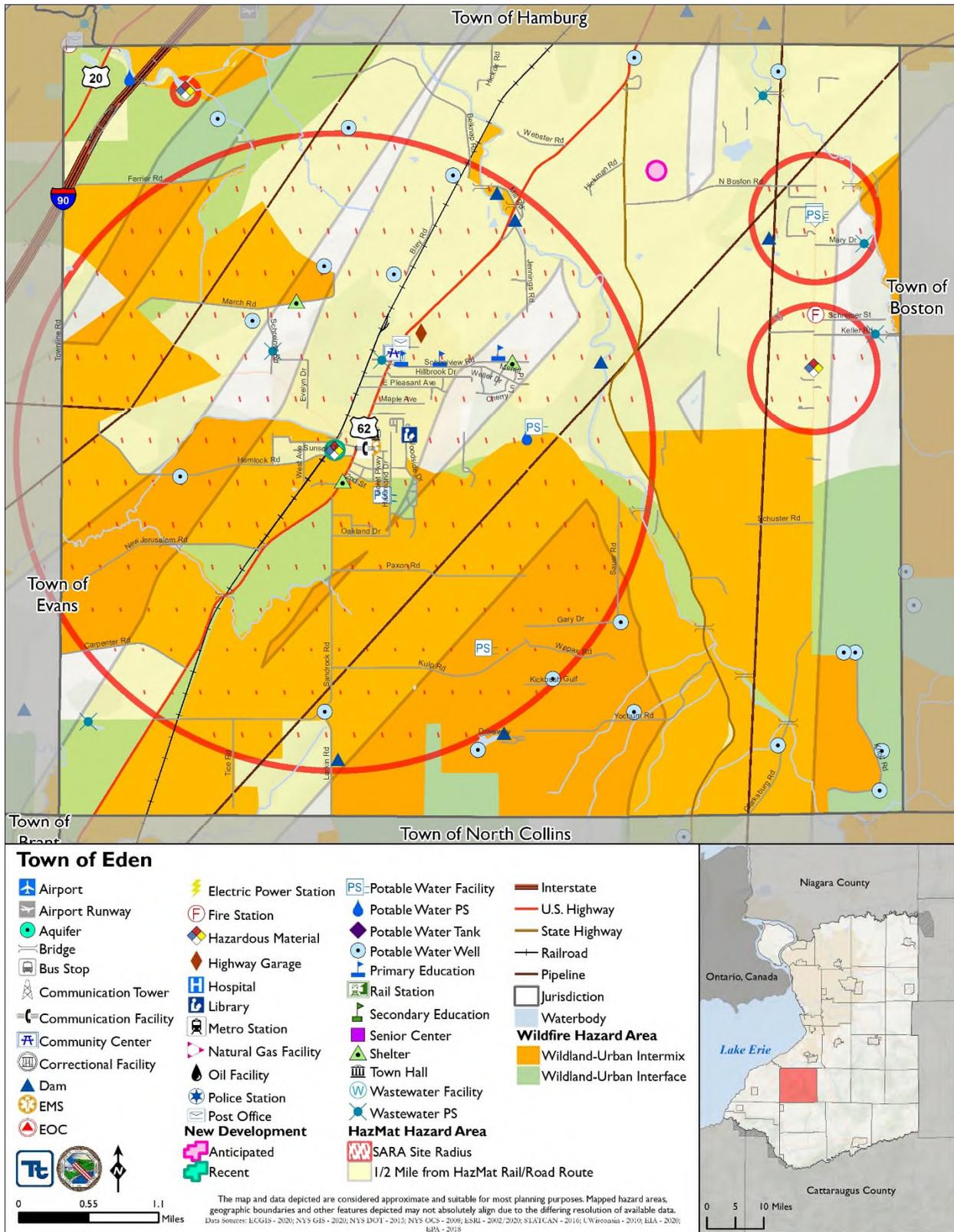




Figure 9.20-3. Town of Eden Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Eden’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.20-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.20-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
June 20, 2016	Thunderstorm Wind	No	A Thunderstorm developed ahead of an approaching cold front, producing winds exceeding 50 kts. Isolated storms caused damages southeast of the City of Buffalo, including reports of three quarter inch hail.	Law enforcement reported trees down by thunderstorm winds on Sisson Highway (NY-75), causing an estimated \$10,000 in damages.
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured at 64 mph.	The Town of Eden Fire Department received 3 wind calls during the event, for minor damages.
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph.	The Town of Eden Fire Department received 9 wind calls, including a woman injured and trapped in car under tree.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 19 inches of snow were reported in the Town of Eden.
December 29, 2017	Lake Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 22 inches of snow were reported in the Town of Eden.
January 12, 2018	Winter Storm	No	A winter storm brought a wintry mix of precipitation. Ice accumulations up to a tenth of an inch were reported along the lake shore counties. Heavy snow fell overnight, accumulating up to two inches per hour.	An estimated 10 inches of snow were reported in the Town of Eden.
March 1, 2018	Winter Storm	No	A low pressure storm brought heavy, wet snow, and increased wind speeds across the entire region, resulting in downed trees and wires.	An estimated 20 inches of snow were reported in the Town of Eden.
October 31- November 1, 2019	High Wind/Lakeshore Flooding DR-4472 NY	Yes	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	The Town of Eden Fire Department received 3 wind related calls during the event, for minor damages. There were an observed 1.88 inches of rainfall in the Town.

Notes:





- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Eden’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Eden. The Town of Eden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Town indicated the following:

- The Town of Eden Fire Departments have recently upgraded equipment and tanker trucks to hold more water in the event that they need to reach areas where water is not available. Due to this, risk for wildfire has been decreased to medium for the community.
- The Town indicated that they have an extensive list of residence that require oxygen, medicine, etc. If power is out for a long period of time, we can tend to their needs, through the Police, Fire departments as well as EMS. Due to this, risk for utility failure has been decreased to medium for the community.

Table 9.20-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	Medium	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	Medium	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should





be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.20-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Amos J Zittel Pond Dam	Dam	A	A	2022-T.Eden-002

Source: Effective DFIRM

Identified Issues

After review of the Town of Eden’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Eden has identified the following vulnerabilities within their community:

- Clarksburg Road
- East Pleasant Road
- Larkin Road

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- No Response Received

9.20.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.20-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	No Cost	
-	Flood prevention of homes, businesses, and businesses	Flooding	Stormwater Management Office, Code Enforcement, Planning, Town Board and Conservation Board	Economic Loss	In Progress	Cost	No Cost	Include in 2022 HMP as 2022-T. Eden-001 to continue outreach and engagement with repetitive loss homeowners.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Town code up to date	
-	Fire Structure Collapse	Fire, Structural Stability	Town Board	Death, Injury, Economic Loss	Complete	Cost	-	Completed, discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Utility Failure	Not Identified	Town Board	Injury/Life Support, Death, Economic Loss	Complete	Cost	-	Completed, discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Code Enforcement Officer	Not Identified	Complete	Cost	No Cost	Completed, discontinue.
						Level of Protection	Medium	
						Damages Avoided; Evidence of Success	Ordinance is up to date	
-	Designate/install a specific person to be your municipality's Floodplain Administrator	Flooding	Code Enforcement Officer, Stormwater Management Officer	Not Identified	Complete	Cost	-	Completed as of June 2021. The Town Building Inspector has been identified as the NFIP Floodplain Administrator.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Town Board	Not Identified	Ongoing Capability	Cost	-	Ongoing Capability, discontinue
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Eden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Erie County Soil and Water works to relieve flooding in the area by securing Resilient Farming Grants, and by reestablishing wetlands to reduce flood events.
- The Town of Eden EMS provides yearly CPR courses, as well as National Incident Management System (NIMS) Trainings, with all new members being required to take courses 100, 200, and 800. Eden EMS also provides monthly EMS training courses, with EMT/AMET/Paramedic courses offered through Erie County, and Utilizing Target Solutions for on-line training courses.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Eden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.20-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils										
Extreme Temperature										
Flood		X				X			X	
Hazardous Materials										
Landslide										
Pandemic										
Severe Storm		X				X			X	
Severe Winter Storm		X				X			X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.20-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Eden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.



Table 9.20-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.20-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Eden-001	Repetitive Loss Property Outreach	1, 2, 3	Flood	<p>Problem: There are 2 Repetitive Loss properties within the Town.</p> <p>Solution: The Town of Eden, supported by Erie County OEM, will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the Town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	6 months	Town of Eden Code Enforcement	Low	High	Municipal Budget	High	LPR, EAP	PI, PP
2022-T. Eden-002	Amos J Zittel Pond Dam Outreach	1, 2, 3	Flood	<p>Problem: The Amos J Zittel Pond Dam is exposed to the 100-year SFHA (1% floodplain).</p> <p>Solution: The dam is privately owned and classified as a “low-hazard” class A dam. The Town will coordinate and conduct outreach with the owners of the dam’s location within the floodplain and additional risk associated with the structure and support inspections of the dam as needed.</p>	Yes 💧	No	6 months	Town of Eden Code Enforcement	Low	High	Municipal Budget	High	EAP	PI
2022-T. Eden-003	Clarksburg Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	<p>Problem: Branches off of the South Branch Eighteen Mile Creek exacerbate flooding and road closures along Clarksburg Road.</p> <p>Solution: The Town of Eden Highway Department will upsize and replace a total of 7 culverts along Clarksburg Road where Eighteen Mile Creek crosses the road. 60’ of 30” pipe will be used at each crossing, for a total of \$10,500. Including fill, blacktop replacements and labor and equipment, total project cost will be \$30,800. See</p>	No	No	1 year	Town of Eden Highway Department	Medium, \$30,800	High	NYSDOT, FEMA HMGP, CHIPS	High	SIP	SP, PP



Table 9.20-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Action Worksheet below for images of locations and cost breakdown.										
2022-T. Eden-004	East Pleasant Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	<p>Problem: A branch off of the South Branch Eighteen Mile Creek runs directly through a neighborhood development and an undersized culvert exacerbates flooding concerns and stormwater runoff and backflow onto properties in the area.</p> <p>Solution: The Town of Eden Highway Department will upsize and replace the culvert at East Pleasant Road where Eighteen Mile Creek crosses the roadway. A 42" and 12" culvert pipe, along with two catch basins will be installed, as per the Highway Department's recommendations and needs of the area. Including parts, fill, blacktop replacements and labor and equipment, total project cost will be \$12,400. See Action Worksheet below for images of location and cost breakdown.</p>	No	No	1 year	Town of Eden Highway Department	Low, \$12,400	High	NYSDOT, FEMA HMGP	High	SIP	SP, PP
2022-T. Eden-005	Larkin Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	<p>Problem: A portion of Big Sister Creek flows under Larkin Road, which causes repetitive flooding and road washouts.</p> <p>Solution: The Town of Eden Highway Department will upsize and replace the culvert at Larkin Road with a 60' x 4' x 8' box culvert to better manage water flow of the Creek and reduce impacts during floods and heavy rainstorms. Including head wall, wingwall, and cutoff walls, fill, blacktop, labor and equipment, total project cost will be \$127,500. See Action Worksheet below for images of location and cost breakdown.</p>	No	No	1 year	Town of Eden Highway Department	High, \$127,500	High	NYSDOT, FEMA HMGP	High	SIP	SP, PP



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.20-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Eden-001	Repetitive Loss Property Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Eden-002	Amos J Zittel Pond Dam Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Eden-003	Clarksburg Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-T. Eden-004	East Pleasant Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-T. Eden-005	Larkin Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.20.9 Action Worksheets

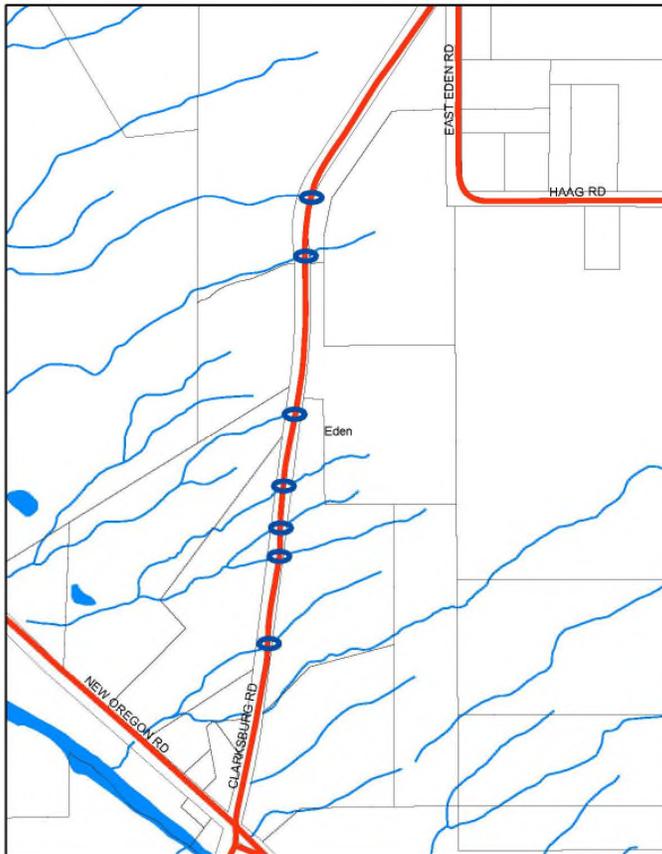
The following action worksheets have been developed by the Town of Eden to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Clarksburg Rd Culvert Replacement		
Project Number:	2022-T. Eden-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	Branches off of the South Branch Eighteen Mile Creek exacerbate flooding and road closures along Clarksburg road.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace a total of 7 culverts along Clarksburg Road where Eighteen Mile Creek crosses the road. 60' of 30" pipe will be used at each crossing, for a total of \$10,500. Including fill, blacktop replacements and labor and equipment, total project cost will be \$30,800. See Action Worksheet Below for images of locations and cost breakdown.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces flood risk
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$30,800	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months-1 year
Estimated Time Required for Project Implementation:	7 days	Potential Funding Sources:	NYSDOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate entire roadway	\$1 million	Not cost effective, too many crossings, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Clarksburg Rd Culvert Replacement	
Project Number:	2022-T. Eden-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	Town will seek funding
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	2 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



**TOWN OF EDEN
CULVERT REPLACEMENT
CLARKSBURG ROAD
2021**



Legend

-  centerline
-  Eden Tax Parcels 2020
-  Stream
-  River or Pond
-  7 Culvert Replacements

Description of Culvert Replacement (7)	
Pipe - 60' of 30" Pipe (\$25/ft) = \$1,500	\$1,500/crossing x 7 = \$10,500.00
Select Fill - 20 Ton (\$20/Ton) = \$400	\$400/crossing x 7 = \$2,800.00
Blacktop - 10 Ton (\$100/Ton) = \$1,000	\$1,000/crossing x 7 = \$7,000.00
Labor & Equipment	
\$1,500/day @ 1 crossing/day = 7 Days	7 Days x 7 crossings = \$10,500.00
TOTAL = \$30,800.00	



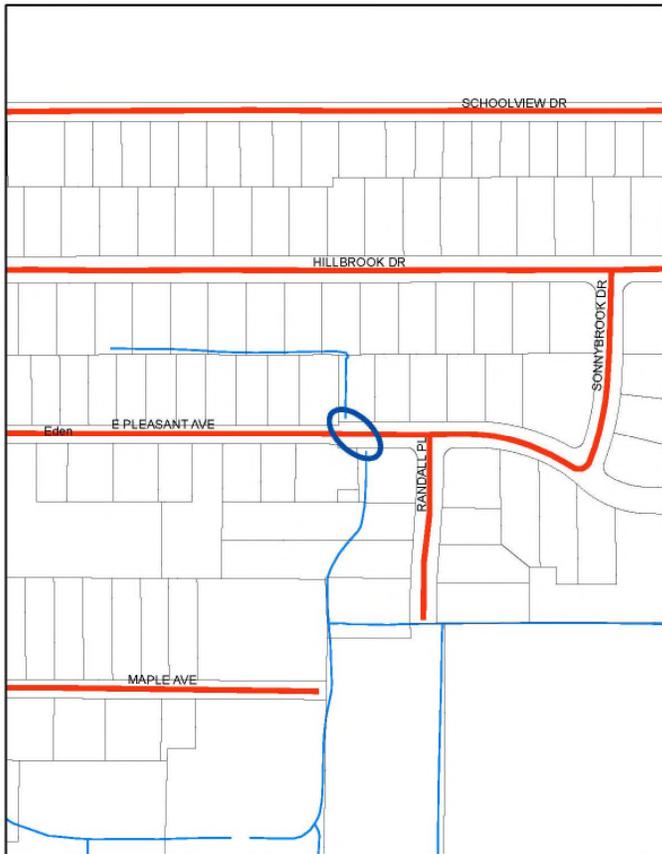
Action Worksheet			
Project Name:	East Pleasant Rd Culvert Replacement		
Project Number:	2022-T. Eden-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	A branch off of the South Branch Eighteen Mile Creek runs directly through a neighborhood development and an undersized culvert exacerbates flooding concerns and stormwater runoff and backflow onto properties in the area.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace the culvert at East Pleasant Road where Eighteen Mile Creek crosses the roadway. A 42" and 12" culvert pipe, along with two catch basins will be installed, as per the Highway Department's recommendations and needs of the area. Including parts, fill, blacktop replacements and labor and equipment, total project cost will be \$12,400. See Action Worksheet Below for images of location and cost breakdown.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces flood risk
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$12,400	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months-1 year
Estimated Time Required for Project Implementation:	2 days	Potential Funding Sources:	NYS DOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate entire roadway	\$1 million	Not cost effective, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	East Pleasant Rd Culvert Replacement	
Project Number:	2022-T. Eden-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	2 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



TOWN OF EDEN CULVERT REPLACEMENT EAST PLEASANT ROAD 2021



Legend

- centerline
- Eden Tax Parcels 2020
- Stream
- River or Pond
- 1 Culvert Replacement

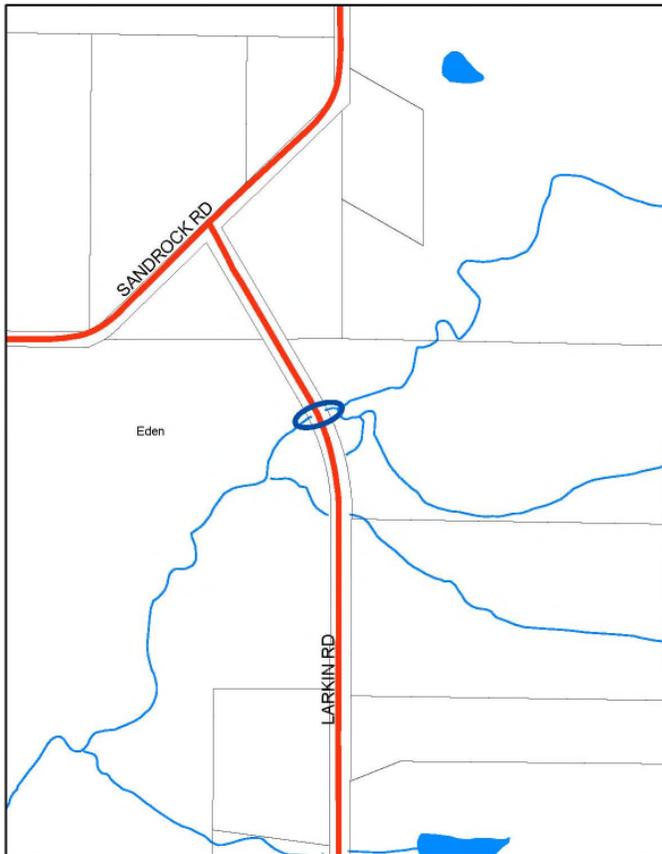
Description of Culvert Replacement (1)	
Pipe - 120' Of 42"	(\$45/ft) = \$5,400
Pipe - 40' Of 12"	(\$5/ft) = \$200
Catch Basins (2)	(\$1,000 ea) = \$2,000
Select Fill - 40 Ton	(\$20/Ton) = \$1,600
Blacktop - 20 Ton	(\$100/Ton) = \$2,000
Labor & Equipment	
\$1,500/day @ 2 Days = \$3,000	
TOTAL = \$ 12,400.00	



Action Worksheet			
Project Name:	Larkin Rd Culvert Replacement		
Project Number:	2022-T. Eden-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	A portion of Big Sister Creek flows under Larkin Road, which causes repetitive flooding and road washouts.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace the culvert at Larkin Road with a 60' x 4' x 8' box culvert to better manage water flow of the Creek and reduce impacts during floods and heavy rainstorms. Including head wall, wingwall, and cutoff walls, fill, blacktop, labor and equipment, total project cost will be \$127,500. See Action Worksheet Below for images of location and cost breakdown.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces flood risk
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$127,500	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months-1 year
Estimated Time Required for Project Implementation:	7 days	Potential Funding Sources:	NYSDOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate entire roadway	\$1 million	Not cost effective, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Larkin Rd Culvert Replacement	
Project Number:	2022-T. Eden-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	Town will seek funding
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	7 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



**TOWN OF EDEN
CULVERT REPLACEMENT
LARKIN ROAD
2021**



Legend

-  centerline
-  Eden Tax Parcels 2020
-  Stream
-  River or Pond
-  1 Box Culvert

Description of Box Culvert Replacement (1)
Box Culvert - 60' x 4' x 8' (\$1200/ft) = \$72,000
Head Wall, Wing Wall & Cut off Wall - \$40,000
Select Fill - 150 Ton (\$20/Ton) = \$3,000
Blacktop - 20 Ton (\$100/Ton) = \$2,000
Labor and Equipment \$1,500/Day @ 7 Days = \$10,500
TOTAL = \$127,500.00



9.21 Town of Elma

This section presents the jurisdictional annex for the Town of Elma. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Elma’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.21.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Elma’s hazard mitigation plan primary and alternate points of contact. The Town of Elma followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Deputy Supervisor/Councilman, and Town Engineer. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.21-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Wayne A. Clark, Supervisor Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 652-3260 x7 Email: supervisor@elmanewyork.com	Name/Title: Michael Nolan, Deputy Supervisor/Councilman Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 998-4736 Email: mnolan@elmanewyork.com
NFIP Floodplain Administrator	
Name/Title: Joseph Colern Jr., CEO Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 652-6779 Email: jim@stonymfg.com	

9.21.2 Municipal Profile

The Town of Elma is located in the south and center of Erie County. Elma is the county’s youngest town, having incorporated in 1857. Elma is 36 square miles in size and was formed from portions of the towns of Aurora and Lancaster. The town contains the following hamlets; Blossom, East Elma, Elma Center, Elma Village, Jamison Road, and Springbrook. The area called "Big Flats" by the local Native Americans became Elma Village. The town is 35 square miles in size. The town is bounded on the west by the Towns of West Seneca and Orchard Park, on the south by the Town of Aurora, on the East by the Town of Marilla and on the north by the Town of Lancaster. US Route 20 and five separate NYS Routes pass through the Town of Elma. The Buffalo Creek traverses the town’s northern tier (Town of Elma 2018).



White settlement of this area began in earnest after the Seneca Indians were removed from their reservation lands. White settled near creeks which were a source of power for the plentiful sawmills, grist mills and cider mills. As the woods were cleared, the rich soil yielded productive farm yields. Lumber, dairy products, and farm produce were shipped into Buffalo by rail. Today the town is characterized as a suburban mix (Town of Elma 2020).

According to the U.S. Census, the 2010 population for the Town of Elma was 11,317. The estimated 2019 population was 11,732, a 3.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.4 percent of the population is 5 years of age or younger and 23.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.21.3 Jurisdictional Capability Assessment and Integration

The Town of Elma performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.21.3). The Town of Elma’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Elma. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.21-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 52 (Building Construction); fully amended September 22, 1954	Local/State	Building Department
Comment: <i>It is the intent and purpose of this chapter to set certain minimum requirements for the construction of:</i> <i>A. New buildings for residential, commercial or industrial purposes.</i> <i>B. Additions to or conversions of existing buildings to be used for residential, commercial or industrial purposes in the Town of Elma.</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
The town has also adopted the State of New York Building Code and accepts the applicability of the State Building Construction Code for the Town of Elma of the County of Erie of the State of New York in accordance with the provisions of § 374-a of the Executive Law.					
Zoning Code	Yes	No	Chapter 144 (Zoning); 7-18-1950	Local	Building Department and Zoning Board
<p>Comment: Pursuant to the authority conferred by Article 16 of the Town Law of the State of New York and for each of the purposes specified therein, the Town Board of the Town of Elma, County of Erie and State of New York, has ordained and does hereby enact the following chapter regulating and restricting, by zones, the number of stories and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, the density of population and the location and use of buildings, structures and land for trade, industry and residence and providing for setbacks and line clearances or other purposes. Such regulations shall apply to the Town of Elma.</p> <p>These regulations are made in accordance with a Comprehensive Plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewage, schools, parks and other public requirements.</p>					
Subdivision Ordinance	Yes	No	Chapter 123 (Subdivision of Land); amended July 19, 9189	Local	Planning Board and Town Board
<p>Comment: It is declared to be the policy of the Town of Elma Planning Board to consider land subdivision plats as part of a plan for the orderly, economic and efficient future growth and development of the Town. Whenever any subdivision of land is proposed, and before any contract for the sale of or any offer to sell any lots in such subdivision or any part thereof is made, and before any permit for the erection of any structure in such proposed subdivision shall be granted, the subdivider or his duly authorized agent shall apply, in writing, for approval of such proposed subdivision in accordance with the following procedures.</p>					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 120 (Stormwater Management); adopted by Local Law No. 2-2015	Local/State	Engineering
<p>Comment: The purpose of the stormwater management chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of §120-2A. The chapter's following objectives are as follows:</p> <ol style="list-style-type: none"> 1. Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised; 2. Require land development activities to conform to the substantive requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-02-01, or as amended or revised; 3. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; 4. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; 5. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and 6. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</p>					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 117 (Site Plan Review); adopted by Town Board on 4/16/1986	Local	Planning Board



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: Prior to the issuance of either a building permit or use permit in any zoning district, except for a one- or two-family dwelling, related accessory uses or agricultural uses permitted by right under this chapter and the Town of Elma Zoning Ordinance, the Building Inspector shall refer the permit applicant to the Planning Board for site plan consideration in accordance with § 274-a of the Town Law and the procedure and standards set forth in this chapter. The requirements for site plan review include the following: 1) A sketch plan shall include a map of site topography at no more than five-foot contour intervals. If general site grades exceed 5% or portions of the site have susceptibility to erosion, flooding or ponding, a soil overlay and a topographic map showing contour intervals of not more than two feet of elevation should additionally be provided. 2) In the preliminary site plan approval process, the planning board will pay special attention to the adequacy of structures, roadways and landscaping in areas with susceptibility to ponding, flooding and/or erosion.</p>					
Environmental Protection Ordinance	No	-	-	-	-
<p>Comment:</p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 82 (Flood Damage Prevention); adopted by Local Law No. 1-2019	Local	Code Enforcement Officer
<p>Comment: The Elma Town Board of the Town of Elma finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Town of Elma and that such damages may include: destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages and to achieve the purposes and objectives hereinafter set forth, this chapter was adopted. The purpose of this chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program. <p>The town enforces standards for structures in the floodplain. For residential structures, any new construction or substantial improvements in the SFHA must elevate the lowest floor at or above two feet above the BFE. For non-residential structures, any new construction or substantial improvements in the SFHA must have the lowest floor elevated to or above two feet above the BFE.</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 115 (Sewers); adopted on 8/17/2005	Local	WWTP/Engineering/Building
<p>Comment: The general purpose of this chapter is to provide for efficient, economic, environmentally safe, and legal operation of the Town of Elma’s publicly owned treatment works. Article 165 of this chapter discusses storm sewers. The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Elma through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of contaminants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02.</p>					
Emergency Management Ordinance	No	No	-	-	-
<p>Comment:</p>					
Climate Change Ordinance	No	No	-	-	-
<p>Comment:</p>					
Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Planning Documents					
Comprehensive Plan	Yes	No	Regional Comprehensive Plan May 2003-4	Local	Planning Board – Intermunicipal Planning Commission
<p>Comment: <i>The intent of the Regional Comprehensive Plan is to provide a regional planning document for the five communities. The town's goals of the plan are as follows:</i></p> <ul style="list-style-type: none"> • <i>Preserve the rural community character</i> • <i>Encourage orderly growth and development</i> • <i>Preserve and promote recreational opportunities</i> • <i>Provide for economic development</i> • <i>Protect significant environmental resources</i> • <i>Minimize the loss of remaining prime farmland soils to development.</i> • <i>Provide a safe and efficient transportation system</i> <p><i>The major goals of the plan are as follows: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control or all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems. 7) Prepare open space plans to identify and prioritize important environmental features such as wetlands, floodplains, steep slopes, and watersheds.</i></p>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County CEMP 2018	County	Emergency Management
Comment: <i>The County CEMP covers the municipal emergency management and the town abides by the guidance to increase resilience and community safety.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Public Health Plan	No	No	-	-	-
Comment:					
Other	Yes	No	Town of Elma Disaster Plan – updated annually	Local	Emergency Management
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Elma to oversee and track development.

Table 9.21-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	CEO
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Pre-approved and compliance with chapter 100 town code

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Elma and their current responsibilities which contribute to hazard mitigation.

Table 9.21-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The ultimate goal of this planning board is to ensure that the long-range planning and land use objectives of the community can be achieved. In New York State, through the state enabling legislation, municipal planning and land use controls are delegated to the local legislative body.
Zoning Board of Adjustments	Yes	The primary role of a zoning board is to review and decide cases where a relaxation of the ordinance is sought or where there is an alleged error in a zoning decision. The board seeks to correct all errors and reduce the potential hazards that might be caused by a misinterpretation of the local zoning ordinance.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Town of Elma Conservation Board - seeks to preserve the open space to reduce unnecessary development in the town that might pose risk to the community and wildlife.
Open Space Board/Committee	Yes	Town of Elma Conservation Board - seeks to preserve the open space to reduce unnecessary development in the town that might pose risk to the community and wildlife.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Highway Department maintains 40 miles of roads and repaves about 2.5 miles per year and patch the rest of the roads as needed. They also mow roadway shoulders, clear ditches, install culvert pipes, and repair guardrails.
Construction/Building/Code Enforcement Department	Yes	<p>Responsibilities of the Town of Elma Building Department entail the Enforcement of Local and State Building codes in conjunction with Local Zoning enforcement encompassing approximately 36 square miles.</p> <p>All building permits are issued by this Department.</p> <p>Contractors Registration: Under Town Code 105 all contractors, peddlers and solicitors who work within the Town of Elma must be registered with the Town. An application is required with all proper insurances and coverages. The initial fee to register is \$75.00 and \$50.00 to renew every year thereafter.</p> <p>Fire Inspections: State law mandates that every Industrial, Commercial and Multiple Dwelling be inspected once per year.</p> <p>Property Maintenance: The Town Building Department is responsible for the enforcement of property maintenance under the State property maintenance code.</p>
Emergency Management/Public Safety Department	Yes	OEM – updates of municipal emergency management plan and the abidance of the Federal Emergency Management regulations.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	The town uses CodeRED to notify residents about local emergencies or issue critical alerts.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW – road maintenance, culvert upgrades, ditch clearing.
Mutual aid agreements	Yes	Fire
Other	Yes	Emergency Planning Committee was started to develop, maintain, and update the Town of Elma Disaster Plan, to better prepare the Town of Elma, emergency responders, and to protect residents and their property during a disaster or a large scale emergency. The overall goal is to minimize the impact caused by an emergency in the Town of Elma. The town also established the Elma Community Emergency Response Team (Elma CERT) which is a group of citizens whose main goal is to educate the residents on how to prepare and take care of themselves and immediate neighbors for up to 72 hours during a large scale emergency or disaster. First Responders may not be able to help everyone within that time period.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer is identified as the Floodplain Administrator for the town. Duties and responsibilities of the FPA include: permit application review, using flood data, reviewing for alteration of watercourses, construction stage, inspections, stop-work orders, certificate of compliance, and information retaining.
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Management / Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	Yes	Town Engineer

Fiscal Capability

The table below summarizes financial resources available to the Town of Elma.

Table 9.21-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Elma.

Table 9.21-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Office of Emergency Management
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Town Website: http://www.elmanewyork.com/emergency_management_response.html



Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	Yes	CERT
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red System/Website
Warning systems for hazard events	Yes	Code Red System
Natural disaster/safety programs in place for schools	Yes	School Resource Officer (SRO)
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Elma.

Table 9.21-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.21-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.21.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Joseph Colern Jr., CEO

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Elma.

Table 9.21-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Elma	16	21	\$52,116	9	4

Source: FEMA 2020a, FEMA 2020b
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Floodprone areas within the town include Winspear Road Flats. There are not any RiskMAP projects currently underway in the town. The Town of Elma’s flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Building Department is responsible for floodplain management and the Code Enforcement Officer is the FPA. There are certified floodplain managers on staff in the town. The floodplain management staff would like additional assistance/training if available. NFIP administration services the town provides include permit review, town/planning boards, and an engineer. The Town of Elma determines if proposed development in an existing structure would qualify as a substantial improvement by reviewing the plan. The town explained that the barriers to running an effective NFIP program include plan reviews and board reviews. The town does not have any outstanding NFIP compliance violations that need to be addressed. Chapter 82 of the municipal code is the flood damage prevention ordinance and it is supported by Planning, Zoning, and Town Boards. The floodplain management program meets the minimum requirements. The most recent Community Assistance Contact (CAC) was on April 8, 2005 and the most recent Community Assistance Visit (CAV) was on March 29, 2012.

9.21.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Elma has identified the following routes and procedures to evacuate residents prior to and during an event.

- Jamison Road
- Rice Road
- Bullis Road
- Interstate 400 – Aurora Expressway

Sheltering

The Town of Elma has identified the following designated emergency shelters within the town.

Table 9.21-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Iroquois HS	2111 Girdle Rd	100	Yes	Yes	Yes	Unknown	-
Senior Center	3007 Bowen Road	100	Yes	Yes	Yes	Unknown	-
Jamison Rd FC	1071 Jamison Rd	100	Yes	Yes	Unknown	Unknown	-
Blossom FC	1000 N. Blossom Rd	100	Yes	Yes	Yes	Unknown	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Elma has identified the following sites suitable for placing temporary housing units.

Table 9.21-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Iroquois HS	2111 Girdle Rd	100	Parking Lot	Yes	Unknown
Senior Center	3007 Bowen Rd	100	Parking Lot	Yes	Unknown
Jamison Rd FC	1071 Jamison Rd	100	Parking Lot	Yes	Unknown
Blossom FC	1000 N Blossom Rd	100	Parking Lot	Yes	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Elma has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.21-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Jamison Rd FC	1071 Jamison Rd	100	Open Lot	Yes	Unknown

9.21.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.21-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.21-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	39	0	12	0	21	0	28	0	17	0	0	0
Multi-Family	1	0	1	0	0	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	276	0	248	0	242	0	288	0	366	0	0	0
Total Permits Issued	316	0	261	0	263	0	317	0	383	0	0	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.21.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Elma’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Elma has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.21-1. Town of Elma Hazard Area Extent and Location Map 1

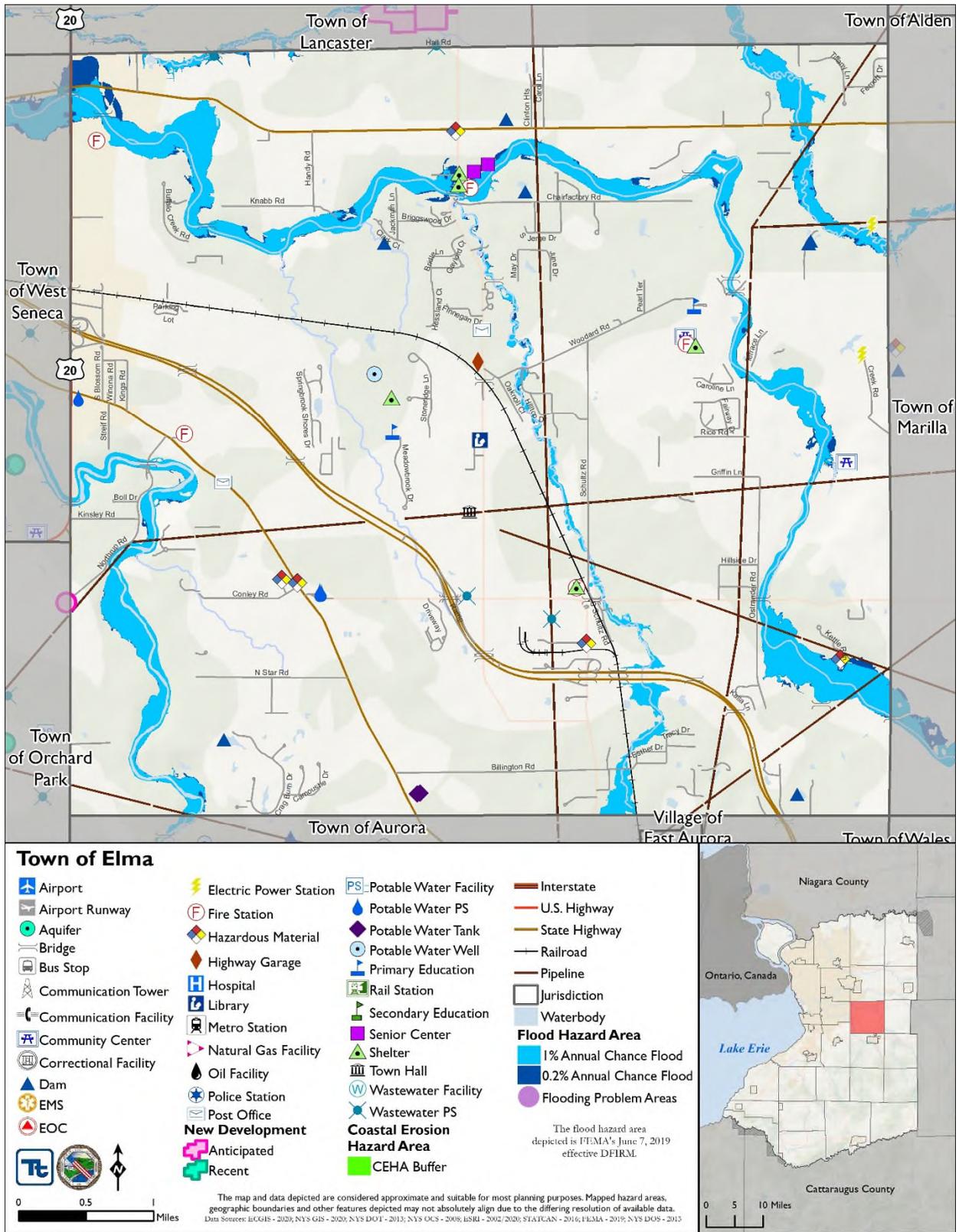




Figure 9.21-2. Town of Elma Hazard Area Extent and Location Map 2

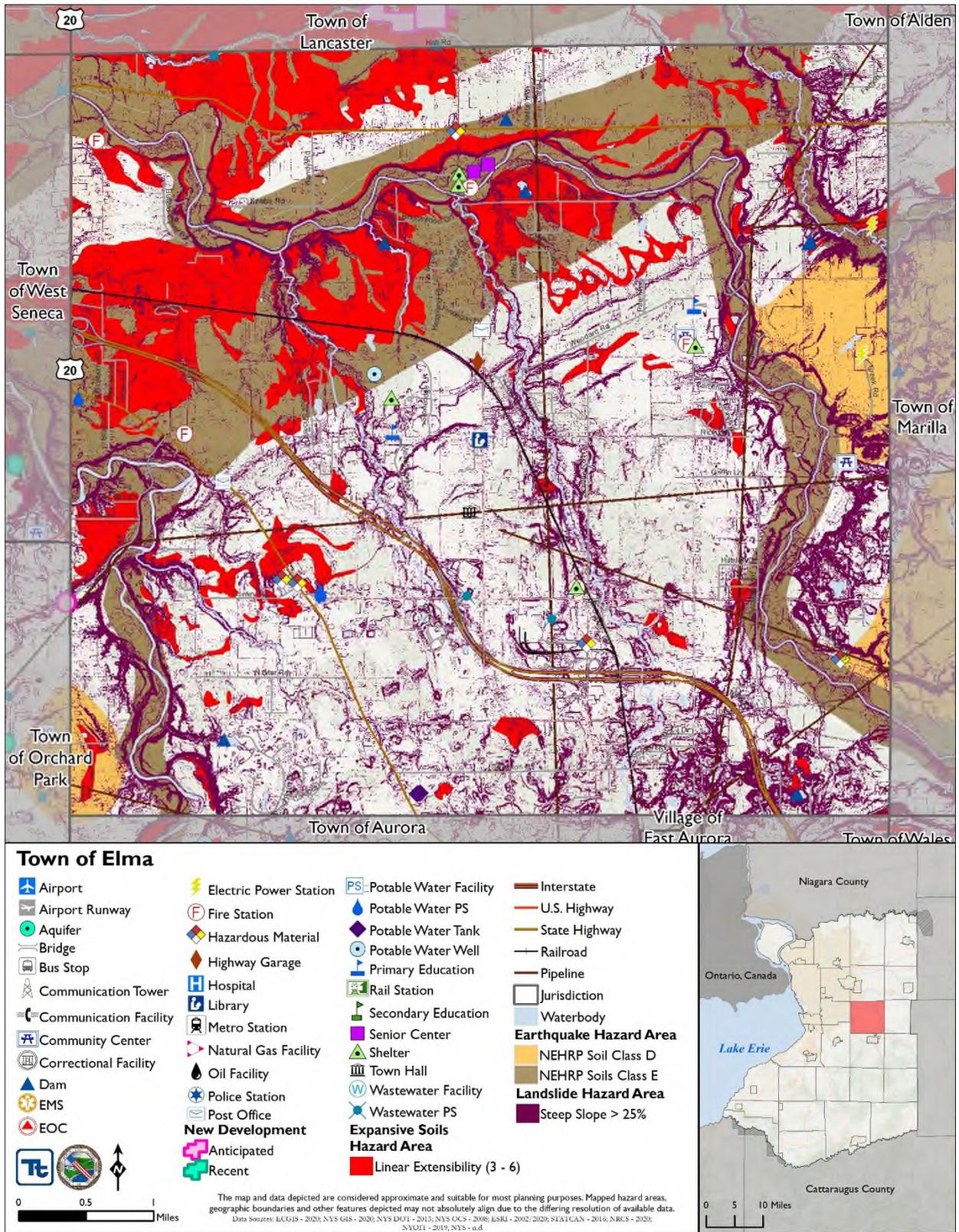
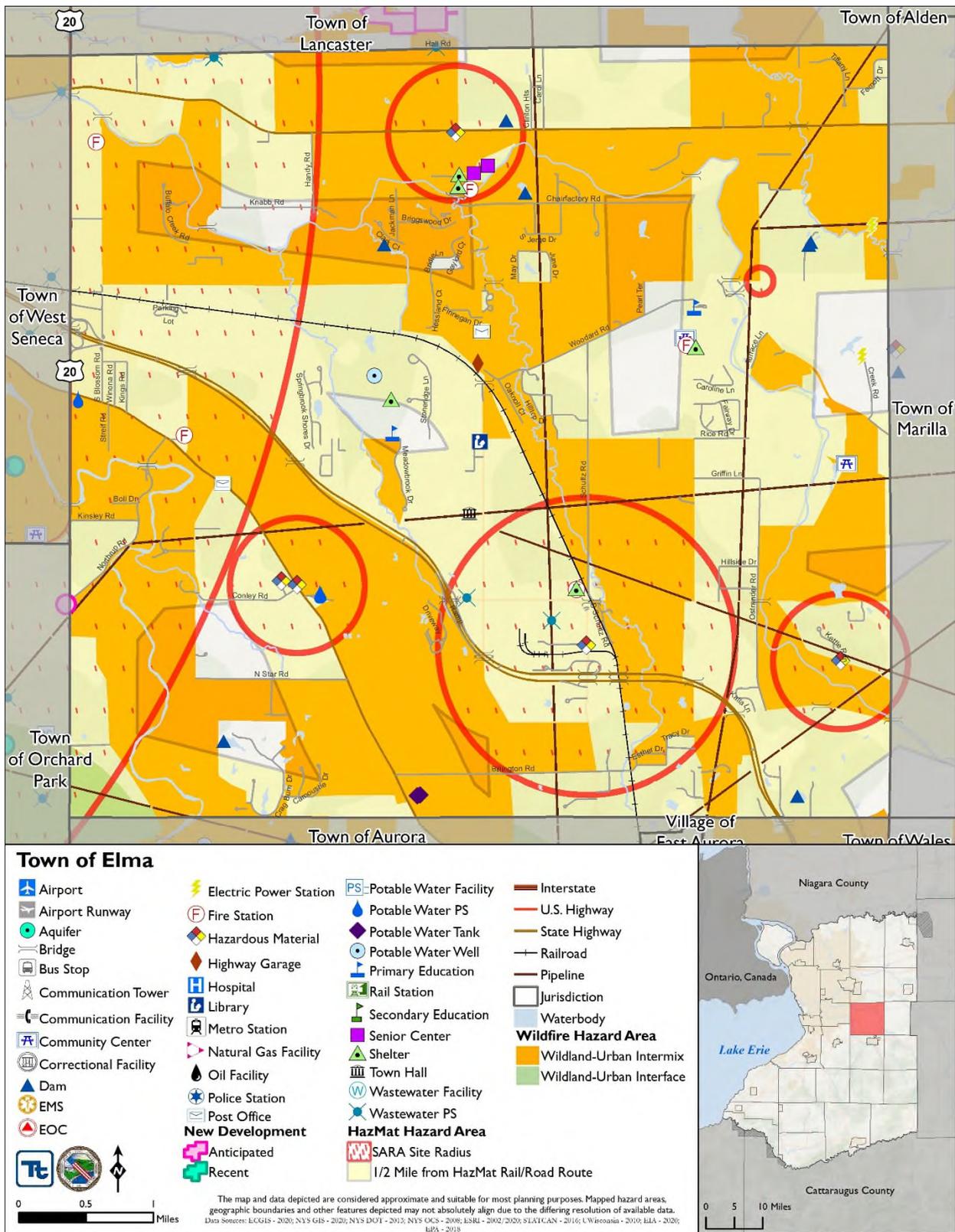




Figure 9.21-3. Town of Elma Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Elma’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.21-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.21-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	Town of Elma did not report any damages.
August 11-15, 2015	Flash Flood	Yes	Town of Elma did not report any damages.
October 28-29, 2015	High Wind	Yes	Town of Elma did not report any damages.
November 6, 2015	Thunderstorm Wind	Yes	Town of Elma did not report any damages.
November 12, 2015	High Wind	Yes	Town of Elma did not report any damages.
November 18, 2015	High Wind	Yes	Town of Elma did not report any damages.
January 11, 2017	High Wind	Yes	Town of Elma did not report any damages.
March 8, 2017	High Wind	Yes	Town of Elma did not report any damages.
March 13, 2017	Winter Storm	Yes	Town of Elma did not report any damages.
July 20, 2017	Tornado	Yes	Town of Elma did not report any damages.
August 4, 2017	Thunderstorm Wind	Yes	Town of Elma did not report any damages.
December 10-15, 2017	Lake-effect Snow	Yes	Town of Elma did not report any damages.
December 24-29, 2017	Lake-effect Snow	Yes	Town of Elma did not report any damages.
January 2, 2018	Blizzard	Yes	Town of Elma did not report any damages.
October 6, 2018	Lightning	Yes	Town of Elma did not report any damages.
February 24, 2019	High Wind	Yes	Town of Elma did not report any damages.
February 24, 2019	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Town of Elma did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Town of Elma did not report any damages.
November 27, 2019	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
January 12, 2020	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
January 18, 2020	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
2020-21	COVID 19	Yes	Multiple business closures, social distancing, required mask mandate and self-quarantine. Many municipal services were terminated as a result and reduced funding had a major negative impact on the town.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Elma’s risk assessment results and data used to determine the hazard ranking.





Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Elma. The Town of Elma has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town had the following comments:

- Severe Winter storms are a threat but the municipality has a high capability to address them so will re rank high to medium.
- The Municipality has not had significant threat to utility failure and will re rank from high to medium.

Table 9.21-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Medium	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	Medium	Medium	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.21-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Elma Fire Station	Fire Station		X	No

Source: 2021 GIS

Identified Issues

After review of the Town of Elma’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Elma has identified the following vulnerabilities within their community:

- Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority.
- Concern with occupant safety and continual operation of building during significant utility interruption.
- The town has an outdated floodplain management ordinance.
- The Donald Lischer Pond Dam, Rowley Dam, NYSEG – Stolle Road Substation, Bulls Road Substation, National Fuel Gas Supply- Porterville, and Speedway 9969 are in the earthquake hazard area.
- The Briggs Dam, Donald Lischer Pond Dam, Bulls Road Electric power station, R. Conley LLC, Speedway 9969 and Elma Post Office are located in the wildfire hazard area.
- Several critical facilities in the Town of Elma may be at risk of being exposed to hazardous materials incidents.
- The Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam are located on steep slopes and may be at risk of landslides.
- The Donald Lischer Pond Dam and Bulls Road Electric Power Station may be at risk of experiencing damages caused by expansive soils.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.21.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.21-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
1	Creek Flood Water and Sediment Deposit Monitoring for periodic survey and assessment of established drainage districts for maintenance needs such as sediment and debris removal	Flooding	OEM	Creek levels monitored by multiple town departments during high water events	In Progress	Cost	-	1. Include in 2022 HMP as Action 2022-Town of Elma-001 2. See wording in mitigation table below 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Survey and assess municipal and fire service buildings for storm preparedness and seismic hazard identification and minimization	Storms and Seismic Events	OEM	Concern with occupant safety and continual operation of building during significant utility interruption	In Progress	Cost	-	1. Include in 2022 HMP as Action 2022-Town of Elma-002 2. See wording in mitigation table below 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Elma Building Department	Outdated floodplain management ordinance	In Progress	Cost	-	1. Include in 2022 HMP as Action 2022-Town of Elma-003 2. See wording in mitigation table below 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Elma Building Department	Outdated floodplain management ordinance	In Progress	Cost	-	1. Include in 2022 HMP as Action 2022-Town of Elma-003 2. See wording in mitigation table below 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Elma has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Elma participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.21-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X	X		X			
Expansive Soils				X			X			
Extreme Temperature										
Flood	X	X		X	X	X			X	
Hazardous Materials				X			X			
Landslide				X			X			
Pandemic										
Severe Storm	X			X	X					
Severe Winter Storm										
Utility Failure										
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.21-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Elma would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Elma-001	Creek levels monitored by multiple town departments during high water events	1,2	Flood, Severe Storm	<p>Problem: Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority.</p>	No	None	5 years	OEM	\$100,000	Flood Mitigation	HMGP, WQIP	High	LPR	PR
				<p>Solution: The town will conduct a thorough assessment of the existing stormwater capacities of the municipality as well as the creek conditions. While dredging has for a while been the primary solution to mitigating drainage clogging, this is not a sustainable solution. Thus, the town will develop a management plan for streams and stormwater and increase existing stormwater drainage capacity across the town, i.e. increasing culvert size, ditch size, stream bed widening, etc. These measures would be implemented based on plan guidance. This mitigation action is solely for the assessment and development of a water and stormwater management plan.</p>										
2022-Town of Elma - 002	Storm and seismic preparedness for municipal and fire service buildings	1,2,3,4	Severe Storms, Earthquake	<p>Problem: Concern with occupant safety and continual operation of building during significant utility interruption.</p> <p>Solution: Survey and assess municipal and fire service</p>	Yes	None	5 years	OEM	Low	Utility Failure	Municipal Budget	High	EAP	PR





Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				buildings for storm preparedness and seismic hazard identification. Conduct construction and retrofitting as needed.										
2022-Town of Elma - 003	Update the Floodplain Management Ordinance	1,2,3	Flood	<p>Problem: The town has an outdated floodplain management ordinance.</p> <p>Solution: Update/revise floodplain management ordinances to comply with latest FEMA regulations to include the required 2' freeboard and be consistent with potential new FIRMs</p>	No	None	3 years	Elma Building Department	Low	Flood	Municipal Budget	High	LPR	PR
2022-Town of Elma - 004	Elma Fire Station Flood Mitigation and Updating	1,2	Flood	<p>Problem: The Elma Fire Station is in the 0.2% annual chance flood event and experiences flooding.</p> <p>Solution: The town shall work with the fire station operator to conduct a thorough assessment of the existing flooding vulnerabilities of the site and determine whether retrofitting and other mitigation measures might be adequate to address existing concerns. If not, the facility might need to relocate. Otherwise, the town would further, conduct additional needs assessment to determine other space and resources needed to expand facility capacity. This includes, additional fire station space for trucks, emergency water tanks/ fuel tanks, generators, storm lights, and shelter facilities.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI



Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Elma - 005	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	3,4	Earthquake	<p>Problem: The Donald Lischer Pond Dam, Rowley Dam, NYSEG – Stolle Road Substation, Bulls Road Substation, National Fuel Gas Supply- Porterville, and Speedway 9969 are in the earthquake hazard area.</p> <p>Solution: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes. Once identified, the town will seek funding to implement the appropriate projects.</p>	Yes	None	Within 6 months for outreach	Town of Elma Town Board	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of Elma - 006	Work with the private facility owners to protect the facilities from wildfires	3,4	Wildfire	<p>Problem: The Briggs Dam, Donald Lischer Pond Dam, Bulls Road Electric power station, R. Conley LLC, Speedway 9969 and Elma Post Office are located in the wildfire hazard area.</p> <p>Solution: Work with property owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities from wildfire events.</p>	Yes	None	Within 6 months for outreach	Town Board	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PR
2022-Town of Elma - 007	Protect the critical facilities in the Town of Elma from HazMat incidents	3,4	Hazardous Materials Incidents	<p>Problem: Several critical facilities along the railroad in the Town of Elma may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are</p>	Yes	None	Within 6 months for outreach	Town Board	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI



Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				evacuated from the buildings due to a hazmat release.										
2022-Town of Elma - 008	Work with the Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam facility owners from landslides	3,4	Landslide	<p>Problem: The Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam are located on steep slopes and may be at risk of landslides.</p> <p>Solution: Work with the facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect it from landslides.</p>	Yes	None	Within 6 months for outreach	Town Board	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential landslide damage	Town Budget	High	EAP	PI
2022-Town of Elma - 009	Work with the Donald Lischer Pond Dam and Bulls Road Electric Power Station facility owners to protect the facilities from the risk of expansive soils	3,4	Expansive Soils	<p>Problem: The Donald Lischer Pond Dam and Bulls Road Electric Power Station may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: Work with the facility owners to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.</p>	Yes	None	Within 6 months for outreach	Town of Elma	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022-Town of Elma - 010	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect</p>	No	No	Within 3 years	Town NFIP Administrator	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP



Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ♦ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:





- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.21-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Elma-001	Creek levels monitored by multiple town departments during high water events	1	1	1	1	1	1	-1	1	1	0	1	1	1	1	11	High
2022- Town of Elma -002	Storm and seismic preparedness for municipal and fire service buildings	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022- Town of Elma -003	Update the Floodplain Management Ordinance	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -004	Elma Fire Station Flood Mitigation and Updating	1	1	1	1	1	1	-1	1	1	0	0	1	1	1	10	High
2022- Town of Elma -005	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -006	Work with the private facility owners to protect the facilities from wildfires	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -007	Protect the critical facilities in the Town of Elma from HazMat incidents	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -008	Work with the Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam facility owners from landslides	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -009	Work with the Donald Lischer Pond Dam and Bulls Road Electric Power Station facility owners to protect the facilities from the risk of expansive soils	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Elma -010	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.21.9 Action Worksheets

The following action worksheets have been developed by the Town of Elma to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Creek and Stormwater Management Assessment and Plan		
Project Number:	2022-Town of Elma-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storms		
Description of the Problem:	Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would need to conduct a thorough assessment of the existing stormwater capacities of the municipality as well as the creek conditions. While dredging has for a while been the primary solution to mitigating drainage clogging, this is not a sustainable solution. Thus, the town would need to develop a management plan for streams and stormwater and increase existing stormwater drainage capacity across the town, i.e. increasing culvert size, ditch size, stream bed widening, etc. These measures would be implemented based on plan guidance. This mitigation action is solely for the assessment and development of a water and stormwater management plan.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No X	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No X	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Flood Reduction
Useful Life:	50 years	Goals Met:	All
Estimated Cost:	\$100,000	Mitigation Action Type:	Local Plans and Regulations
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	HMGP, WQIP
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Cap Any Flooding stormwater and streams	High	Not feasible and expensive
	Stormwater and Stream Management	High	Best Option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Creek and Stormwater Management Assessment and Plan	
Project Number:	2022-Town of Elma-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	1	This project is technically feasible
Political	1	There is no political opposition
Legal	1	There are no legal issues
Fiscal	-1	The town needs resources
Environmental	1	This has positive environmental impact
Social	1	Has positive social impact
Administrative	0	Town Board
Multi-Hazard	1	Yes – Flood and Severe Storm
Timeline	1	Feasible
Agency Champion	1	Town DPW
Other Community Objectives	1	community safety
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Elma Fire Station Flood Mitigation and Updating		
Project Number:	2022- Town of Elma -004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Elma Fire Station is in the 0.2% annual chance flood event and experiences flooding. In the case of a flood, the facility is potentially vulnerable to flooding. Additionally, the facility is outdated and has limited capacity in terms of expansion of emergency services for the community.		
Action or Project Intended for Implementation			
Description of the Solution:	The town shall work with the fire station operator to conduct a thorough assessment of the existing flooding vulnerabilities of the site and determine whether retrofitting and other mitigation measures might be adequate to address existing concerns. If not, the facility might need to relocate. Otherwise, the town would further, conduct additional needs assessment to determine other space and resources needed to expand facility capacity. This includes, additional fire station space for trucks, emergency water tanks/ fuel tanks, generators, storm lights, and shelter facilities.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Flood mitigation and hazard preparation.
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$100,000-\$500,000	Mitigation Action Type:	Structural and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	HMGP, Fire Management Assistance Grant Program, Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP)
Responsible Organization:	Town of Elma Office of Emergency Management/ Fire Station	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation and Emergency Preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Close Existing Facility	Low	Capacity Decreases and existing issue continues
	Retrofit and Upgrade Existing Facility	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Elma Fire Station Flood Mitigation and Updating	
Project Number:	2022- Town of Elma -004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is cost effective
Technical	1	This project is technically feasible
Political	1	There are no political issues
Legal	1	There are no legal issues identified
Fiscal	-1	The project needs external funding
Environmental	1	The project has a positive environmental impact
Social	1	The project has a positive social impact
Administrative	0	There is administrative support
Multi-Hazard	0	This addresses a single hazard
Timeline	1	The timeline is feasible
Agency Champion	1	Town OEM
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	



9.22 Town of Evans

This section presents the jurisdictional annex for the Town of Evans. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Evans’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.22.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Evans’s hazard mitigation plan primary and alternate points of contact. The Town of Evans followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Planning & Community Development, Code Enforcement, Engineering. The Director of Planning & Community Development represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.22-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: William Smith, Director of Planning & Community Development Address: 8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-0945 Email: wsmith@townofevans.org	Name/Title: Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer Address: 8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-5753 Email: cbaskerville@townofevans.org
NFIP Floodplain Administrator	
Name/Title: Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer Address: 8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-5753 Email: cbaskerville@townofevans.org	
Additional Contributors	
Name/Title: Dave Johnson, Town Engineer Method of Participation: Provided Data and Information	

9.22.2 Municipal Profile

The Town of Evans is 41.5 square miles and is bounded on the north by the Town of Hamburg, on the east by the Town of Eden, on the south by the Town of Brant and on the west by Lake Erie. The town has a long and rich history as a waterfront and railroad community. In 1804, the first white settler to the town arrived on the west side of Eight-Mile Creek near its confluence with Lake Erie and opened a tavern, the Frontier House. The town incorporated in 1821 and derived its name from David E. Evans, an agent of the Holland Land Company and nephew of land agent Joseph Ellicott (Town of Evans website, accessed 2020). Immigrants



came to the town after the War of 1812. Later in the century, proximity to Lake Erie spurred the development of seasonal residences. While Evans Center remained the community’s main hub, Evans Station, to the south, steadily developed due to construction of the Buffalo and State Line Railroad. As the railroad stimulated more growth a post office was founded and this area eventually incorporated as the separate Village of Angola (Town of Evans & Village of Angola Comprehensive Plan, 2019).

According to the U.S. Census, the 2010 population for the Town of Evans was 14,229. The estimated 2019 population was 13,782, a 3.1 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.2 percent of the population is 5 years of age or younger and 21.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.22.3 Jurisdictional Capability Assessment and Integration

The Town of Evans performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Town of Evans’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Evans. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.22-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	2020 NYS Building Standards	local	Building Dept./Town of Evans
Comments: NYS Uniform and Energy Code 2020; The fact that a building or structure exists in violation of the applicable provisions of the New York State Uniform Fire Prevention and Building Construction Code or of an earlier Town building code, as the case may be, or of any local law of the Town of Evans, when found as other violations in addition to conditions deemed to be in violation of this chapter, may be considered in determining whether a building or structure is hazardous, dangerous or unsafe.					
Zoning Code	Yes	Yes	Chapter 200, Evans Town Code	local	Planning Dept./Town of Evans



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The purpose of this chapter and the intent of the legislative authority in its adoption is to promote and protect to the fullest extent permissible the environment of the Town and its public health, safety, convenience, comfort, prosperity and the general welfare by regulating the use of buildings, other structures and land for residences, open space, public facilities, business, services, industry or other purposes; by regulating and restricting the bulk, height, design, lot coverage and location of structures; by regulating and limiting population density; and, for the aforesaid purposes, to divide the land within the limits of the Town into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan; and to provide procedures for the administration and amendment of said chapter.</p>					
Subdivision Ordinance	Yes	Yes	Chapter 178, Evans Town Code	local	Planning Dept./Town of Evans
<p>Comment: It is declared to be the policy of the Planning Board and Town Board to consider the subdivision of land and the subsequent development of the subdivided plat as subject to control by the Town for the orderly, planned, efficient, physical and economic development of the town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace, that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Master Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.</p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 170 and Chapter 200. Article XII of Evans Town Code	local	Engineering (CPL) and Building Dept./Town of Evans
<p>Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Evans through the regulation of nonstormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for MS4s.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	Yes	Yes	2019 Evans-Angola Comprehensive Plan	Local	Planning Dept./Town of Evans
<p>Comment: See Comprehensive Plan, below</p>					
Site Plan Review	Yes	Yes	Chapter 200-42, Evans Town Code	Local	Planning Dept./Town of Evans
<p>Comment: The content of the site plan shall be approved by the Building Inspector prior to filing. The approved submission shall be filed with the Town Clerk, who, upon payment of the required fees, shall transmit it to the Building Inspector for distribution to such officials and agencies as he may deem appropriate for their review, report and recommendation. The site plan shall include or be accompanied by the following information, prepared by a licensed engineer, architect, landscape architect, surveyor or attorney as appropriate. The number of copies shall be determined by the Building Inspector.</p>					
Environmental Protection Ordinance	Yes	Yes	State Environmental Quality Review Act	local	Planning Dept./Town of Evans
<p>Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019</p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 113, Evans Town Code	Local	Code Enforcement Officer
<p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program.</p> <ul style="list-style-type: none"> It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 170 and Chapter 200. Article XII of Evans Town Code	local	Engineering (CPL) and Building Dept./Town of Evans
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Town of Evans/ Village of Angola Comprehensive Plan Update January 14, 2019	Local	Planning Dept./Town of Evans
Comment: Goals/Objectives to reduce vulnerability: 1) To preserve and enhance the character of the Town and Village through high quality design, responsible stewardship and application of sustainability principles. 2) Support infrastructure that balances growth and development with environmental quality, specifically as related to stormwater, utilities, renewable energy and agricultural preservation. 3) Protect water quality and, prevent shoreline erosion, and protect sensitive habitats. Actions to reduce vulnerability: 1) Prepare an engineering study to address infrastructure issues and deficiencies, especially related to stormwater and drainage concerns in the Town and Village. 2) Prevent nutrient runoff and excessive phosphorus build-up from fertilizer use; promote stormwater retention and treatment practices to remove nutrients and minimize erosion; ensure proper setbacks from waterbodies and buffer areas. 3) Develop a conservation zoning overlay that provides a regulating framework to protect sensitive environmental features. 4) Develop and implement a green streets- green site policy to encourage the use of a natural systems approach to help address current stormwater and flooding concerns, manage stormwater, reduce flows, improve water quality and enhance watershed health.					
Capital Improvement Plan	Yes	No	Ongoing	Local	Finance Office
Comment: Within Annual Budget					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Chapter 113, Evans Town Code	local	Building Dept./Town of Evans
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	No	Stormwater Management Program Plan May 1, 2015 – April 30, 2017	local	Supervisor, Planning



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: Goals/Objectives to reduce vulnerability: 1) To reduce the discharge of pollutants to the maximum extent practicable. Actions to reduce vulnerability: 1) Prepare public education posters that can be placed within municipal buildings, libraries, and schools. 2) Implement enforcement action per the Local Law to prohibit illicit discharges, activities and connections to separate storm sewer system.</p>					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	2013 Local Waterfront Revitalization Program (currently being updated) Waterfront Ordinance, 2011	Local	Building Dept./Town of Evans
<p>Comment: Goals/Objectives to reduce vulnerability: 1) The preservation, enhancement and utilization of the natural and man-made resources of the waterfront area of the Town occur in a coordinated and comprehensive manner to ensure a proper balance between the protection of natural resources and the need to accommodate growth and economic development. 2) To prevent the beneficial use of waterfront resources while preventing the loss and degradation of living waterfront resources and wildlife; adverse impacts to historic structures; diminution of open space areas or public access to the waterfront; disruption of natural waterfront processes; impairment of scenic, cultural or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; and permanent adverse changes to ecological systems. Actions to reduce vulnerability: 1) Ensure that development occurs where adequate public infrastructure is available to reduce health and pollution hazards (LWRP Policy 5). 2) Minimize flooding and erosion hazards through nonstructural means, carefully selected, long-term structural measures and the appropriate siting of structures (LWRP Policies 11, 12, 13, 14, 16, 17).</p>					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	Yes	Yes	2002 Regional Farmland Protection Plan and 2009 Sowing the Seeds of Southtowns Agri-Business.	local	Planning and Community Development
Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.					
Other (this could include a tourism plan, business)	Yes	No	Lake Erie Beach Neighborhood Revitalization Strategy, 2010	Local	Supervisor



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
development plan, etc.)					
<p>Comment: Goals/Objectives to reduce vulnerability: 1) Formulate strategies to eliminate structures presently located on problematic sites limited by access or vulnerable to environmental impacts such as flooding or erosion. 2) Utilize storm water management techniques to reduce flooding within the Lake Erie Beach Neighborhood. 3) Ensure storm water management is considered for all new construction to reduce or eliminate storm water runoff impacts upon existing development.</p> <p>Actions to reduce vulnerability: 1) Acquire available properties along Muddy Creek and Fern Brook as they become available as a means to protect the natural rights of way and prevent new housing from developing in the floodplains. 2) Employ progressive storm water management techniques to combat persistent flooding. 3) Develop a comprehensive Storm Water Management Plan for Lake Erie Beach and surrounding neighborhoods and add techniques to zoning code. 4) Use bio-retention storage areas to collect and filter water. 5) Reduce and disconnect impervious areas such as parking lots to reduce volume and velocity of runoff. 6) New development should be prohibited from located within the adjacent floodplain and each proposed project should be strictly reviewed for flooding impacts in adjacent neighborhoods. 7) Trails in flood prone areas should be crushed gravel and stone construction.</p>					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2017 Town of Evans Disaster Preparedness Plan	Local	Fire, Emergency, Police
<p>Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).</p>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Winter Storm Recovery and Preparing for the Next Storm, 2014	Local	Supervisor
<p>Comment: Goals/Objectives to reduce vulnerability: 1) To prevent loss of life to humans and animals and damage to structures from winter storms.</p> <p>Actions to reduce vulnerability: 1) Provides maintenance procedures for farm structures to prevent collapse from a winter storm.</p>					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Evans to oversee and track development.

Table 9.22-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Building Departments



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Yes, floodplain permits are tracked.
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town still maintains are large amount of vacant and buildable land.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Evans and their current responsibilities which contribute to hazard mitigation.

Table 9.22-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Division Provides: Application assistance for: <ul style="list-style-type: none"> • Site Plan Review • Rezoning • Major and Minor Subdivisions • Special Use Permits • Local Waterfront Revitalization Program (LWRP) Consistency Review • Telecommunication Towers • Commercial, Agricultural and Residential Windmills General Assistance with: <ul style="list-style-type: none"> • Zoning and Development issues • The New York State Environmental Quality Review (SEQR) Process • The Town of Evans Comprehensive Plan • Development in the Local Waterfront Revitalization Area • Agricultural Protection • Town of Evans Stormwater Management
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals is a seasoned board comprised of members with varied background and experience. The Zoning Board of Appeals is charged with addressing the requests by residents to either obtain an interpretation of the zoning ordinance or zoning map designation; appeal to a type of property use for something other than what is allowed; appeal for variance to a zoning ordinance; which is generally due to the size or location of a proposed new structure.
Planning Department	Yes	The role of planning in the Town of Evans has diversified to include issues related to long-term Comprehensive planning and zoning, as well as the day-to-day issues associated with growth and development. The Town has adopted a Comprehensive Plan, a Local Waterfront Revitalization Program and an Agricultural Protection Plan, and the implementation of the recommendations contained in these documents.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Commission makes recommendations to the Towns Board regarding open space conservation program, and conservation priorities for the Town of Evans.
Open Space Board/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Economic Development Commission/Committee	Yes	The Evans Town Board formed the Economic Development Advisory Committee in May 2002, to assist with development issues and implementation of the Master Plan. The Committee currently consists of 12-members from various professions such as: banking; legal; real estate; industrial development; local government; small business; and, health and human services. EDAC, a recommending committee, has been actively engaged in local economic development matters, working to enhance development opportunities in the Town of Evans. Most recently, EDAC has been involved in advancing the Residential Tax Enhancement Project as well as the Lake Erie Beach Neighborhood Revitalization Strategy.
Public Works/Highway Department	Yes	The main mission of the Highway Department is the maintenance and improvement of a network of approximately 140 lane miles of town highways for the safe operation of the motoring public. In recent years, the Department has taken on the additional task of new road construction. The Highway Superintendent is the custodian of the right-of-way. In addition to road maintenance, within the borders of the right-of-way, the department maintains drainage and the removal of brush and grass cutting. Recently, the Highway Department has added the service of residential brush pickup for town residents and the community. The department is accountable to keep four bridges in repair. During the winter months, the department is responsible for snow removal and ice control not only to the Town of Evans' 140 lane miles of town road, but also an additional 70 lane miles of County of Erie highways.
Construction/Building/Code Enforcement Department	Yes	It is the mission of the Code Enforcement Department of the Town of Evans to work in partnership with the Evans Town Board, Planning Division, Director of Community Development and the Police Department to promote and maintain a safe and desirable living and working environment. We help maintain or improve the quality of our community by administering a fair and unbiased enforcement program to correct violations of the Building Codes of New York, Municipal Codes, and land use requirements.
Emergency Management/Public Safety Department	Yes	Police Department
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED Emergency Alerts
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Responsibility of the Highway Department (see above)
Mutual aid agreements	Yes	-
Other	Yes	Climate Smart Committee Task Force
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Town Engineer



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	Town Engineer, Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Engineering
Emergency Manager	Yes	-
Grant writer(s)	Yes	Planning Department
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Evans.

Table 9.22-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Evans.

Table 9.22-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Managed by the Supervisor’s Office.



Outreach Resources	Available? (Yes/No)	Comment:
Personnel skilled or trained in website development	Yes	The Town Clerk currently manages website; however, the Town is in process of hiring a new communications person to handle website.
Hazard mitigation information available on your website	Yes	Available on the Planning and Building Dept pages.
Social media for hazard mitigation education and outreach	Yes	The town regularly uses its social media pages to communicate with residents about potential hazards.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Various Committees, including Drainage Committee that works to address flooding issues.
Other programs already in place that could be used to communicate hazard-related information	Yes	The town has developed an online Flood Reporting Systems connected to the town's website.
Warning systems for hazard events	Yes	See above
Natural disaster/safety programs in place for schools	Yes	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Evans.

Table 9.22-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	In Process	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	-
NYSDEC Climate Smart Community	In Process	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.22-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate





Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.22.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Evans.

Table 9.22-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Evans	106	100	\$450,489	24	71

Source: FEMA, 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town has identified areas within the Fern Brook and Muddy Creek Watersheds in the Lake Erie Beach and Grandview neighborhoods as flood prone areas within the town. Ice jams are frequent on Big Sister Creek in the Evans Center Neighborhood. There are numerous property owners within the town that are interested in flood mitigation projects for their properties and the town keeps this list to provide support. However, there have been no properties that have been mitigated by either elevation or acquisition. There are currently no RiskMAP projects being undertaken within the town. The town also notes that the flood hazard maps available to the town do not accurately address flood risk because they do not account for ice jam flooding.

Substantial Damage determinations are made by the Town Building Inspector, who determines a damage value threshold for the property.



NFIP Compliance

The Town of Evans Building Department is responsible for floodplain management. While there are certified floodplain managers (CFM) within the town, assistance for staff with a full overview of the Flood Assistance Program has been requested to support the floodplain management efforts. Barriers to an effective NFIP program include the employment of qualified personnel. The town reviews all floodplain building permit applications with engineering guidance and support from a retained engineering consultant. The Town Building Inspector determines if proposed developments qualify as “substantial improvements.” The Planning Board and Town Board both consider floodplains and take flood risk into account when developing codes and reviewing site plans.

There are currently no outstanding compliance issues within the town. The most recent Community Assistance Visit (CAV) was completed on March 16, 2020.

Chapter 113 of the Town of Evans Town Code details the local Flood Damage Prevention Ordinance, last amended on April 17, 2019. The floodplain management program meets minimum requirements. The town is in the process of joining the Community Rating System (CRS) program.

9.22.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Evans has identified the following routes and procedures to evacuate residents prior to and during an event.

- Any evacuation would be directed from town roads to county roads and finally to state roads (Routes 5 and 20) that are accessible. The NYS Thruway would be considered if necessary and possible. NYS detour routes would be used if necessary. Evacuation procedures and response plans are kept at the Police Department. These plans would be coordinated with NITTEC (Niagara International Transportation Technology Coalition) as well as other support local, county, and state agencies.

Sheltering

The Town of Evans has identified the following designated emergency shelters within the Town.

Table 9.22-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Highland VFC	1 George Nablo, Derby	250	Yes	Yes	Yes	Ambulance, basic first aid	Fire/Rescue
N Evans VFC	6980 Versailles, Derby	150	Yes	Yes	Yes	Basic first aid	Fire/Rescue
Evans Center VFC	8298 Erie Road, Angola	50	Yes	Yes	Yes	Ambulance – basic first aid	Fire/Rescue



Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Lake Erie Beach VFC	9483 Lake Shore, Angola	150	Yes	Yes	Yes	Ambulance – basic first aid	Fire/Rescue

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Evans has identified the following sites suitable for placing temporary housing units.

Table 9.22-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify Permanent Housing Locations. See Mitigation Action #2022-T. Evans-001.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Evans has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.22-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify Permanent Housing Locations. See Mitigation Action #2022-T. Evans-001.					

9.22.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.22-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.22-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	11	1	11	0	11	0	8	0	13	2	9	0
Multi-Family	0	0	0	0	1	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	2	0	4	0	1	0	5	0	6	0	4	0
Total Permits Issued	13	1	15	0	13	0	13	0	19	2	14	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
Autozone Parts, Inc	Comm	1		6919 Erie Rd 206.07-2-19	Wildland-Urban Intermix Hazard Area, NEHRP Soil Class E and E Hazard Area, ½ Mile Buffer from HazMat Roadways		Auto Parts Store					
Flexovit USA, Inc	Comm	2		1305 Eden Evans Center Rd 236.00-11-3.1	Unknown		Industrial					
Cradle Beach Camp, Inc	Comm	1		8038 Lake Shore Rd 220.00-1-1	Unknown		Dormitory, Completed October 2017					
Brandy Ownes	Comm	1		515 Herr Rd 250.08-5-1	Unknown		Store, Completed March 2018					
The Four Brits, LLC	Comm	1		459 Herr Rd 250.07-3-5	Unknown		Bar/Restaurant, Completed August 2018					
RTE Real Estate	Comm	3		7692 Southwestern Blvd 207.00-4-21.2	Unknown		Greenhouse, Completed June 2020					
Robert Warren	Comm	3		9545 Hardpan Rd 251.00-2-1.112	Unknown		Storage Units					
The Broadway Group, LLC	Comm	1		6889 Erie Rd 206.07-2-15	Unknown		Dollar General, Completed September 2019					
Marguerite Hogg	Comm	4		8712 Erie Rd 235.00-2-3.11	Unknown		Storage Units, Completed December 2020					
Angola Congregation of Jehovah's Witness	Comm	1		1100 Cain Rd	Unknown		Church, Construction in Progress					
Derby Warehousing, LLC	Comm	1		1393 Wisconsin Rd 206.00-4-9.1	Unknown		Warehouse, Completed November 2019					
1670 Southwestern Self Storage	Comm	6		1670 Eden Evans Center	Unknown		Storage Units, Completed November 2020					



Type of Development	2015	2016	2017	2018	2019	2020
			Rd 221.00-3-16.112			
Erie Woods Apartments, LLC	Comm	3	6622 Erie Rd 193.13-2-17	Unknown		Apartment Units, Completed November 2017
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Identified						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.22.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Evans’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Evans has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.22-1. Town of Evans Hazard Area Extent and Location Map 1

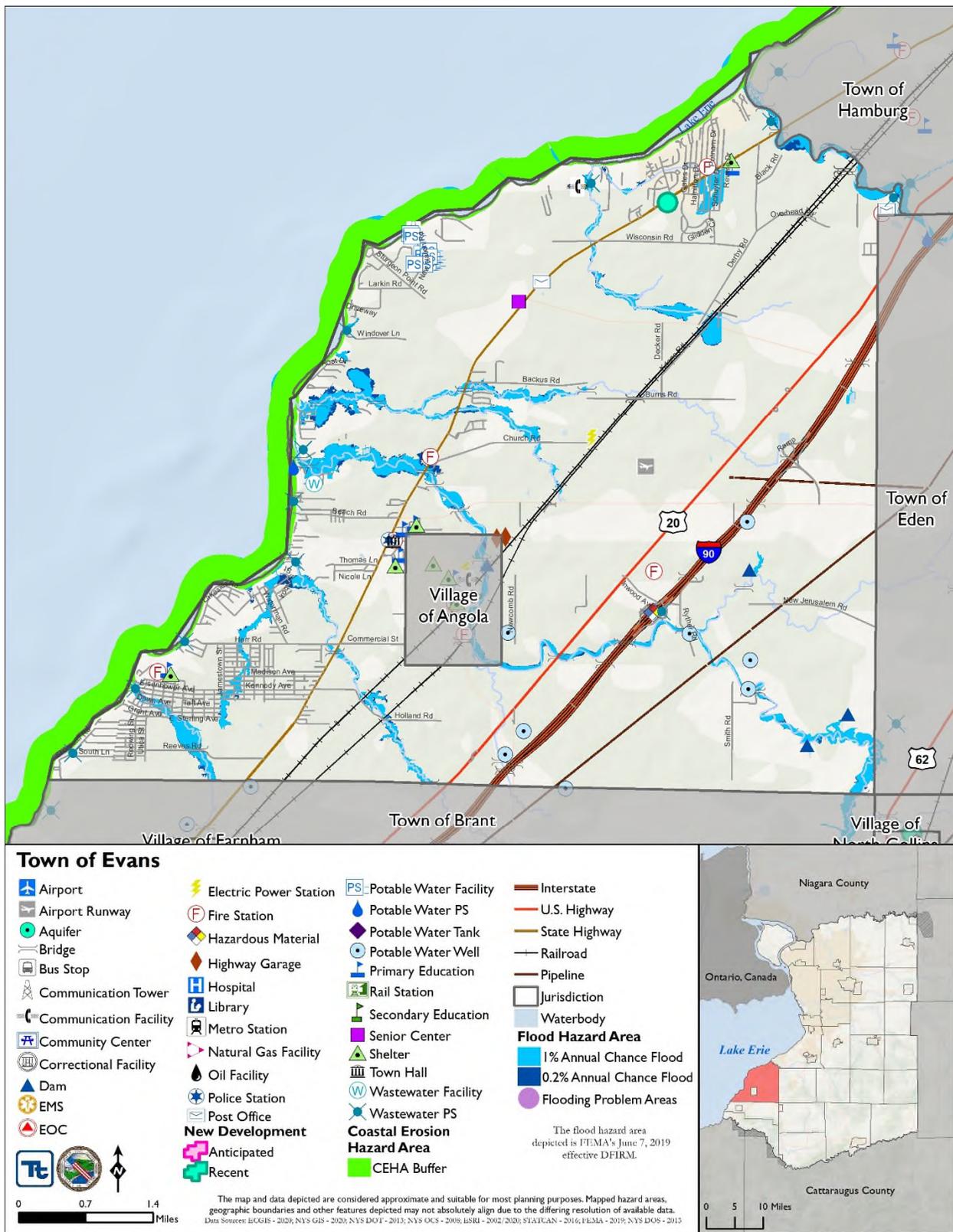




Figure 9.22-2. Town of Evans Hazard Area Extent and Location Map 2

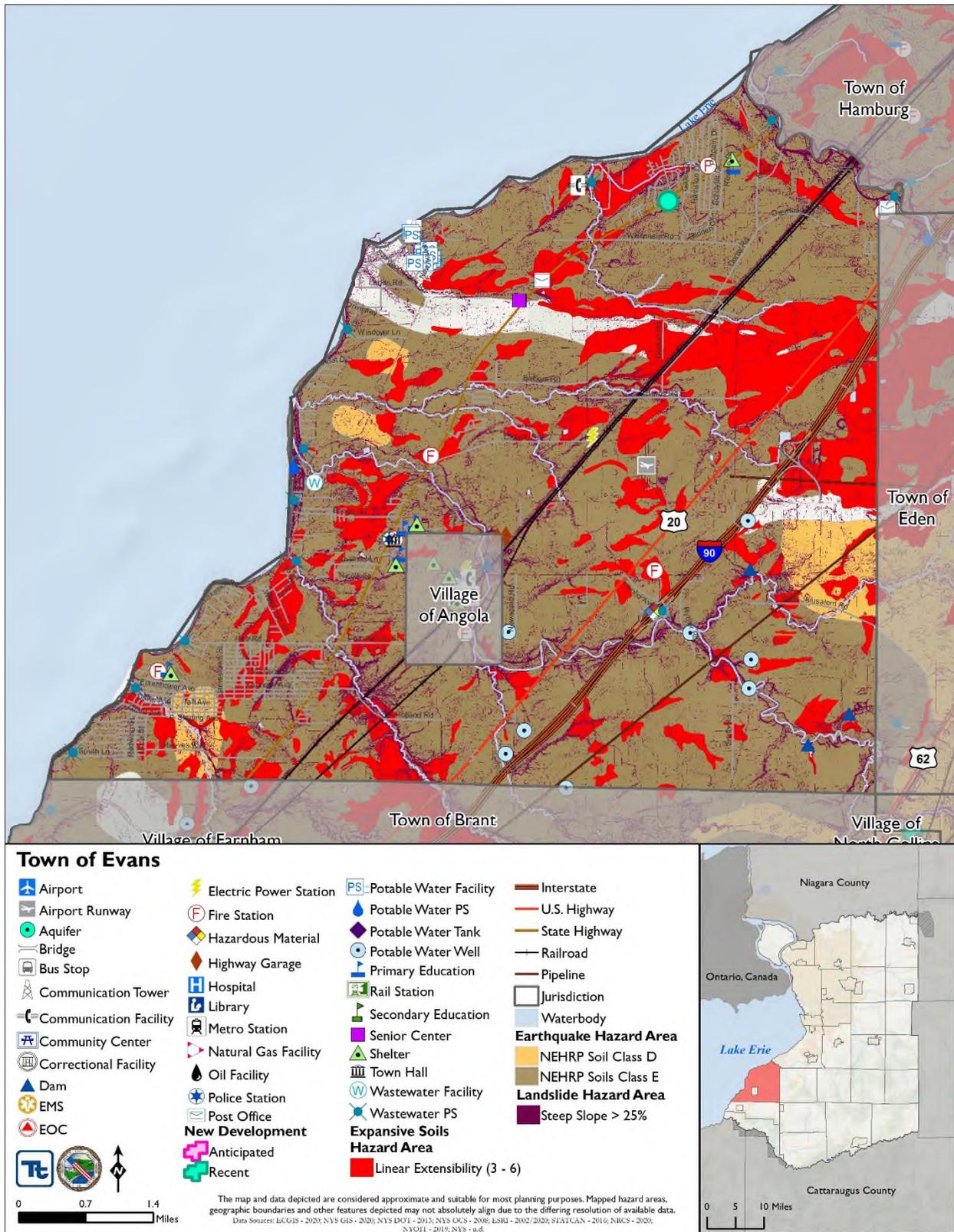
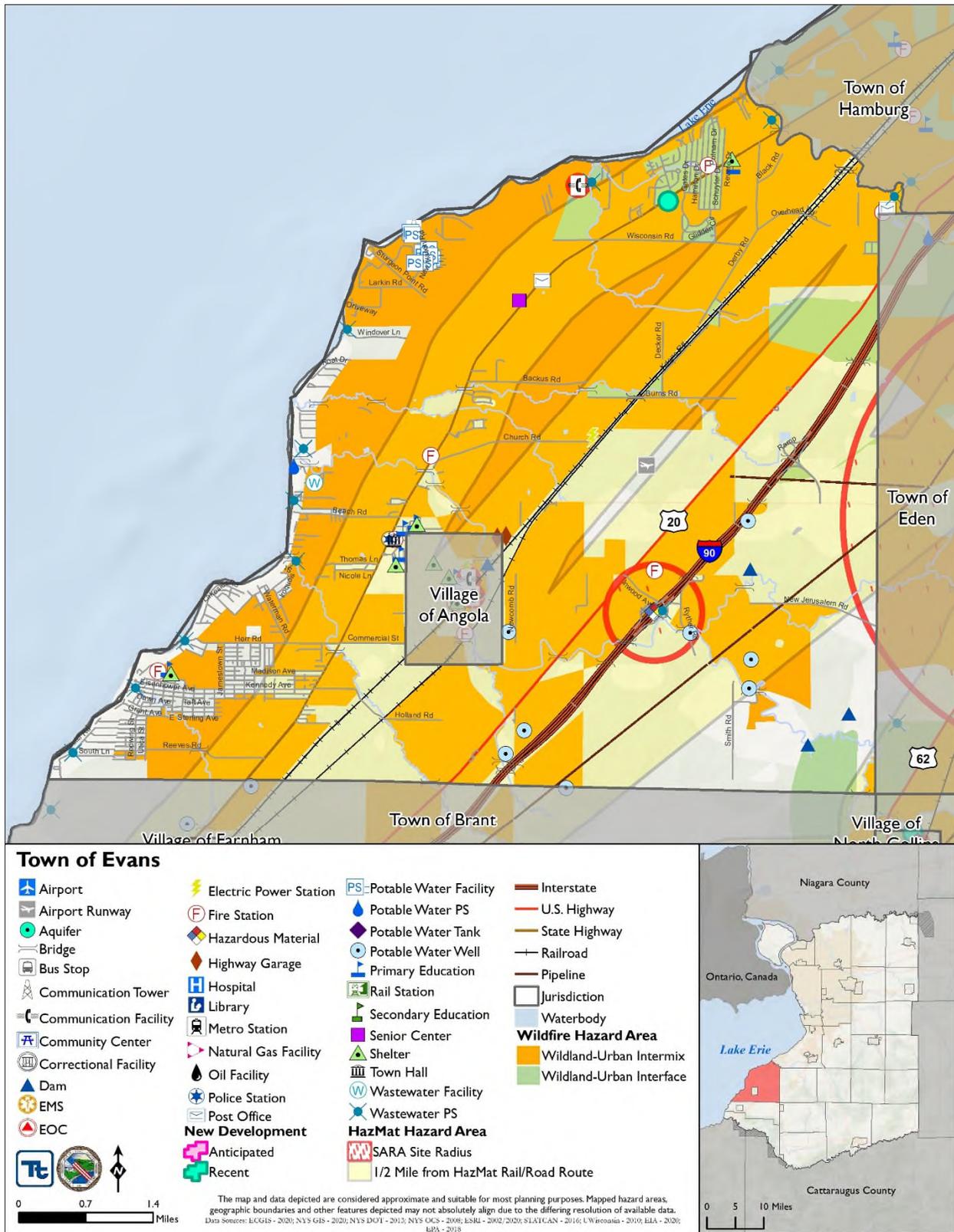




Figure 9.22-3. Town of Evans Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Evans’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.22-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.22-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	High Wind	No	A strong cold front, followed by strong winds impacted the coasts of Lake Erie and Ontario. Wind gusts were measured in excess of 60 mph.	In Evans Center, a tree was knocked down by the wind, cutting off a gas line to a home, then striking a car.
February 4, 2019	Flood	No	Record high temperatures occurred on February 4, resulting in almost total snow melt and ice break off on local rivers.	Route 5 was closed in Evans in both directions due to flooding of the Big Sister Creek.
October 27- November 1, 2019	Lakeshore Flooding and High Winds DR-4472-NY	Yes	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	<p>Lakeshore flooding occurred as a result of the storm due to wave action and wave run-up, particularly in lower elevation areas along the Lake Erie shoreline. Losses included the following:</p> <ul style="list-style-type: none"> • Damage to private property (seawalls, foundations, docks, etc.) in the amount of approximately \$750,000. • Damage to Evans Town Park fence in the amount of approximately \$15,000 • Damage to Lake Erie Beach Park (bridge and retaining wall) in the amount of approximately \$250,000 • Damage to Sturgeon Point Marina (breakwater, electrical, and revetment) in the amount of approximately \$2,850,000. • More than 500 NYSEG customers lost power in Evans and Angola.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 31- November 1, 2019	High Wind DR-4472-NY	Yes	See above	While high winds were also the cause of the above listed damage along the shoreline, both emergency and town wide debris removal from high winds (such as downed trees and limbs) was estimated at a cost of approximately \$200,000 to the town.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Evans’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Evans. The Town of Evans has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- In recent years, there has been ongoing and significant erosion of both public and private property along the Lake Erie shoreline due to record high water levels combined with strong winds, wave action, wave run-up in creeks and streams, and recurring seiches. This includes both shoreline erosion as well as streambank erosion around the outlets of several Lake Erie tributaries located in the Town of Evans. This coastal erosion has also been occurring around a number of public parks, impacting the quality of life for residents and local tourism economy.
- Historically, the frequency and intensity of earthquakes in the town has been extremely low. The town is not aware of any new and imminent threats that would warrant the high risk ranking, therefore it has been decreased to medium.



- An increase in the frequency of localized flooding has occurred throughout the town as a result of heavy rainfalls and inadequate stormwater infrastructure in certain areas. The most problematic in recent years has been the Fern Brook and Muddy Creek watersheds in the southern portion of the town, such as the Lake Erie Beach neighborhood. An increase in coastal flooding has also occurred due to high water levels and extreme winds resulting in wave action and wave-run up along several tributaries.
- Historically, the frequency and intensity of wildfires in the town has been extremely low. The town is not aware of any new and imminent threats that would warrant the high risk ranking, therefore it has been decreased to medium.

Table 9.22-15. Hazard Ranking Input

Coastal Erosion*	Cyber Attack	Earthquake*	Expansive Soils	Extreme Temperature	Flood*	Hazardous Materials
High	Medium	Medium	Medium	Medium	High	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire*	
Low	High	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.22-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Lake Bay Grove Wastewater Pump Station	Water	Yes	Yes	2022-T. Evans-002
Point Breeze #1 Wastewater Pump Station	Water	No	Yes	2022-T. Evans-002
Point Breeze #2 Wastewater Pump Station	Water	No	Yes	2022-T. Evans-002

Source: Effective DFIRM



Identified Issues

After review of the Town of Evans’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Evans has identified the following vulnerabilities within their community:

- There has been significant erosion of both public and private property along the Lake Erie shoreline due to record high water levels combined with strong winds and recurring seiches. This includes both shoreline erosion as well as streambank erosion around the outlets of several Lake Erie tributaries located in the Town of Evans, such as Muddy Creek.
- Extreme wind storms have increased in magnitude and frequency causing significant damage along the Lake Erie shoreline as well as throughout the town. Shoreline damage in the form of coastal erosion has occurred from more extreme winds and subsequent wave action as well as wave run-up along several tributaries. Extreme wind damage has also occurred throughout the entire town in the form of downed trees and general property damage.
- An increase in the frequency of localized flooding has occurred throughout the town as a result of heavy rainfalls and inadequate stormwater infrastructure in certain areas. The most problematic in recent years has been the Fern Brook and Muddy Creek watersheds in the southern portion of the town, such as the Lake Erie Beach neighborhood. An increase in coastal flooding has also occurred due to high water levels and extreme winds resulting in wave action and wave-run up along several tributaries.
- There has been an increase in ice jams in recent years resulting in localized flooding along Big Sister Creek.
- An increase in wave action and wave run-up along the shoreline and several Lake Erie tributaries in the town has led to significant damage to the lakefront properties (including public facilities) as well as acceleration of streambank erosion issues.
- While not necessarily an increase in frequency, there has been an increase in the overall intensity of winter storms in terms of both heavy snowfall and high winds.
- Flood-prone areas include:
 - Localized flooding throughout the Muddy Creek watershed in the Lake Erie Beach neighborhood.
 - Coastal flooding and erosion due to wave-run up at the mouth of Muddy Creek.
 - Localized flooding throughout the Fern Brook watershed in the Lake Erie Beach and Grandview neighborhoods.
 - Localized flooding around the Pike Creek watershed in the Derby neighborhood.
 - Ice jamming and upstream flooding occurring on Big Sister Creek near Evans Center.
 - Flooding and erosion of Lake Erie coastal neighborhoods such as Shore Meadows, Lake Erie Beach, Grandview Bay, and Angola on the Lake
 - Flooding and erosion Lake Erie coastal public facilities such as Sturgeon Point Marina, Evans Town Park, Lake Erie Beach Park (town-owned), Wendt Beach County Park and Bennet Beach County Park.

9.22.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own



table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.22-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
1	Creeks and stream clean out	Flooding	LEBVFC and Highway Dept.	Help low area not flood	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-003 2. The town is working with Erie County Soil and Water to identify areas of local creeks and streams in need of clearing. The town is also embarking on a comprehensive drainage study of the Fern Brook and Muddy Creek watersheds, which will also include recommendations for stream clearing and debris removal. Responsible parties are Planning, Engineering and Highway Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Program to update public about disasters	All Hazards	LEBVFC	Help get word out on what to do in a disaster	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-004 2. Town is working with both online and print materials to spread information about flood mitigation and to quickly notify residents of potential flood issues/events. Responsible parties are Planning, Community Development, Code Enforcement, Fire and Police Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-005 2. Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-006 2. Town is working to address new pending FIRMs which resulted in FEMA's recent Coastal Mapping of Great Lakes Communities to include wave run-up.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-007 2. Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
6	Join the Community Rating System (CRS)	Flooding	Building Dept.	Not Identified	In Progress	-	-	1. Include in 2022 HMP as 2022-T. Evans-008 2. The town has been working with NYSDEC Western Flood Hub representative and Erie County Dept of Env and Planning to address any outstanding violations (complete), and to now register, build resources, and develop an initial ranking in the CRS program. Responsible parties are Planning, Code Enforcement and Engineering Depts.
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Evans has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

Mitigation Action	Responsible Party / Lead Agency	Comments/Details
Shoreline Management Solutions at Lake Erie Beach	Planning, Engineering and Parks Depts.	In-progress – The goal of the Plan is to identify innovative strategies and sustainable shoreline management practices, including both nature-based and structural alternatives. Funded in part by the NYSDEC and town.
Mitigation Enhancements to Sturgeon Point Marina Breakwater	Planning, Engineering and Parks Depts.	In-progress – Town is currently working on repair and design of mitigation measures to help ensure the long-term stability of the western Sturgeon Point Marina Breakwater which protects the public harbor. This is also a project under review with FEMA from the October 31, 2019 storm. Partially funded by, NYSDOS, ESD and the town.
Townwide Drainage Study	Planning and Engineering Depts.	The town has developed a scope of work and applied for funding for a town-wide drainage study. The initial focus will be on the Fern Brook and Muddy Creek watersheds which historically have been the most problematic. Funding application currently submitted to FEMA.
Online Flood Reporting System	Planning and Engineering Depts.	The town has created an online tool for flood reporting, text notifications, and educational materials on preparedness and mitigation. Includes GIS mapping of reported flooding issues and known hazards. Partially funded by the Lake Erie Watershed Protection Alliance (LEWPA).
Revisions to Drainage Code	Planning, Engineering and Code Enforcement Depts.	The town has completed a first draft of a revision to Section 200. Article XII. Stormwater Management of the Evans Town Code in order to help address drainage issues associated with impacts of new development on drainage issues.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Evans participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.



Table 9.22-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	X	X	X		X	X	X	X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X		X	X			X	X		X
Severe Winter Storm	X		X	X			X	X		X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.22-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Evans would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.22-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Evans-001	Permanent and Temporary Housing	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.</p>	No	No	Short	Town of Evans, Erie County	Low-Medium	High, ensures locations for alternative housing during and after hazards	Municipal Budget, NYSDHSES	High	LRP	ES
2022-T. Evans-002	Wastewater Pump Station Flood Mitigation	1, 2, 3	Flood	<p>Problem: The Lake Bay Grove Wastewater Pump Stations is located within the 1% SFHA (100-year floodplain), and the Point Breeze #1 and #2 Pump Stations are located within the 0.2% SFHA (500-year floodplain).</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility 	Yes 💧	No	Short	Town of Evans DPW	Medium-High	High, reduces flooding at critical facilities	FMA, CDBG	High	SIP	SP



Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<ul style="list-style-type: none"> Floodproofing of facility Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-T. Evans-003	Creeks and Stream Clean Out	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Creeks and streams within the town become infiltrated with debris during and after storm events and cause additional flooding and damages.</p> <p>Solution: The town is working with Erie County Soil and Water to identify areas of local creeks and streams in need of clearing. The town is also embarking on a comprehensive drainage study of the Fern Brook and Muddy Creek watersheds, which will also include recommendations for stream clearing and debris removal. Responsible parties are Planning, Engineering and Highway Depts.</p>	No	No	Short	Town of Evans, Erie County SWCD	Medium	High, reduces flooding	FMA, Municipal Budget, NYSDEC	High	NSP	NR
2022-T. Evans-004	Disaster Public Information Campaign	1, 2, 3	All Hazards	<p>Problem: The town does not have a consolidated program or site to provide disaster information to residents.</p> <p>Solution: Town is working with both online and print materials to spread information about flood mitigation and to quickly notify residents of potential flood issues/events. Responsible parties are Planning, Community Development, Code Enforcement, Fire and Police Depts. There are currently 200 residents signed up for online alerts. The town will add information to the newsletter about alerts and safety during hazard events.</p>	No	No	Short	Planning, Community Development, Code Enforcement, Fire and Police Depts	Low	High, ensures life safety of residents	Municipal Budget	High	EAP	PI



Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Evans-005	Increase Floodplain Management Capabilities	1, 2	Flood	<p>Problem: The town wants to increase staff to enforce NFIP regulations and floodplain management ordinances.</p> <p>Solution: Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.</p>	No	No	Short	Code Enforcement and Engineering	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-006	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1, 2, 3	Flood, Coastal Erosion	<p>Problem: As FEMA releases new information and FIRMs, the town needs to update their ordinances.</p> <p>Solution: Town is working to address new pending FIRMs which resulted in FEMA's recent Coastal Mapping of Great Lakes Communities to include wave run-up. Once FIRMs are updates, Fern Brook will be updated after the completion of an H&H study.</p>	No	No	Short	Building Department	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-007	CFM Certifications	1, 2, 3	Flood	<p>Problem: The town does not have a CFM on staff.</p> <p>Solution: Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.</p>	No	No	Short	Building Department, Engineer	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-008	Join the Community Rating System (CRS)	1, 2, 3	Flood	<p>Problem: The town does not participate in the CRS. The town has been working with NYSDEC Western Flood Hub representative and Erie County Dept of Env and Planning to address any outstanding violations (complete).</p> <p>Solution: The town will now register, build resources, and develop an initial ranking in the CRS program.</p>	No	No	Short	Building Department, Engineer	Low	High, increases town capabilities, reduces costs of flood insurance for residents	Municipal Budget	High	LPR	PR



Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Responsible parties are Planning, Code Enforcement and Engineering Depts.										
2022-T. Evans-009	Repetitive Loss Outreach	1, 2, 3	Flood	<p>Problem: There are 24 Repetitive Loss properties within the town; and 74 NFIP policy holders living within the 1% flood boundary (100 year floodplain).</p> <p>Solution: The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	Short	Building Department, Engineering	Low to conduct outreach	High	Municipal Budget	High	EAP	PI
2022-T. Evans-010	Drainage Study	1, 2, 3	Coastal Erosion, Flood, Severe Storm, Severe Winter Storm	<p>Problem: The town is in the process of completing a drainage study to address flooding concerns during storms and potential damages.</p> <p>Solution: Upon completion of the study, the town will work to seek funding to implement recommendations. Recommendations include paving 24 roads in the Lake Erie Beach Area, and revitalization of the area. The town will also address loss of trees from storms by improving vegetation and adding green infrastructure solutions where drainage has become an increasing issue.</p>	No	No	Short	Building Department, Engineering	High	High, reduces flooding and damages	FMA, HMA, HMGP, CDBG	High	LPR, SIP, NSP	PI, SP, NR

Notes:

Not all acronyms and abbreviations defined below are included in the table.





Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.22-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Evans-001	Permanent and Temporary Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Evans-002	Wastewater Pump Station Flood Mitigation	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	110	High
2022-T. Evans-003	Creeks and Stream Clean Out	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2022-T. Evans-004	Disaster Public Information Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-T. Evans-005	Increase Floodplain Management Capabilities	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-006	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-T. Evans-007	CFM Certifications	1	1	1	1	1	1	1	1	1	1	0	1	1	1	14	High
2022-T. Evans-008	Join the Community Rating System (CRS)	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-009	Repetitive Loss Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-010	Drainage Study	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.22.9 Action Worksheets

The following action worksheets have been developed by the Town of Evans to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Wastewater Pump Station Flood Mitigation		
Project Number:	2022-T. Evans-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Lake Bay Grove Wastewater Pump Stations is located within the 1% SFHA (100-year floodplain), and the Point Breeze #1 and #2 Pump Stations are located within the 0.2% SFHA (500-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	High, reduces flooding at critical facilities
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	Medium-High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	1-2 years	Potential Funding Sources:	FMA, CDBG
Responsible Organization:	Town of Evans DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate pump stations	\$500,000	Not cost effective
	Decommission pump stations	N/A	Not feasible, remaining stations cannot handle capacity needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Wastewater Pump Station Flood Mitigation	
Project Number:	2022-T. Evans-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at critical facilities
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	Town supports project
Legal	1	
Fiscal	-1	Town will seek funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Drainage Study		
Project Number:	2022-T. Evans-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Coastal Erosion, Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The town is in the process of completing a drainage study to address flooding concerns during storms and potential damages.		
Action or Project Intended for Implementation			
Description of the Solution:	Upon completion of the study, the town will work to seek funding to implement recommendations. Recommendations include paving 24 roads in the Lake Erie Beach Area, and revitalization of the area. The town will also address loss of trees from storms by improving vegetation and adding green infrastructure solutions where drainage has become an increasing issue.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces flooding and damages
Useful Life:	30 years	Goals Met:	1, 2, 3
Estimated Cost:	High	Mitigation Action Type:	Local Plans and Regulation, Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on Funding
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FMA, HMA, HMGP, CDBG
Responsible Organization:	Building Department, Engineering	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	\$250,000	May not solve drainage issues
	Build retention walls	\$250,000	Will not solve drainage issues, town relies on tourism at beach
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Drainage Study	
Project Number:	2022-T. Evans-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flooding to homes
Property Protection	1	Protects lakefront property
Cost-Effectiveness	1	
Technical	1	
Political	1	Town supports
Legal	1	
Fiscal	-1	Will need to seek funding
Environmental	0	
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	Flood, winter storms, coastal erosion
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



9.23 Village of Farnham

This section presents the jurisdictional annex for the Village of Farnham. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Farnham’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.23.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Farnham’s hazard mitigation plan primary and alternate points of contact. The Village of Farnham followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Mayor’s Office, Clerk, and Department of Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.23-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Jere R. Hoisington, Mayor Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhammayor@roadrunner.com	Name/Title: Jackie Hoisington, Clerk Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhamclerk@farnham.brantny.com
NFIP Floodplain Administrator	
Name/Title: Ellsworth Nolan, DPW Supervisor Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhamclerk@farnham.brantny.com	

9.23.2 Municipal Profile

The Village of Farnham is a semi-rural community that is located about 25 miles southwest of downtown Buffalo. The village is one square mile in size and is located wholly within the Town of Brant. The Village of Farnham is located in the western part of the Town of Brant, north of the Cattaraugus Reservation and southeast of Evangola State Park. The village incorporated in 1892 and is named after Leroy Farnham, a local landowner and merchant (Village of Farnham website, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Farnham was 382. The estimated 2019 population was 459, a 20.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 7.0 percent of the population is 5 years of age or younger and 12.0 percent is



65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.23.3 Jurisdictional Capability Assessment and Integration

The Village of Farnham performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.23.3). The Village of Farnham’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Farnham. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.23-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL No1-2007, section 1-19	Local	Code Enforcement
Comments: NYS Uniform and Energy Code 2020					
Zoning Code	Yes	Yes	101 – Zoning, 05/13/1989	Local	Code Enforcement
Comment: None					
Subdivision Ordinance	Yes	Yes	101-24, 05/13/1989	Local	Code Enforcement and Planning Board
Comment: None					
Stormwater Management Ordinance	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	No	Zoning 05/13/1989, Section 101	Local	Planning
• Comment: None					
Environmental Protection Ordinance	No	No	Chapter 86	Local	Code Enforcement
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	-	Local	-
Comment: None					
Municipal Separate Storm Sewer System (MS4)	Yes	No	Not Indicated	State	NYSDOT
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: None					
Capital Improvement Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	Yes	No	Not Indicated	Local	Village Emergency Management
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Farnham to oversee and track development.

Table 9.23-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Farnham and their current responsibilities which contribute to hazard mitigation.



Table 9.23-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	No Comment
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	No Comment
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Exterior Fire Siren System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW maintains drainage within village
Mutual aid agreements	Yes	Fire and EMS Services
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	DPW Supervisor
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Mayor
Resilience Officer	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Farnham.

Table 9.23-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Farnham.

Table 9.23-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	https://www.brantny.com/Farnham.php
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-



Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Farnham.

Table 9.23-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.23-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use



Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.23.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Ellsworth Nolan, DPW Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Farnham.

Table 9.23-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Farnham	1	5	\$20,817	3	0

Source: FEMA 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village did not indicate any areas prone to flooding within the jurisdictions. There are no current RiskMAP projects underway and the village does not maintain a list of property owners interested in flood mitigation. There have been no mitigated properties in the village through wither elevation or acquisition. According to FEMA, there are no SFHAs within the village at time of publication.

NFIP Compliance

The Village Department of Public Works is responsible for floodplain management. The Floodplain Management Program for the village satisfies NFIP regulations. There are no Certified Floodplain Managers within the village, and the village does not need any assistance or trainings to support the floodplain management program. The Village Planning, Board, Zoning Board, and Building Inspector determine is proposed developments are substantial improvements. There are no outstanding compliance issues and the last Community Assistance Contact (CAC) was on June 20, 2007.

9.23.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Farnham has identified the following routes and procedures to evacuate residents prior to and during an event.

- Routes 5 and 20





- Commercial Street (Route 249)

Sheltering

The Village of Farnham has identified the following designated emergency shelters within the Village.

Table 9.23-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Village Hall	Commercial Street	100	Yes	Yes	Yes	Fire/EMS	Kitchen/Generator

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Farnham has identified the following sites suitable for placing temporary housing units.

Table 9.23-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Park	Commercial Street	5	Park Land	Water, electric, septic	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Farnham has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.23-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Park	Detroit Street	5	Vacant Lot	Water, electric, Septic	None

9.23.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.23-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.23-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	1	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	6	0	8	0	10	0	1	0	3	0	4	0
Total Permits Issued	6	0	8	0	10	0	1	0	4	0	5	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Indicated												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.23.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Farnham’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Farnham has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.23-1. Village of Farnham Hazard Area Extent and Location Map 1

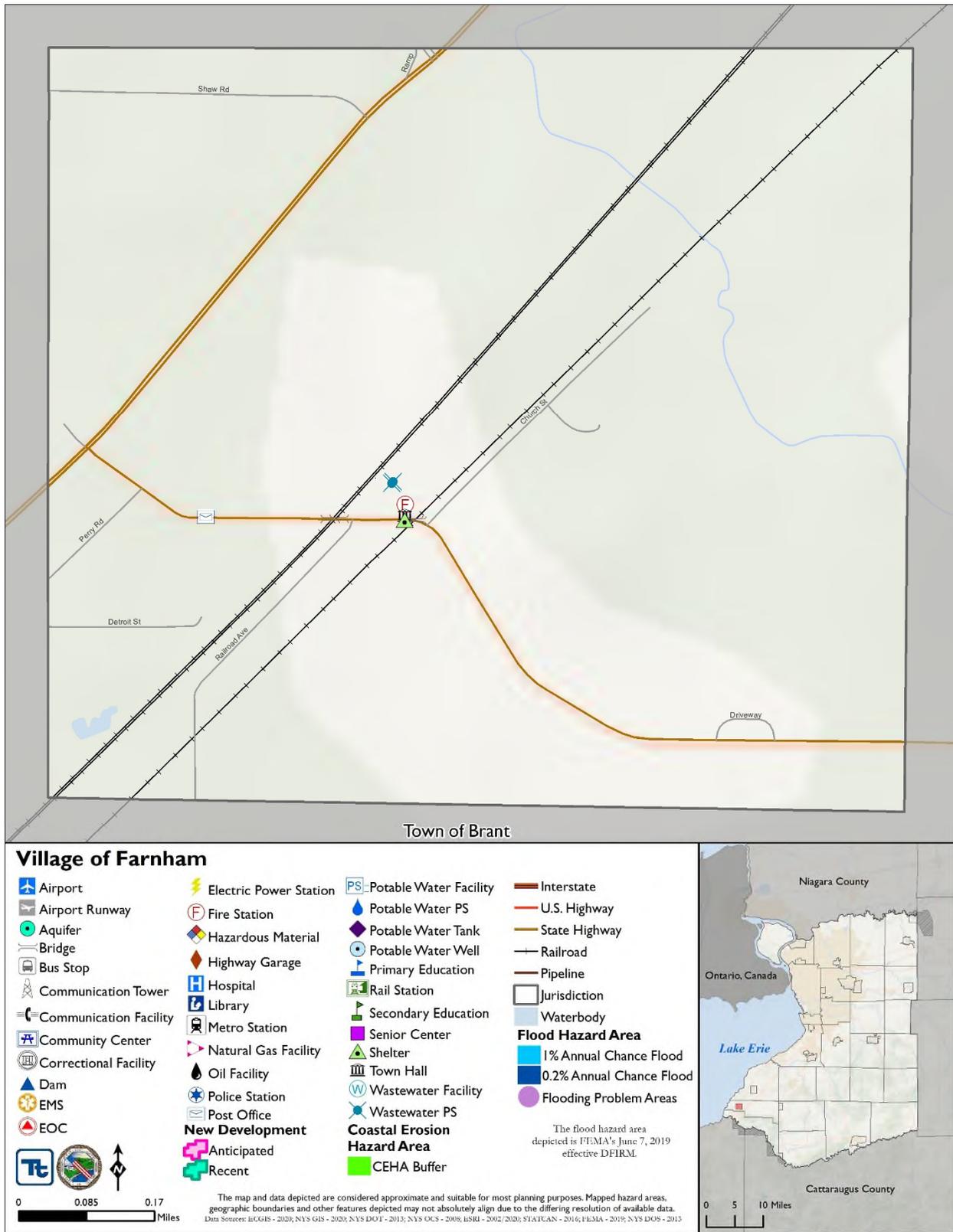




Figure 9.23-2. Village of Farnham Hazard Area Extent and Location Map 2

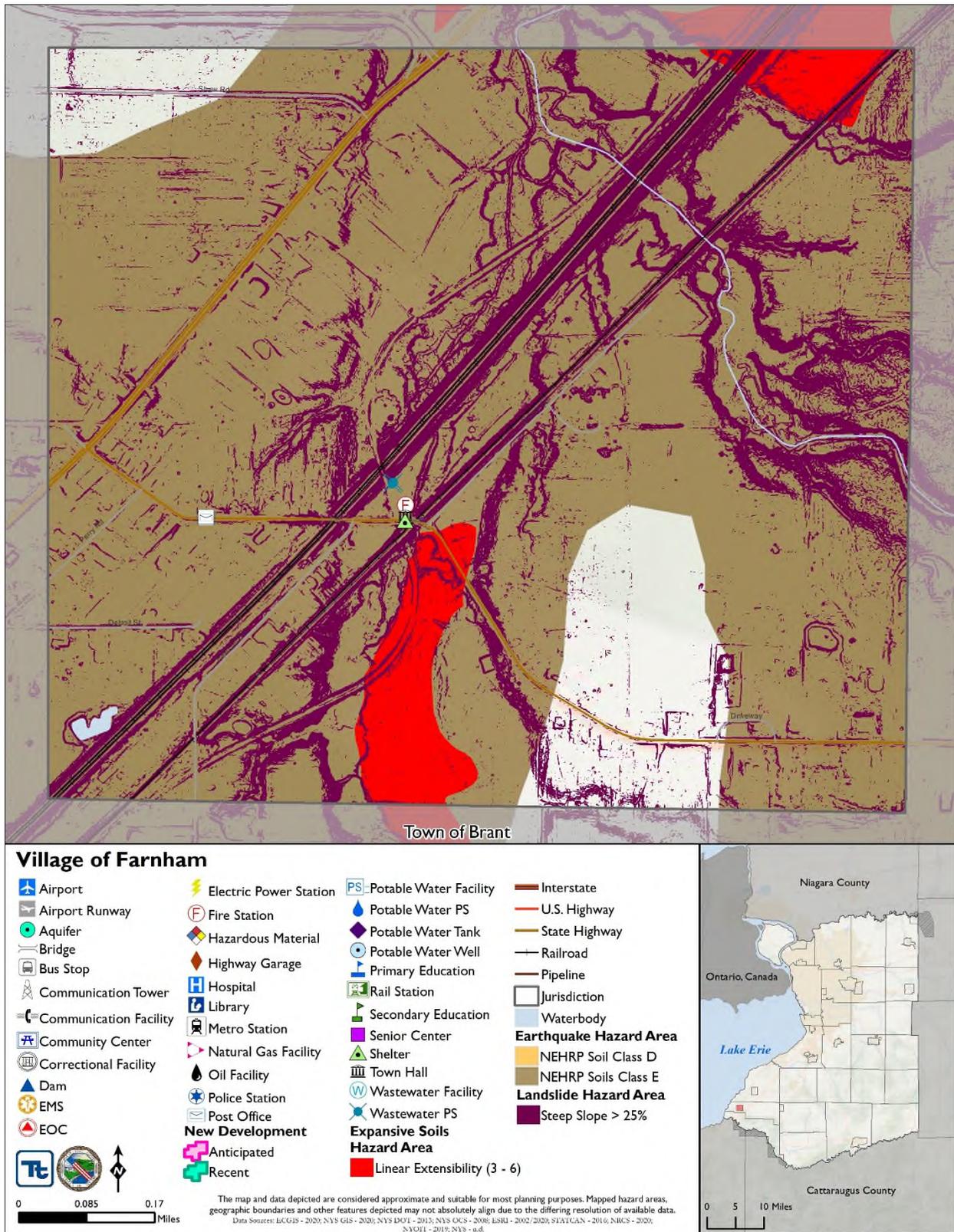
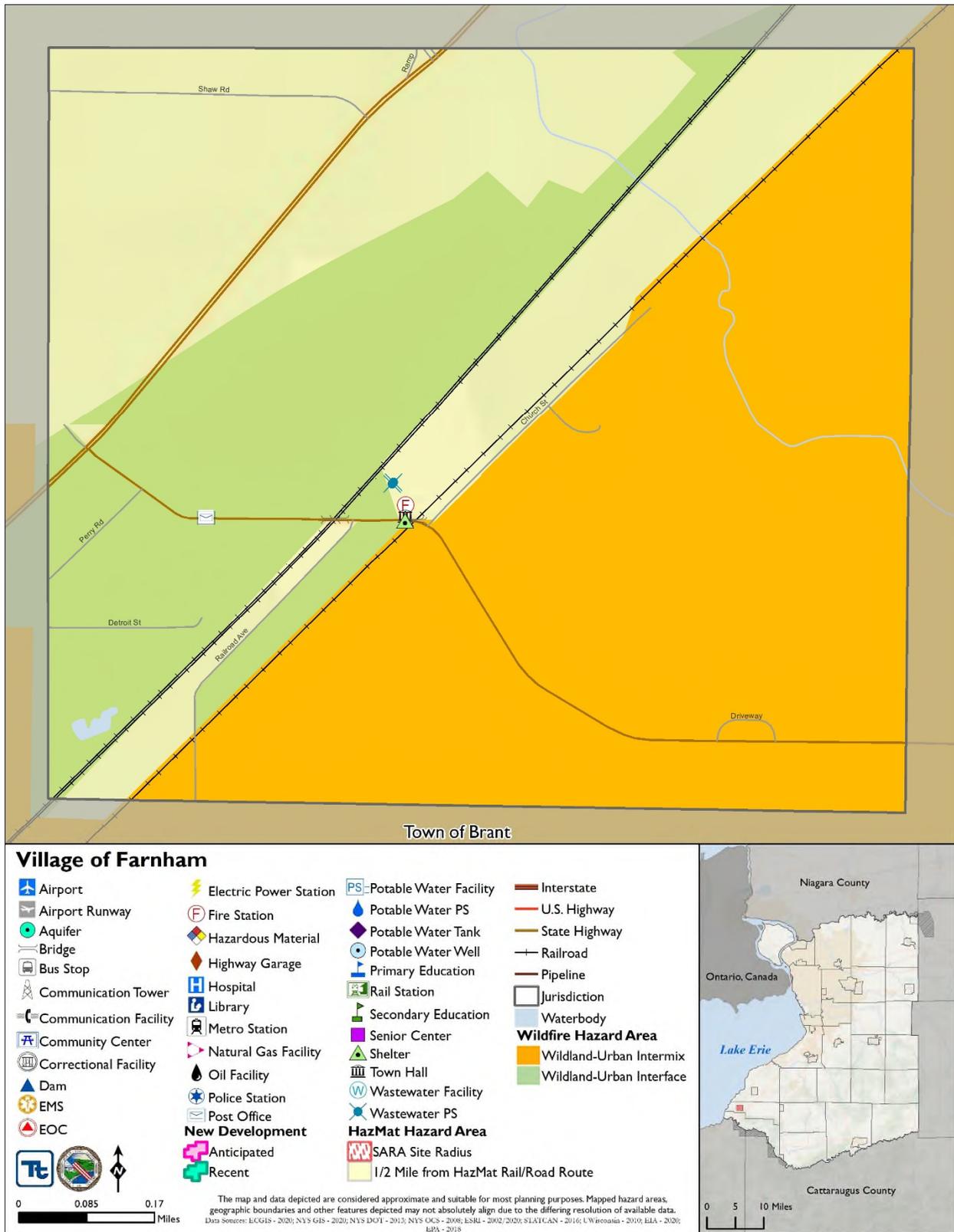




Figure 9.23-3. Village of Farnham Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Farnham’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.23-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.23-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No municipal damages reported
August 11-15, 2015	Flash Flood	No	No municipal damages reported
October 28-29, 2015	High Wind	No	No municipal damages reported
November 6, 2015	Thunderstorm Wind	No	No municipal damages reported
November 12, 2015	High Wind	No	No municipal damages reported
November 18, 2015	High Wind	No	No municipal damages reported
January 11, 2017	High Wind	No	No municipal damages reported
March 8, 2017	High Wind	No	No municipal damages reported
March 13, 2017	Winter Storm	No	No municipal damages reported
July 20, 2017	Tornado	No	No municipal damages reported
August 4, 2017	Thunderstorm Wind	No	No municipal damages reported
December 10-15, 2017	Lake-effect Snow	No	No municipal damages reported
December 24-29, 2017	Lake-effect Snow	No	No municipal damages reported
January 2, 2018	Blizzard	No	No municipal damages reported
October 6, 2018	Lightning	No	No municipal damages reported
February 24, 2019	High Wind	No	No municipal damages reported
February 24, 2019	Lakeshore Flooding	No	No municipal damages reported
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	No municipal damages reported
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	No municipal damages reported
November 27, 2019	Lakeshore Flooding	No	No municipal damages reported
January 12, 2020	Lakeshore Flooding	No	No municipal damages reported
January 18, 2020	Lakeshore Flooding	No	No municipal damages reported

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Farnham’s risk assessment results and data used to determine the hazard ranking.





Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Farnham. The Village of Farnham has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.23-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.23-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: Effective DFIRM





Identified Issues

After review of the Village of Farnham’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Farnham has identified the following vulnerabilities within their community:

- HazMat situation due to Village Hall (emergency Shelter) and Fire/EMS equipment being situated between two sets of railroad tracks. Increased traffic on railways make the village susceptible to “lock out” event as a result of spill or derailment.

9.23.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.

Table 9.23-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)	Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
The Village of Farnham had no projects identified as part of the 2015 HMP.							

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Farnham has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Farnham participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.



Table 9.23-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils										
Extreme Temperature										
Flood										
Hazardous Materials	X	X			X				X	X
Landslide										
Pandemic										
Severe Storm	X	X			X			X		
Severe Winter Storm	X	X			X			X		
Utility Failure	X	X			X			X		
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.23-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Farnham would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.23-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.23-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	GRS Category
2022-V. Farnham-001	Tree Trimming and Maintenance	1, 2	Severe Storm, Severe Winter Storm, Utility Failure	<p>Problem: During storm events, downed trees can cause road closures and property damages.</p> <p>Solution: The village will develop a maintenance program to monitor dead trees and remove branches before and after storm events to reduce property damages and power outages.</p>	No	No	Ongoing once established	Village of Farnham DPW	Medium	High	Municipal Budget, HMGP	High	LPR, NSP	PR, NRP
2022-V. Farnham-002	Village Hall Vulnerability Study	1, 2	Hazardous Materials	<p>Problem: Village Hall (emergency Shelter) and Fire/EMS equipment is situated between 2 sets of railroad tracks. Increased traffic on railways make us susceptible to “lock out” event as a result of spill or derailment.</p> <p>Solution: The village will conduct a vulnerability assessment of the Village Hall and Fire/EMS building to determine risk posed by the location proximity to the railroads and the possibility of “lock outs.” If determined to pose increased risk, the village will seek to relocate the Village Hall and Fire/EMS equipment away from the risk to train and hazmat transportation accidents to ensure operations of government and emergency services during hazards.</p>	Yes	No	Short	Village of Farnham	Low to conduct study, High to relocate building	High, ensures continuity of operations	Municipal Budget, HMGP	High	LPR, SIP	PR, SP, ES
2022-V. Farnham-003	Critical Facility Vegetation Management	1, 2	Wildfire	<p>Problem: The Village Hall, fire station, and wastewater pump station are near wooded areas. In the case of the pump station and Village Hall, trees from the nearby wooded areas actually touch the structures. This puts these critical facilities at risk of burning during a wildfire/brush fire affecting those wooded areas.</p> <p>Solution: The village will assess the vegetation around each critical facility and manage that vegetation as necessary to reduce the risk of fire</p>	Yes	Yes	Within 6 months	Village of Farnham DPW	Low	High	Municipal Budget	High	NSP	PR



Table 9.23-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				spreading from the wooded areas to the structures.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.





- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NRP) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.23-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Farnham-001	Tree Trimming and Maintenance	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
2022-V. Farnham-002	Village Hall Vulnerability Study	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-V. Farnham-003	Critical Facility Vegetation Management	1	1	1	1	1	1	1	0	0	1	0	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.23.9 Action Worksheets

The following action worksheets have been developed by the Village of Farnham to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Action Worksheet			
Project Name:	Tree Trimming and Maintenance		
Project Number:	2022-V. Farnham-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	During storm events, downed trees can cause road closures and property damages.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will develop a maintenance program to monitor dead trees and remove branches before and after storm events to reduce property damages and power outages.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Medium	Mitigation Action Type:	Local Plans and Regulations, Natural Systems Protections
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months
Estimated Time Required for Project Implementation:	Ongoing once established.	Potential Funding Sources:	Municipal Budget, HMGP
Responsible Organization:	Village of Farnham DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Ask residents to alert village to dangerous trees.	\$1,000	Reactive. Likely to miss most trees.
	Remove all trees along areas with powerlines and property	N/A	Not feasible/environmentally damaging
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Tree Trimming and Maintenance	
Project Number:	2022-V. Farnham-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces power outages
Property Protection	1	Reduces property damages from falling trees
Cost-Effectiveness	1	
Technical	1	DPW
Political	1	
Legal	1	
Fiscal	1	Ongoing as part of DPW Capabilities
Environmental	0	Risk for over-trimming
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Severe Winter Storm, Utility Failure
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Village Hall Vulnerability Study		
Project Number:	2022-V. Farnham-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Hazardous Materials		
Description of the Problem:	Village Hall (emergency Shelter) and Fire/EMS equipment is situated between 2 sets of railroad tracks. Increased traffic on railways make us susceptible to “lock out” event as a result of spill or derailment.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will conduct a vulnerability assessment of the Village Hall and Fire/EMS building to determine risk posed by the location proximity to the railroads and the possibility of “lock outs.” If determined to pose increased risk, the village will seek to relocate the Village Hall and Fire/EMS equipment away from the risk to train and hazmat transportation accidents to ensure operations of government and emergency services during hazards.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures continuity of operations
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Low to conduct study, High to relocate building	Mitigation Action Type:	Local Plans and Regulations, Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	1-2 years	Potential Funding Sources:	Municipal Budget, HMGP
Responsible Organization:	Village of Farnham	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Reroute railroad	N/A	Not feasible
	Decommission railroad	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Village Hall Vulnerability Study	
Project Number:	2022-V. Farnham-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures operation of Fire/EMS
Property Protection	1	Reduces hazmat exposure at village hall
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	Village will seek funding if need to relocate
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Hazardous materials
Timeline	1	
Agency Champion	1	Mayor
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Critical Facility Vegetation Management		
Project Number:	2022-V. Farnham-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Wildfire		
Description of the Problem:	The Village Hall, fire station, and wastewater pump station are near wooded areas. In the case of the pump station and Village Hall, trees from the nearby wooded areas actually touch the structures. This puts these critical facilities at risk of burning during a wildfire/brush fire affecting those wooded areas.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will assess the vegetation around each critical facility and manage that vegetation as necessary to reduce the risk of fire spreading from the wooded areas to the structures.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High
Useful Life:	N/A	Goals Met:	1, 2
Estimated Cost:	Low	Mitigation Action Type:	Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 6 months
Estimated Time Required for Project Implementation:	One month from initiation	Potential Funding Sources:	Municipal Budget
Responsible Organization:	Village of Farnham DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Risk of wildfire/brush fire remains
	Relocate critical facilities	High	Cost prohibitive
	Remove all trees near critical facilities	Low	Greater damage to the environment than targeted vegetation management around the facilities
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Critical Facility Vegetation Management	
Project Number:	2022-V. Farnham-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



9.24 Village of Gowanda

This section presents the jurisdictional annex for the Village of Gowanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Gowanda’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.24.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Gowanda’s hazard mitigation plan primary and alternate points of contact. The Village of Gowanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: the Mayor, Deputy Mayor, and Disaster Coordinator. The Deputy Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.24-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Carol Sheibley, Deputy Mayor Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-532-3494 Email: csheib@verizon.net	Name/Title: Nicholas Crassi, Disaster Coordinator Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-640-2707 Email: racernick07@earthlink.net
NFIP Floodplain Administrator	
Name/Title: David Smith, Mayor Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-532-3353 Email: gowandamayor@gmail.com	

9.24.2 Municipal Profile

The name “Gowanda” is derived from the Seneca Indian phrase meaning “a valley among the hills” referring to the village’s location below the Zoar Valley gorge along the Cattaraugus Creek. Gowanda is unique in that it is situated in both Cattaraugus and Erie counties. The village is approximately 30 miles from downtown Buffalo. The Cattaraugus Reservation is located northwest of the village. To the north and east is the Town of Collins and to the south is the Town of Persia in Cattaraugus County.

After the Revolutionary War, the American government secured land treaties with the Iroquois nations in western New York. The majority of the nations had been allies of the British, and they were forced to cede most of their lands in New York after the British defeat. Gowanda’s first white settler purchased 707 acres on both sides of



the creek from the Holland Land Company. The village incorporated in 1848 (Village of Farnham website, accessed 2020).

Throughout the years, Gowanda has regularly experienced flooding. In August 2009, a large flash devastated much of the village. One man drowned, and houses and cars were washed away. A total of two fatalities were caused directly from the flooding. Gowanda's water reservoir at Point Peter Road was completely destroyed, leaving the village without water. The village experienced another flood, resulting in a state of emergency, when two waterways, Cattaraugus Creek and Thatcher Brook, flooded their banks in May 201. (Wikipedia Village of Farnham, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Gowanda was 975. The estimated 2019 population was 1,043, a 7.0 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 9.5 percent of the population is 5 years of age or younger and 18.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.24.3 Jurisdictional Capability Assessment and Integration

The Village of Gowanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.24.3). The Village of Gowanda's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Gowanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.24-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 26	Local	CEO



Section 9.24: Village of Gowanda

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Zoning Code	Yes	Yes	Chapter 30	Local	CEO
Comment: None					
Subdivision Ordinance	Yes	Yes	Chapter 31	Local	Planning Board
Comment: None					
Stormwater Management Ordinance	Yes	Yes	Site Plan	Local	Building Department
Comment: None					
Post-Disaster Recovery Ordinance	Yes	No	N/A	Local	Village
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: None					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 31	Local	Building Department
Comment: The following site plan provisions are intended to secure compliance with the requirements and standards set forth in this chapter and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location and dimension of buildings. It further is to assure that the development and redevelopment of land within the village is appropriate and compatible with the development of surrounding land and consistent with the approved Master Plan.					
Environmental Protection Ordinance	Yes	Yes	Chapter 31	Local	Building Department
Comment: None					
Flood Damage Prevention Ordinance	Yes	Local and State	Flood Damage Protection LL#1 of 2019	Local	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)
Comment: Relevant goals include to minimize expenditure of public money for costly flood control projects, minimize the need for rescue and relief efforts associated with flooding, and minimize damage to facilities and utilities located in areas of special flood hazard.					
Municipal Separate Storm Sewer System (MS4)	No	-	-	-	-
Comment: None					
Emergency Management Ordinance	Yes	Yes	Emergency Management	Local	OEM
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					



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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan	Local	Village Administration
Comment: None					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Floodplain Plan	Local	Village Administration
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No	-	-	-	-
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	Yes	No	Economic Development Plan	Local	Village Administration
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency management Plan	Local	OEM
Comment: None					
Strategic Recovery Planning Report	Yes	-	Strategic Recovery Planning Report	Local	Administration
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Yes	Threat & Hazard Identification & Risk Assessment (THIRA)	Local	OEM
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Post-Disaster Recovery Plan	Local	OEM
Comment: None					
Continuity of Operations Plan	Yes	No	Chapter 2	Local	OEM
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Gowanda to oversee and track development.



Table 9.24-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Village Code
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Village Code
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No,	A buildable land analysis is noted in Section 4 (County Profile)

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Gowanda and their current responsibilities which contribute to hazard mitigation.

Table 9.24-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Village Board of Trustees
Zoning Board of Adjustments	Yes	Village Board of Trustees
Planning Department	Yes	Village Board of Trustees
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Village Highway Department maintains, operates and manages the following: <ul style="list-style-type: none"> • 11.79 miles of village streets • 30 miles of storm sewers • 20.3 acres of park land • 5 municipal parking lots totaling 5.5 acres • Equipment maintenance garage • 30 miles of sidewalk (sidewalks plowed by the Village, maintained by homeowner)
Construction/Building/Code Enforcement Department	Yes	The Code Enforcement Officer administers and enforces all the provisions of the Uniform Code and local law within the Village of Gowanda.
Emergency Management/Public Safety Department	Yes	OEM
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRed/911
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Water Development Work underway
Mutual aid agreements	Yes	County
Other	No	-
Technical/Staffing Capability		



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Engineer
Professionals trained in conducting damage assessments	Yes	Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	County Training
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Gowanda.

Table 9.24-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Village Board
Capital improvements project funding	Yes – Village Board
Authority to levy taxes for specific purposes	Yes – Village Board
User fees for water, sewer, gas or electric service	Yes – Village Board
Impact fees for homebuyers or developers of new development/homes	Yes – Village Board
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – Village Board
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes – Village Board
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Village Board



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Gowanda.

Table 9.24-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Emergency Management
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red/911
Natural disaster/safety programs in place for schools	Yes	Internal training
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Gowanda.

Table 9.24-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,





future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.24-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.24.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Smith, Mayor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Gowanda.

Table 9.24-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Gowanda	80	135	\$2,332,781	46	70

Source:

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Village of Gowanda identified two flood-prone areas within the community – Thatcher Brook and Grannis. The village does not maintain a list of property owners interested in flood mitigation. There are RiskMAP projects currently underway within the village. Substantial Damage Determinations are made using FEMA Codes. At present, six homes within the Village of Gowanda have been mitigated through elevation or acquisition. Flood hazard maps for the community adequately address the flood risk within the village.

The local department responsible for floodplain management within the Village of Gowanda is Code Enforcement and there are no certified floodplain managers on staff. The village indicated that it has access to resources to determine possible future flooding conditions from climate change.





The Village of Gowanda indicated that its staff need assistance or training to support its floodplain management program. Cattaraugus County provides NFIP administration services for the village. The village uses Village Code to determine whether proposed development on an existing structure qualifies as a substantial improvement. The village did not identify any barriers to running an effective NFIP program in the community.

NFIP Compliance

The Village of Gowanda’s last Community Assistance Visit took place on April 23, 2008. The last Community Assistance Contact took place on November 2, 2009.

The flood damage prevention ordinance of the Village of Gowanda can be found under Chapter 34 – 2019 update. The village indicated that its floodplain management program meets or exceeds the minimum requirements. Other local ordinances, plans, or programs that support floodplain management and meeting the NFIP requirements include the 205 Study.

9.24.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Gowanda has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 62
- Route 39
- Aldrich Street
- Broadway Road

Sheltering

The Village of Gowanda has identified the following designated emergency shelters within the Village.

Table 9.24-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Gowanda High School	Village	As needed	Optional	Yes	Yes	As Needed	Food
Gowanda Elementary School	Village	As needed	Optional	Yes	Yes	As needed	Food
Gowanda Fire Hall	230 Aldrich Street	As needed	Optional	Yes	Yes	As needed	Food

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Gowanda has identified the following sites suitable for placing temporary housing units.



Table 9.24-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The Village of Gowanda did not identify any areas suitable for placing temporary housing units but will work with the county to identify appropriate locations (2022-Village of Gowanda-013).					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Gowanda has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.24-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The Village of Gowanda did not identify any areas suitable for relocating homes outside of the floodplain. A buildable land analysis is noted in Section 4 (County Profile). The village will work with the county to identify appropriate locations (2022-Village of Gowanda-013).					

9.24.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.24-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.24-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0	0	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Identified												

SFHA Special Flood Hazard Area (1% flood event)





** Only location-specific hazard zones or vulnerabilities identified.*

9.24.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Gowanda's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Gowanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.24-1. Village of Gowanda Hazard Area Extent and Location Map 1

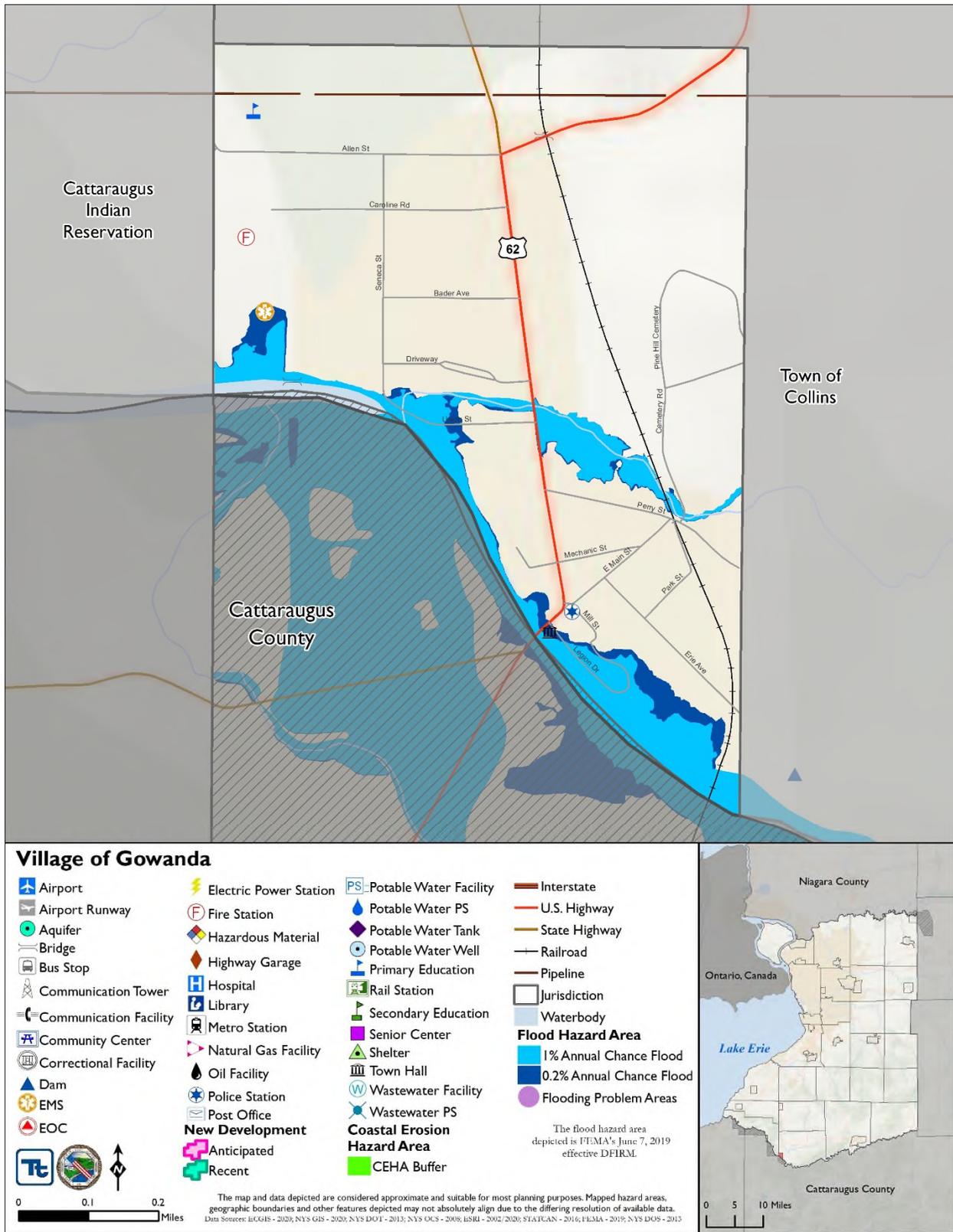




Figure 9.24-2. Village of Gowanda Hazard Area Extent and Location Map 2

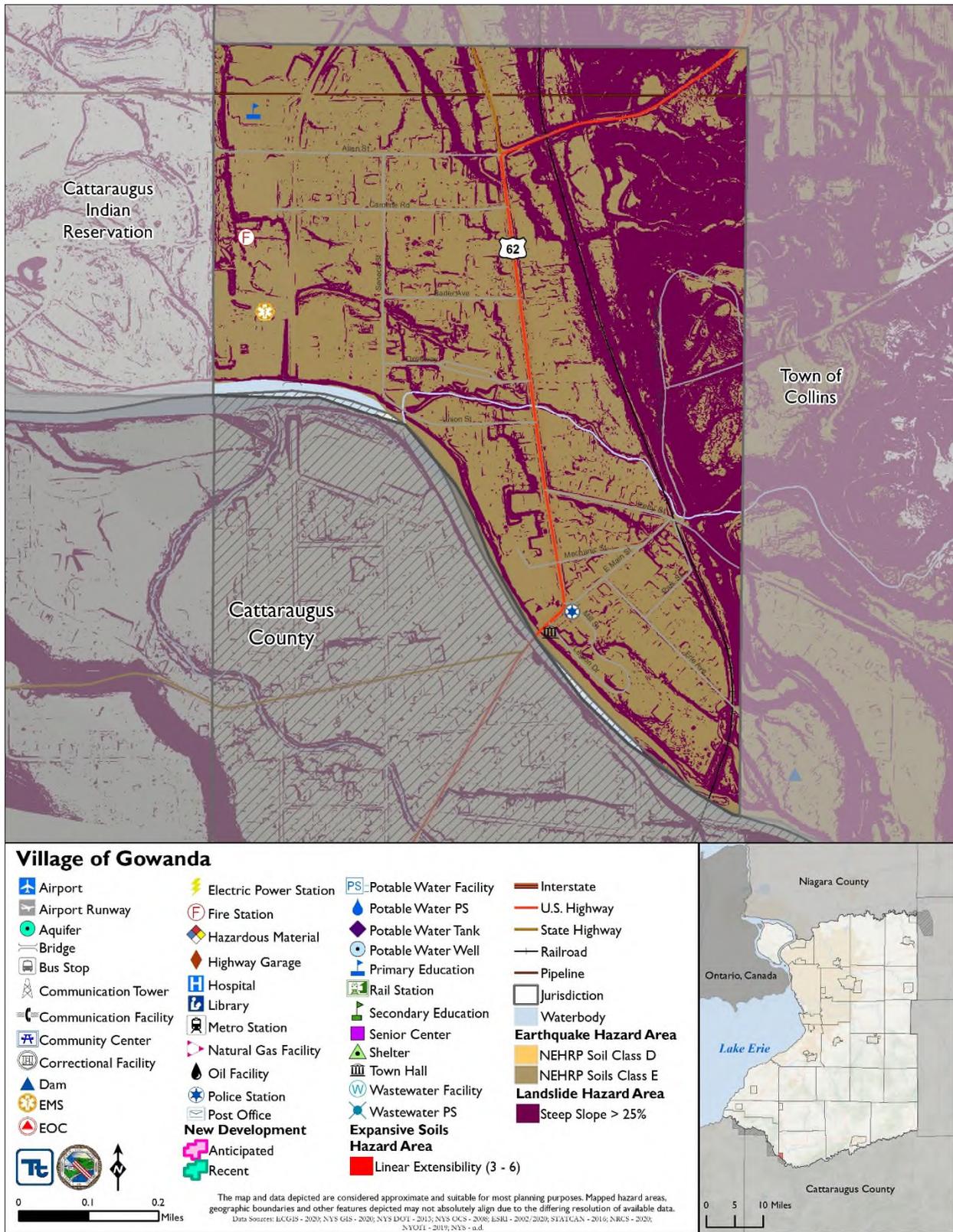
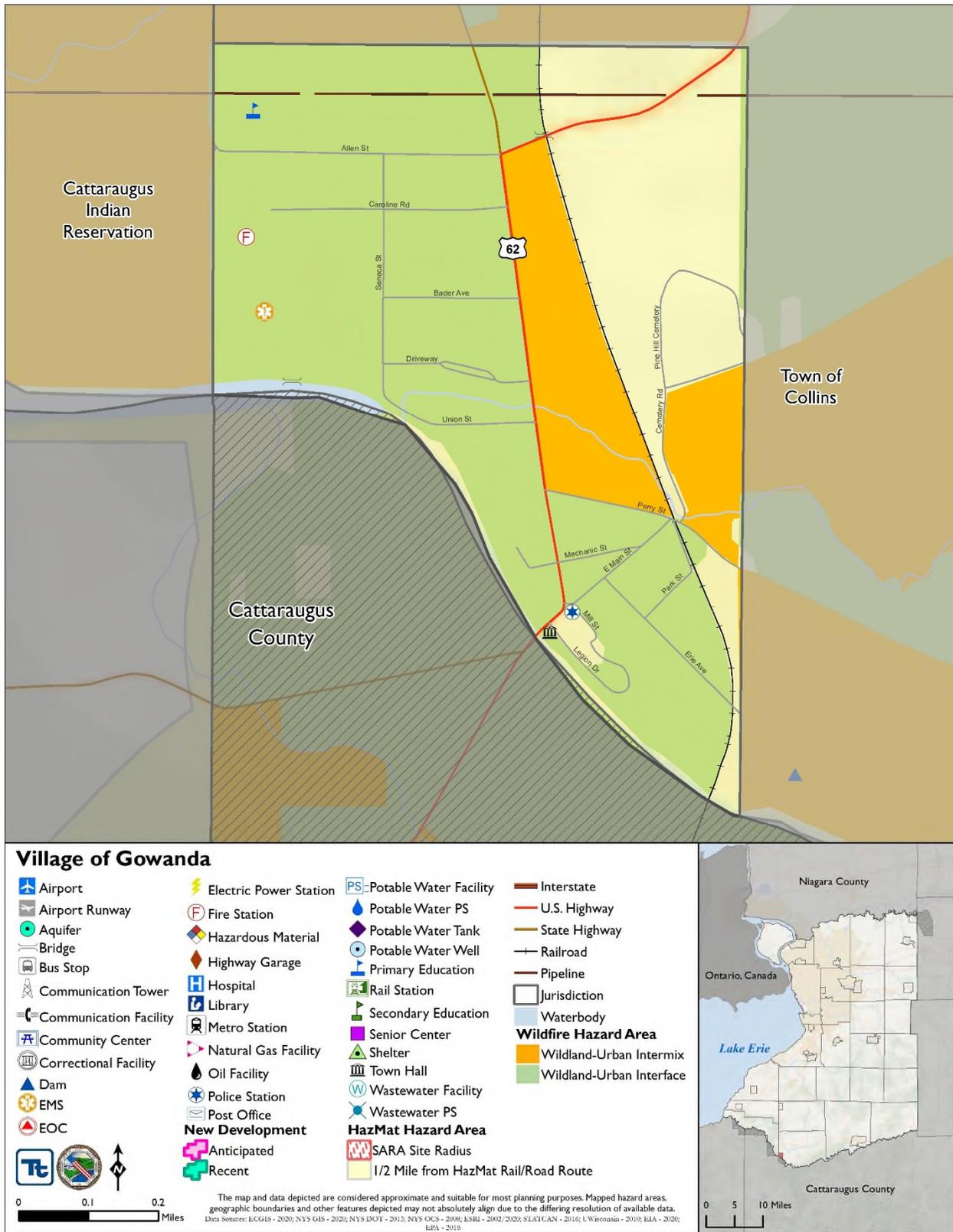




Figure 9.24-3. Village of Gowanda Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Gowanda’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.24-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.24-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Gowanda’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Gowanda. The Village of Gowanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.24-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.24-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Verizon CO (VZ-NY62848)	Hazmat	X	-	2022-Village of Gowanda-001
Gowanda Free Library	Library	X	-	2022-Village of Gowanda-001
Emmanuel Lutheran Church	Religious	X	-	2022-Village of Gowanda-001
First Baptist Church	Religious	X	-	2022-Village of Gowanda-001
Free Methodist Church	Religious	X	-	2022-Village of Gowanda-001
St Mary’s Episcopal Church	Religious	X	-	2022-Village of Gowanda-001
United Methodist Church	Religious	X	-	2022-Village of Gowanda-001

Source: FEMA DFIRM

Identified Issues

After review of the Village of Gowanda’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Gowanda has identified the following vulnerabilities within their community:

- The village has numerous critical facilities in the Special Flood Hazard Area.
- Flood prone areas require a warning system.
- The Gowanda water reservoir on Point Peter Rd is prone to landslides along its banks.
- Allen Springs and Thatcher Brook have stream bank erosion issues. These could be solved through seeding, rip rap, and stream bank stabilization.
- The village requires an emergency warning system which would include the water and sewer facilities.
- The village requires an Emergency Operations Plan.
- Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding
- The village requires another trash rack on Thatcher Brook to prevent debris jams
- The following culverts in Gowanda have incurred damages and require to be upsized:
 - Grannis Brook
 - Union Street
 - Buffalo Street
 - Rail Road Bridge



- Cemetery Hill culvert
- Thatcher Brook
 - Chaple Street Bridge
- The Gowanda Historic Hollywood Theater at 39 West Main Street is a non-profit cultural asset that is also commonly used for outreach on hazards and emergency management education events. The corner of the building rests in the floodplain and the structure has been impacted by flooding in the past.

9.24.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.24-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
#1	Participate with the USACE Section 205 Flood Mitigation Feasibility Study of Thatcher Brook	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost		1. Include in 2022 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
#2	Implement the Thatcher Brook Mitigation Plan after the Section 205 Flood Mitigation Feasibility Study	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost		1. Include in 2022 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
#3	Implementation of the actions identified in the Village of Gowanda Flood Mitigation Plan	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost		1. Include in 2022 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
#4	Implementation of actions identified in the Thatcher Brook Watershed Management Plan	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost		1. Include in 2022 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
#5	Floodproof/Elevate/Acquire homes in the flood prone areas (approximately 500 structures)	Flooding	Village of Gowanda Code Enforcement	Not Identified	No Progress	Cost		1. Discontinue 2. 3. No longer a priority
						Level of Protection		
						Damages Avoided; Evidence of Success		



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
#6	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	Ongoing Capability			1. Discontinue 2. 3. Ongoing Capability
						Damages Avoided; Evidence of Success		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Gowanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Gowanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.24-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X									X
Cyber Attack	X									X
Earthquake	X									X
Expansive Soils	X									X
Extreme Temperature	X									X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X									X
Landslide	X	X	X			X		X		X
Pandemic	X									X
Severe Storm	X	X	X			X		X	X	X
Severe Winter Storm	X		X					X		X
Utility Failure	X		X					X		X
Wildfire	X									X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.24-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Gowanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.24-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Gowanda -001	Critical Facilities Outreach	1, 3	Flood	<p>Problem: The village has numerous critical facilities in the Special Flood Hazard Area. These facilities are not municipally owned:</p> <ul style="list-style-type: none"> • Verizon CO (VZ-NY62848) • Gowanda Free Library • Emmanuel Lutheran Church • First Baptist Church • Free Methodist Church • St Mary's Episcopal Church • United Methodist Church <p>Solution: The FPA will conduct outreach to facility managers to discuss flood exposure and potential mitigation actions.</p>	Yes 💧	None	Within 6 months	FPA	Staff time	Facility managers educated on flood exposure and potential mitigation actions	Village budget	High	EAP	PI
2022-Village of Gowanda -002	Flood Warning System	1, 3	Flood	<p>Problem: Flood prone areas require a warning system.</p> <p>Solution: The village will evaluate areas that need a flood warning system constructed and construct the system where necessary. The system will place specific emphasis on warnings for water and sewer facilities. The System</p>	No	None	2 years	FPA, OEM	\$7 million	Warning system established	HMGP, NWS, USGS, village budget	High	SIP	ES



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				will also be able to be used to distribute warnings regarding other emergency events.										
2022-Village of Gowanda -003	Flood Risk Management Feasibility Study	2	Flood	<p>Problem: Flooding is a regional problem and natural watercourses need to be kept clear of debris to reduce flooding.</p> <p>Solution: Continue to support USACE Flood Risk management Feasibility Study in the Village of Gowanda, and Towns of Perrysburg, Persia, and Dayton, as well as Erie County and the Town of Collins. The project includes debris removal in waterways.</p>	No	None	Within 5 years	USACE, FPA	High	Flooding risk reduced	HMGP, village budget	High	NSP	NR
2022-Village of Gowanda -004	Landslide study	2	Landslide	<p>Problem: The Gowanda water reservoir on Point Peter Road is prone to landslides along its banks.</p> <p>Solution: Study slide conditions in the Village of Gowanda near the Gowanda water reservoir on Point Peter Road and conduct bank stabilization.</p>	No	None	Within 5 years	Engineer	Medium	Landslide risk reduced	HMGP, BRIC, village budget	High	SIP, NSP	PP, NR
2022-Village of Gowanda -005	Establish Tree Maintenance Program	1	Severe Storm, Severe Winter Storm, Utility Failure	<p>Problem: Falling tree branches can result in property damage and utility failure.</p> <p>Solution: The village will establish a tree maintenance program to reduce the</p>	No	None	Within 1 year	DPW	Low	Reduction in tree damage, power outages	Village budget	High	NSP	NR



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Gowanda -006	Stream Bank Erosion Mitigation	2	Severe Storm, Flood, Landslide	<p>likelihood of falling tree branches.</p> <p>Problem: Allen Springs and Thatcher Brook have stream bank erosion issues.</p> <p>Solution: The village will work with SWCD to identify locations to mitigate stream bank erosion through seeding, rip rap, and stream bank stabilization. The village will secure necessary permits and complete the identified mitigation actions.</p>	No	May require permitting	Within 5 years	SWCD, DPW	Medium	Reduction in streambank erosion and potential collapses which could result in landslide and flooding concerns	HMGP, BRIC, village budget	High	NSP	NR
2022-Village of Gowanda -007	Emergency Operations Plan	1, 2, 3	All hazards	<p>Problem: The village lacks an emergency operations plan.</p> <p>Solution: The village will write and adopt an emergency operations plan. The plan will be integrated with the proposed flood warning system.</p>	No	None	Within 1 year	OEM	Staff time	Plan established	Village budget	High	LPR	ES
2022-Village of Gowanda -008	Stormwater Improvements	1, 2	Flood, Severe Storm	<p>Problem: Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding.</p> <p>Solution: The Village Engineer will design the necessary stormwater improvements and new features. The DPW will install the stormwater</p>	No	None anticipated	Within 5 years	Engineer, DPW	High	Increased drainage, reduction in flooding	HMGP, BRIC, CHIPS, village budget	High	SIP	SP



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				system components designed by the Engineer.										
2022-Village of Gowanda -009	Thatcher Brook Trash Rack	2	Flood, Severe Storm	<p>Problem: Thatcher Brook is prone debris jams which increases flood risk. The Brook has one trash rack which is effective at reducing the debris. Additional mitigation is needed.</p> <p>Solution: The village will work to gain the necessary permitting and install a second trash rack on Thatcher Brook.</p>	No	May require permitting	Within 5 years	Engineer	Medium	Reduction in debris jam and flood risk	HMGP, BRIC, village budget	High	SIP, NSP	PP · N R
2022-Village of Gowanda -010	Culvert Upgrades	1	Flood, Severe Storm	<p>Problem: The following culverts in Gowanda have incurred damages and require to be upsized:</p> <ul style="list-style-type: none"> • Grannis Brook <ul style="list-style-type: none"> ○ Union Street ○ Buffalo Street ○ Rail Road Bridge ○ Cemetery Hill culvert • Thatcher Brook <ul style="list-style-type: none"> ○ Chaple Street Bridge <p>Solution: The village will make the necessary upgrades to the identified culverts.</p>	No	May require permitting over Thatcher Brook	Within 5 years	Public Works	\$5,000 per culvert on average	Reduction in culvert damages and flood risk	HMGP, BRIC, CHIPS, village budget	High	SIP	SP
2022-Village of Gowanda -011	Gowanda Historic Hollywood Theater	1, 3	Flood	<p>Problem: The Gowanda Historic Hollywood Theater at 39 W. Main Street is a non-profit cultural asset that is also commonly used for outreach on hazards and emergency management</p>	No	None	Within 2 years	Village, County, Facility manager	Medium	Facility protected from flood damages	HMGP, FMA, BRIC, county and village budgets	High	SIP	PP



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>education events. The corner of the building rests in the floodplain and the structure has been impacted by flooding in the past.</p> <p>Solution: The village will work with Cattaraugus County to assist the Gowanda Historic Hollywood Theater as it works to identify potential mitigation actions and carry them out. The most likely actions would involve floodproofing the facility.</p>										
2022-Village of Gowanda -012	Repetitive Loss Properties	1, 2	Flood, Severe Storm	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The village has 46 repetitive loss properties.</p> <p>Solution: Conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement</p>	No	None	3 years	NFIP Floodplain Administrator, supported by homeowners	\$6 Million	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP



Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				acquisition/purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).										
2022-Village of Gowanda -013	Temporary and Permanent Housing	1	All hazards	<p>Problem: The village has not identified appropriate locations for the placement of temporary and permanent housing.</p> <p>Solution: The village will work with the county to identify appropriate locations for temporary and permanent housing.</p>	No	None	Within 6 months	Village administration, county	Staff time	Temporary and permanent housing locations identified	County and village budgets	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain





Mitigation Category:

- *Local Plans and Regulations (LPR)* – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.24-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Gowanda-001	Critical Facilities Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-Village of Gowanda-002	Flood Warning System	1	1	1	0	1	1	0	1	1	1	0	1	1	1	11	High
2022-Village of Gowanda-003	Flood Risk Management Feasibility Study	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-004	Landslide study	1	1	1	0	1	1	0	1	1	1	0	0	1	1	10	High
2022-Village of Gowanda-005	Establish Tree Maintenance Program	0	1	1	1	1	1	0	0	1	1	0	1	1	1	10	High
2022-Village of Gowanda-006	Stream Bank Erosion Mitigation	0	1	1	1	1	0	0	1	1	1	1	0	1	1	10	High
2022-Village of Gowanda-007	Emergency Operations Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Village of Gowanda-008	Stormwater Improvements	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-009	Thatcher Brook Trash Rack	0	1	1	1	1	0	0	1	1	1	0	0	1	1	9	High
2022-Village of Gowanda-010	Culvert Upgrades	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-011	Gowanda Historic Hollywood Theater	0	1	1	1	1	0	0	1	1	1	0	1	1	1	10	High
2022-Village of Gowanda-012	Repetitive Loss Properties	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2022-Village of Gowanda-013	Temporary and Permanent Housing	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.24.9 Action Worksheets

The following action worksheets have been developed by the Village of Gowanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Flood Warning System		
Project Number:	2022-V. Gowanda-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Currently, the Village of Gowanda does not have a method to identify flood levels and distribute warnings to prepare the population for flooding events.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will evaluate areas that need a flood warning system constructed and construct the system where necessary. The system will place specific emphasis on warnings for water and sewer facilities. The Thatcher Brook Diversion Channel is currently in design phase. The System will also be able to be used to distribute warnings regarding other emergency events.		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	Flood warning system	Estimated Benefits (losses avoided):	Increased flood warning with better quality data
Useful Life:	15 years	Goals Met:	1, 3
Estimated Cost:	\$7 Million	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	HMGP, NWS, USGS, Municipal budget
Responsible Organization:	NFIP Floodplain Administrator, OEM	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Rely on the NWS updates	\$0	Do not provide real-time information, delay in information could impact the village on responding properly
	Conduct manual readings by emergency personnel	Staff time	Inaccurate and time consuming
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Flood Warning System	
Project Number:	2022-V. Gowanda-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provides improved flood warning
Property Protection	1	Provides the opportunity to move movable property prior to a flood
Cost-Effectiveness	1	
Technical	0	Requires technical support from USGS or NWS
Political	1	
Legal	1	The village has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood
Timeline	0	2 years
Agency Champion	1	NFIP Floodplain Administrator, OEM
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Stormwater Improvements		
Project Number:	2022-V. Gowanda-008		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will design the necessary stormwater improvements and new features. The DPW will install the stormwater system components designed by the Engineer.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering study	Estimated Benefits (losses avoided):	Increased drainage, reduction in flooding
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	HMGP, BRIC, CHIPS, village budget
Responsible Organization:	Engineer, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation, Stormwater management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Close roadways that experience flooding	Low	Loss of access
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Stormwater Improvements	
Project Number:	2022-V. Gowanda-008	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The village has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Engineer, DPW
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Thatcher Brook Trash Rack		
Project Number:	2022-Village of Gowanda-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Thatcher Brook is prone debris jams which increases flood risk. The Brook has one trash rack which is effective at reducing the debris. Additional mitigation is needed.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work to gain the necessary permitting and install a second trash rack on Thatcher Brook.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering study	Estimated Benefits (losses avoided):	Reduction in debris jam and flood risk
Useful Life:	20 years	Goals Met:	2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	HMGP, BRIC, village budget
Responsible Organization:	Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation, Stormwater management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Conduct debris clearing after every rainfall event	Medium	Limited staffing ability
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Thatcher Brook Trash Rack	
Project Number:	2022-Village of Gowanda-009	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	0	The village may require permitting to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Engineer
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Culvert Upgrades		
Project Number:	2022-Village of Gowanda-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The following culverts in Gowanda have incurred damages and require to be upsized: <ul style="list-style-type: none"> • Grannis Brook <ul style="list-style-type: none"> ○ Union Street ○ Buffalo Street ○ Rail Road Bridge ○ Cemetery Hill culvert • Thatcher Brook <ul style="list-style-type: none"> ○ Chapple Street Bridge 		
Action or Project Intended for Implementation			
Description of the Solution:	The village will replace and upsize the repetitively damaged/undersized culverts in the village. The Thatcher Brook bridge/culvert may require permitting over Thatcher Brook. All permits will be secured prior to construction.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	At least a 5-year event; will be determined once project is complete	Estimated Benefits (losses avoided):	Reduction in culvert damages and flood risk
Useful Life:	30 years	Goals Met:	1
Estimated Cost:	\$5,000 per culvert on average	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, BRIC, CHIPS, village budget
Responsible Organization:	Public Works	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Remove roads	\$20,000 per roadway	Roadways cannot be removed
	Relocate roads to another location	\$50,000 per roadway	Roadways will still need to cross stream, costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Culvert Upgrades	
Project Number:	2022-Village of Gowanda-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project will protect roadways from flooding, culvert damages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flood
Timeline	0	Within 5 years
Agency Champion	1	Public Works
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Village of Gowanda-012		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Village of Gowanda has 46 repetitive loss properties.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	Goals Met:	1, 2
Estimated Cost:	\$6 Million	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate homes	\$500,000 per home	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages	
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Village of Gowanda-012	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Families moved out of high-risk flood areas.
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	0	Project would remove families from the flood prone areas of the village.
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



9.25 Town of Grand Island

This section presents the jurisdictional annex for the Town of Grand Island. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Grand Island’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Grand Island’s hazard mitigation plan primary and alternate points of contact. The Town of Grand Island followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Highway Department and Supervisor’s office. The Town Supervisor and Highway Superintendent represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.25-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: John Whitney, P.E., Town Supervisor Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number: 716-773-9600 x616 Email: jwhitney@grand-island.ny.us	Name/Title: Richard Crawford, Highway Superintendent Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number: 716-773-9632 Email: dcrawford@grand-island.ny.us
NFIP Floodplain Administrator	
Name/Title: Robert Westfall, P.E., Town Engineer Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number: 716-773-9600 x639 Email: rwestfall@grand-island.ny.us	
Additional Contributors	
Name/Title: Ronald Milks, Code Enforcement Officer Method of Participation: Completed worksheets	

9.25.2 Municipal Profile

The Town of Grand Island is located between City of Buffalo and Niagara Falls, dividing the Niagara River in half upriver from the famous Falls. The town is in the northwestern corner of Erie County and is 33 square miles in size. The town shares an international border with Ontario, Canada, although no bridges cross the river from the town, which is traversed by Interstate 190 and NYS Route 324.

The town’s original inhabitants were Seneca Indians. The town was founded in 1651 and became part of the British Colony of New York in 1764. New York State purchased Grand Island and other islands on the





Niagara River in 1815. In 1825 Grand Island established a connection to the mainland by ferry. The town incorporated in 1852. In 1993, a federal lawsuit was filed by the Seneca Nation of Indians who sought to have Grand Island returned to native ownership, but the island remained part of the United States (Town of Grand Island Comprehensive Plan 1998). The town was once nominated to be the headquarters for the United Nations due to its location on a friendly international border, before New York City was ultimately chosen (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Town of Grand Island was 20,374. The estimated 2019 population was 21,047, a 3.0 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.4 percent of the population is 5 years of age or younger and 17.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.25.3 Jurisdictional Capability Assessment and Integration

The Town of Grand Island performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.25.3). The Town of Grand Island’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Grand Island. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.25-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Local Law 1971, Construction Codes, Uniform, Chapter 125	Local	Code Enforcement/Building
Comment: This chapter shall provide for administration and enforcement of the New York State Uniform Fire Prevention and Building Code, the State Energy Code and such other laws as are applicable to the construction in the State of New York (collectively, "Uniform Code") in the Town of Grand Island. Consistent administration of the town’s building code supports construction of hazard resistant buildings.					
Zoning Code	Yes	No	LL3-2004, Zoning, Chapter 407	Local	Code Enforcement/Building



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The purpose of the Zoning Code is to provide for the orderly growth of the Town of Grand Island. The Zoning Code sets requirements on the use of land and size, height, and bulk of uses. Specific areas have been designated for residential, business, and industrial growth to protect the overall character of the town, ensure the development of cohesive neighborhoods, and minimize conflicts among land uses. Specifically, the Zoning Code is developed to:</p> <ul style="list-style-type: none"> • Implement the Town Comprehensive Plan, Grand Island Local Waterfront Revitalization Plan (LWRP), and the Ferry Village Master Plan. • Promote the health, safety, and general welfare of the public and provide safety from fire, flood, and other dangers. • Provide adequate light, air, and outdoor uses to include public, common, and private open space areas. • Prevent overcrowding of land and ensure structure and land use arrangements are aesthetically harmonious to surrounding areas and structures. • Avoid undue concentration of population or sparse, uncoordinated development. • Facilitate the adequate provision of transportation, water, sewer, school, parks, and other public services. • Protect the character and values of residential, institutional, public, business, and industrial uses and to ensure their orderly and beneficial development. • Regulate the location of buildings and intensity of uses in relation to streets to ensure minimal interference with and by traffic movements, reduce congestion on Town streets and improve public safety. • Preserve and protect significant natural features and vegetation, thereby preventing ecological damage and visual blight which occur when those features or vegetation are eliminated or substantially altered to serve development purposes only. <p>Protects the town from flood danger. R-2 and R-3 Districts shall preserve and incorporate into the landscaping of the development, natural features including streams, drainageways, and existing trees. Site plans must include a drainage plan showing existing and finished grades, size and type of pipe, location of receivers, and stormwater management plan evaluating the impacts on the watershed; the best management practices employed to mitigate the impacts of stormwater. In all districts, no permanent structure shall be permitted within the setbacks from the ten-year flood stage edge of any stream or existing natural drainage channel, established on the Town Official Map.</p>					
Subdivision Ordinance	Yes	No	Subdivision of Land, 1971, Chapter 327	Local	Code Enforcement/Building
<p>Comment: It is declared to be the policy of the Town Board and the Town Planning Board to consider land subdivision plats as part of a plan for the orderly, efficient, and economical development of the Town of Grand Island. This means, among other things:</p> <ul style="list-style-type: none"> • A. That land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health, or peril from fire, flood or other menace; • B. That proper provision shall be made for drainage, water supply, sewerage, other underground utilities, and other needed improvements; • C. That all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties. • D. That the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Master Plan, and shall be of such width, grade, and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and • E. That proper provision shall be made for open spaces for parks and playgrounds. 					
Stormwater Management Ordinance	Yes	Yes	LL # 5 of 2007, Article XXXV 407-195 through 407-201*	Local/State/Federal	Code Enforcement & Engineering
<p>Comment: The purpose of this article is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. This article seeks to meet those purposes by achieving the following objectives:</p> <ol style="list-style-type: none"> (1) Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02 or as amended or revised; (2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01 or as amended or revised; (3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; (4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; (5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and (6) Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	No	LL # 3 OF 2004, Zoning, Chapter 407	Local	Zoning/Engineering
Comment: The growth management framework is established in the Zoning Code.					
Site Plan Review	Yes	No	Zoning Chapter 407, Article XXIV Site Plan Review	Local	Zoning/Engineering and Planning Board
Comment: Site Plan review by the Planning Board and as administered by the Building Department includes assessment of hazard risk.					
Environmental Protection Ordinance	Yes	No	State Environmental Quality Review (SEQR) LL 8-0101	Local/State	Town Board/Town Engineer
Comment: The town includes SEQR review in the development review process.					
Flood Damage Prevention Ordinance	Yes	Yes	LL # 1 – 2019 Chapter 155, Flood Damage Prevention Ordinance	Local/State/Federal	FPA
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program. <p>BFE+2 feet is required for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	MS4 General Permit GP-0-15-003, Chapter 267, Sewers, Article IX Storm Sewers	Local/State	Town Engineer
Comment: No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Grand Island Comprehensive Plan, 2018	Local	Town Board
<p>Comment: The Comprehensive Plan includes the following Objectives: Determine the breadth and extent of available natural resources in the Town with an inventory of assets, including forested trees, wetlands, grasslands, shorelines, wildlife, and historical/cultural sites. 2. Prepare an inventory/map of open space in the Town. Create a plan for protection of selected natural areas with ecological significance. 3. Work with land trusts and property owners to protect natural areas. 4. Promote the conservation of trees by preparing an inventory of trees on Town-owned streets, parks, and public spaces. Create a management plan for care and maintenance of these trees. Educate residents and developers about the potential invasive species that threaten trees. 5. Capitalize on the economic potential of natural resources by encouraging uses that relate to and actively engage with them rather than isolating them, including recreation, ecotourism, cultural education/interpretation, and supporting business ventures. 6. Ensure that buffer areas are created and maintained around water bodies and water courses to protect water quality, reduce erosion, and preserve aquatic ecosystems. Develop and implement a program to monitor water quality. Community Values • Natural resources are our biggest asset • We are a unique island community • We're more than just a passthrough • Gateways make the first impression • We desire a true Town Center • Establish a more prominent identity • Future lies in diversity 37 Town of Grand Island : Bridging the Gap 4 Goals & Objectives 7. Adopt environmental practices and policies that promote the conservation of birds, wildlife, and wildlife habitat. 8. Encourage trails or other public access for any non-residential development that contain streams, wetlands, floodplains, or other features that are not developable due to environmental constraints. 9. Promote efforts that recognize the importance of environmental sustainability such as recycling, clean energy, controlling invasive/non-native species, fertilizer use, composting, etc. (Refer to local law #1 (2017) chapter 407-165.1) 10. Engage with local agencies and groups that promote environmental protection and restoration initiatives. 11. Promote stewardship of our natural resources through educational workshops, pamphlets, and outdoor events/activities. 12. Encourage renewable energy systems at an appropriate scale and density to decrease local utility loads and minimize carbon emissions. 13. Promote the use of energy-efficient systems, materials, and equipment for private development; consider a requirement for municipal buildings to reduce their carbon footprint. 14. Encourage agricultural ventures in appropriate areas of the Town to conserve rural landscapes and support local agricultural business opportunities. Promote practices that balance farm productivity with green space protection and sustainability. 15. Seek reductions in greenhouse gas emissions and the overall carbon footprint of the Town and identify potential mitigation measures, starting with municipal operations, processes, and facilities. 16. Encourage the development of a local Farmland Protection Plan to support agricultural businesses and farms on Grand Island. The intent is to create an environment in which the community and agriculture can coexist.</p>					
Capital Improvement Plan	Yes	No	5 – year Capital Improvement Plan, June 2020	Local	Town Board, Accounting, Engineering
Comment: 5–year updated annually					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: -					
Stormwater Plan	No	No	-	-	-
Comment: * See Stormwater Management					
Open Space Plan	Yes	Yes	TGI Parks & Recreation Open Space Plan 8/10/1992	Local	Town Board/Parks & Rec
Comment: Proactive management of open space and recreation assets includes assessment of hazard risk and mitigates flood risk.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					



Section 9.25: Town of Grand Island

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	Town of Grand Island Local Waterfront Revitalization Program	Local	Town Board/Engineer/Planning Board
Comment: Key goals of the LWRP are 1) to prevent flooding and erosion damages. Current Flood Insurance Rate Maps and the Flood Damage Prevention should be consulted and supplemented by site specific studies to establish accurate floodplain boundaries. 2) Construction activities should be guided away from Spicer Creek Wetland and other wetland and island habitats to preserve sensitive fish and wildlife habitat. 3) Activities or development in the coastal area will be undertaken to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands, and bluffs.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	January 2020, Resource Guide for the Protection and Promotion of Agriculture and Farming	Local	Town Board/Zoning
Comment: This Resource Guide serves two functions for the Town – providing a framework for future regulatory and policy actions necessary to protect farming and agriculture, and to act as a resource document for new and existing farmers, providing financial, educational, and technical support and other pertinent information.					
Other (this could include a tourism plan, business development plan, etc.)	No	-		-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Grand Island to oversee and track development.

Table 9.25-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	File is maintained in Engineering (Floodplain Development)
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The level of buildout in the town is unknown

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Grand Island and their current responsibilities which contribute to hazard mitigation.

Table 9.25-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. This board's mission is three-fold: <ul style="list-style-type: none"> to recommend to the Town Board any laws, regulations or rules that relate to town planning and development, to report to the Town Board on all matters referred to it, including all applications for site plan, sub-division, special use and zoning changes, to make such investigations, maps, reports, and recommendations in connection with the planning and development of the town as it deems desirable.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		The Planning Board is an advisory board to the Town Board (Volunteer).
Zoning Board of Appeals	Yes	The Zoning Board of Appeals hears and decides appeals from, and reviews any order, requirement, decision, interpretation, or determination made by, the administrative official charged with the enforcement of any zoning ordinance or law. The ZBA considers hazard exposure in its deliberations on variances to the zoning code.
Planning Department	No	Contract engineer
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	<p>The Conservation Advisory Board (CAB) reviews proposals or applications resulting in the use or development of any open space identified in the approved Town of Grand Island Open Space Plan. Recommendations that reasonably achieve the goal of maintaining, improving or otherwise enhancing the environmental quality of Grand Island are provided to the Town Board for consideration.</p> <p>The CAB also serves as a consultant to the Town Board on environmental matters.</p>
Open Space Board/Committee	Yes	Conservation Advisory Board (see above)
Economic Development Commission/Committee	Yes	Economic Development Advisory Board. The mission of this board is to pro-actively develop Grand Island's business community. It is charged with helping existing businesses survive and prosper, identifying and attracting new businesses that are compatible with our environment, and working with economic development opportunities as they occur.
Public Works/Highway Department	Yes	<p>The Grand Island Highway Department provides a wide variety of services including:</p> <ul style="list-style-type: none"> • Issue permits for work to be performed in town Highway rights-of-way. For example: <ul style="list-style-type: none"> ○ Curb cuts ○ Driveway culvert permits ○ Road push or boring permits ○ Open road cuts ○ Power and telephone pole location permits and gas line permits. • Snow and ice removal on all town roads and roads owned by Erie County which are done under contract. • The upkeep of all town owned roads • Road sweeping on town roads, curbed areas mostly. • Roadside mowing of town roads. • Traffic control sign installation and maintenance. • Maintenance of roadside ditches. For example: <ul style="list-style-type: none"> ○ Roadside ditching ○ Installing driveway culverts-by permit ○ Installing pipe across the premises-by permit. • Fleet Maintenance for all town owned vehicles. Richard W. Crawford, Jr. – Superintendent
Construction/Building/Code Enforcement Department	Yes	Ron Milks, Department Head. The Building/Code Enforcement/Zoning Department is responsible for the enforcement of the New York State Commercial and Residential Building Codes and Fire Prevention inspections, within the Town of Grand Island, as well as the various portions of the Town Code. Building permits are issued, plans and specifications are reviewed, and various inspections are conducted. The Department assists the public, contractors, and design professionals in the understanding of the various code requirements as they apply to their projects. The Department prepares periodic reports, notices, and



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		related documents and performs required fire safety inspections of existing buildings and investigate complaints relating to code violations.
Emergency Management/Public Safety Department	Yes	Community Emergency Response Team. GIPD – Robert Rine, Officer in Charge
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department – Right – of – way maintenance, Engineering Department by contracts
Mutual aid agreements	Yes	The town maintains mutual agreements with other municipality’s Fire, Police, Highway, Water/Wastewater operators
Other	Yes	Agricultural Advisory Board, Architectural Review Board, Historic Preservation Board, Parks and Recreation Committee and Traffic Safety Committee
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building: Ron Milks, Code Enforcement/Building inspector Engineering: Robert H. Westfall, P.E., Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Various within departments
Professionals trained in conducting damage assessments	Yes	Engineering & Building Departments
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department and GIS consultant
Scientist familiar with natural hazards	Yes	Various within community
NFIP Floodplain Administrator (FPA)	Yes	Town Engineer
Surveyor(s)	No	Hired professional service
Emergency Manager	No	-
Grant writer(s)	Yes	Rotella Grants
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Grand Island.



Table 9.25-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Town Board, Accountant and Engineer
Capital improvements project funding	Yes, Town Board, Accountant Engineering
Authority to levy taxes for specific purposes	Yes, Town Board, Assessor, Accounting
User fees for water, sewer, gas, or electric service	Yes, Town Board, Accountant and Engineer
Impact fees for homebuyers or developers of new development/homes	Yes, Town Board
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Town Board, Accountant
Incur debt through special tax bonds	Yes, Town Board, Accountant
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes, Town Board, Accountant and Engineer
Open Space Acquisition funding programs	Yes, Town Board, Accountant and Engineer
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, Town Board, Accountant and Engineer

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Grand Island.

Table 9.25-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on stormwater and wetlands is available on the town website.
Social media for hazard mitigation education and outreach	Yes	The Town of Grand Island uses Facebook as its social media
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Website/social Media
Natural disaster/safety programs in place for schools	No	-
Other	Yes	GIFD – Fire Prevention Programs

Community Classifications

The table below summarizes classifications for community programs available to the Town of Grand Island.



Table 9.25-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.25-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.25.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Robert Westfall, Town Engineer





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Grand Island.

Table 9.25-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Grand Island	46	30	\$62,488	7	23

Source: FEMA, 2020a and 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the Town of Grand Island that are prone to flooding include the shoreline of the Niagara River and various tributaries discharging to that river.

The town does not maintain a list of properties that have been damaged by flooding nor a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town’s flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Engineering & Building Department is responsible for floodplain administration; however, there are no Certified Floodplain Managers on staff at the town. The town’s floodplain management program is implemented in various ways, but most directly via site plan review and building permit approval process. The Town of Grand Island takes a proactive approach in managing its floodplain. The FPA and other staff speak with residents almost weekly about violations and measures to address them. The town assists residents in understanding requirements and procedures for development in the regulated floodplain, and provides residents with information about the SFHA for residents’ use with other agencies (e.g., banks, lending institutions). The town also helps residents understand and meet requirements for accessory structures. When determining if proposed development on an existing structure qualifies as a substantial improvement, the FPA will estimate the value of new work versus the assessed value of the entire property.

The town’s floodplain management program meets NFIP standards. The town’s most recent Community Assistance Visit (CAV) was in June 2020, and there are no outstanding NFIP compliance violations to be addressed. Town staff would find refresher training on the requirements of the NFIP useful. The town does not participate in the Community Rating System, but does have numerous elevation certificates on file at the town office.

9.25.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Grand Island has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route I-190 is the only exit point from the island, therefore the town will coordinate with county and state agencies as needed for access along this critical roadway.

Sheltering

The Town of Grand Island has identified the following designated emergency shelters within the town.

Table 9.25-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Grand Island High	1100 Ransom Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Grand Island Middle	1100 Ransom Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Huth Road Elementary	1773 Huth Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Kaegabein Elementary	1690 Love Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Sidway School	2451 Baseline Rd, Grand Island	Unknown	No	Yes	No	School nurse	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Grand Island has identified the following sites suitable for placing temporary housing units.

Table 9.25-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Nike Base	3278 Whitehaven Rd, Grand Island	Unknown	Building	Water, electric, septic	Complies with Codes



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Grand Island has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.25-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
K.O.A.	2570 Grand Island Blvd, Grand Island	Unknown	Campground	Water, electric, septic	None
Branches of Niagara	2659 Whitehaven Rd, Grand Island	Unknown	Campground	Water, electric, septic	None
Cinderella Campground	2797 Grand Island Blvd Grand Island	Unknown	Campground	Water, electric, septic	None

9.25.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.25-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.25-13. Recent and Expected Future Development

Type of Development	2015**		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	N/A	N/A	25	0	54	0	64	0	48	0	31	1
Multi-Family	N/A	N/A	20	0	2	0	9	0	18	0	0	0
Other (commercial, mixed-use, etc.)	N/A	N/A	5	0	2	0	5	0	6	0	7	0
Total Permits Issued	N/A	N/A	50	0	58	0	78	0	72	0	38	1
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Heron Pointe – Phase 1	Residential	232 units/20 buildings		101 Heron Pointe Pkwy		Expansive soils		Multi-unit apartments				
Gun Creek Phase 1 & 2	Residential	45 buildings		101 Stonebridge Road		None identified		Single-family homes				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												



Type of Development	2015**	2016	2017	2018	2019	2020
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

** 2015 development data was not provided by the town.

* Only location-specific hazard zones or vulnerabilities identified

9.25.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Grand Island’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Grand Island has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.25-1. Town of Grand Island Hazard Area Extent and Location Map 1

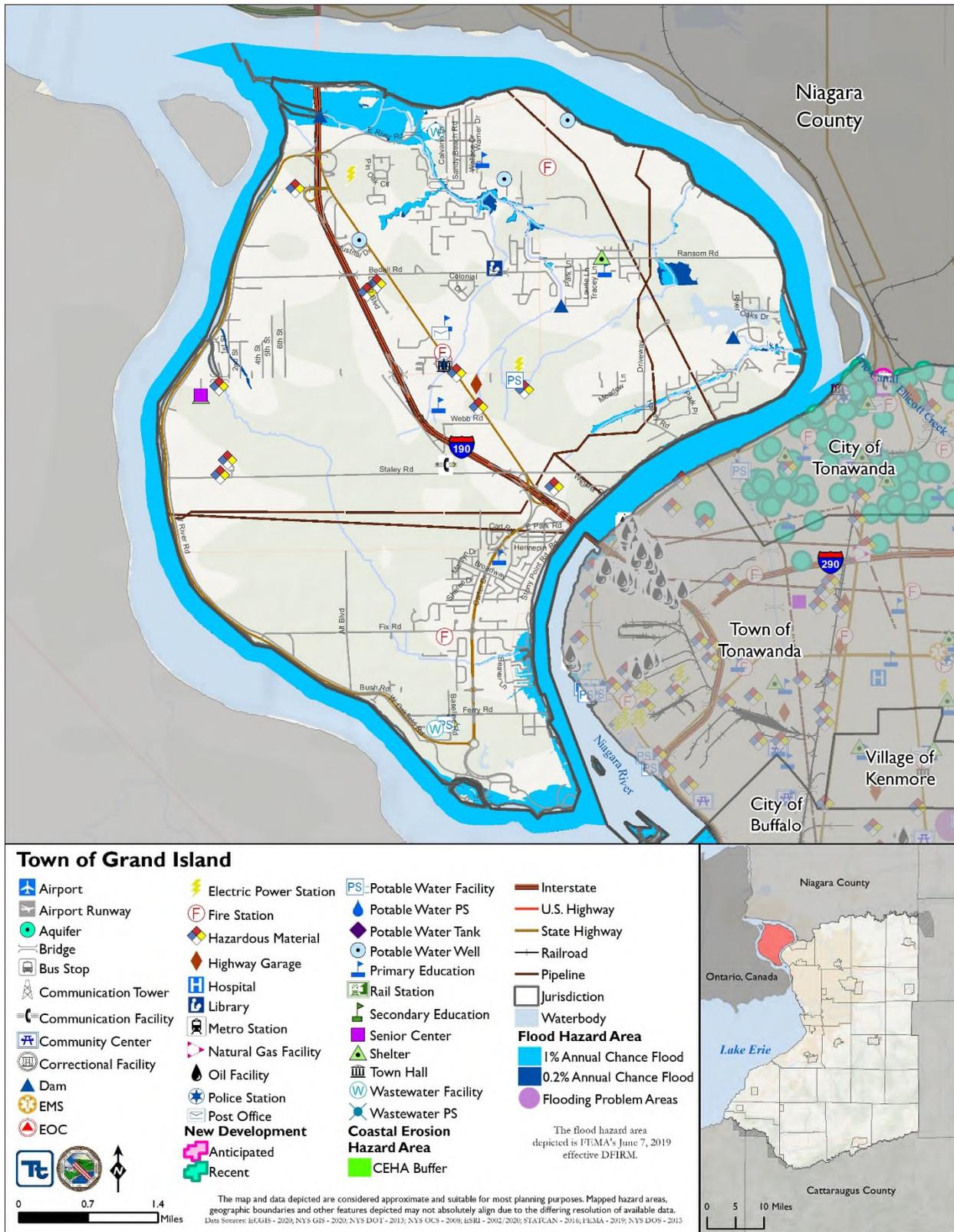




Figure 9.25-2. Town of Grand Island Hazard Area Extent and Location Map 2

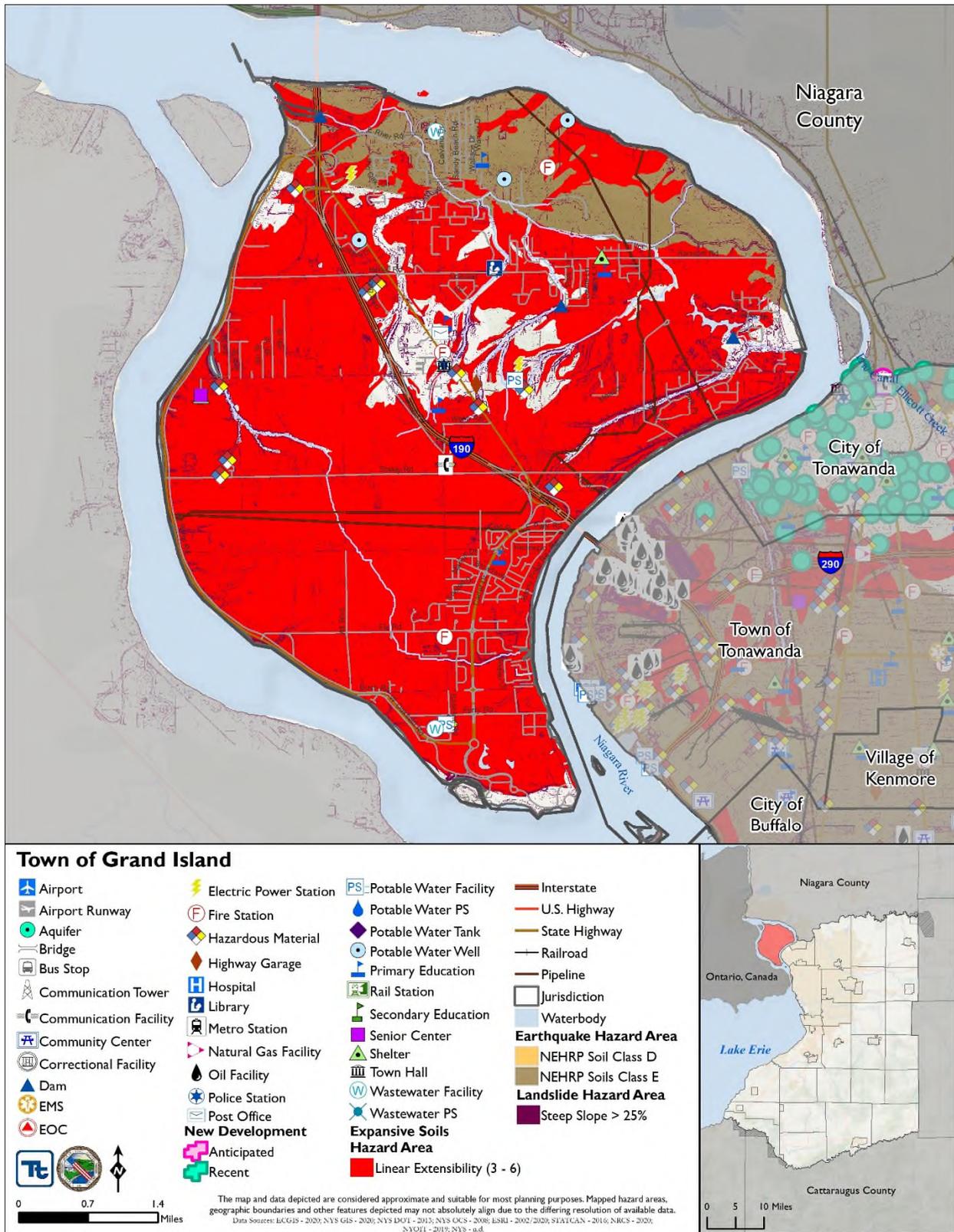
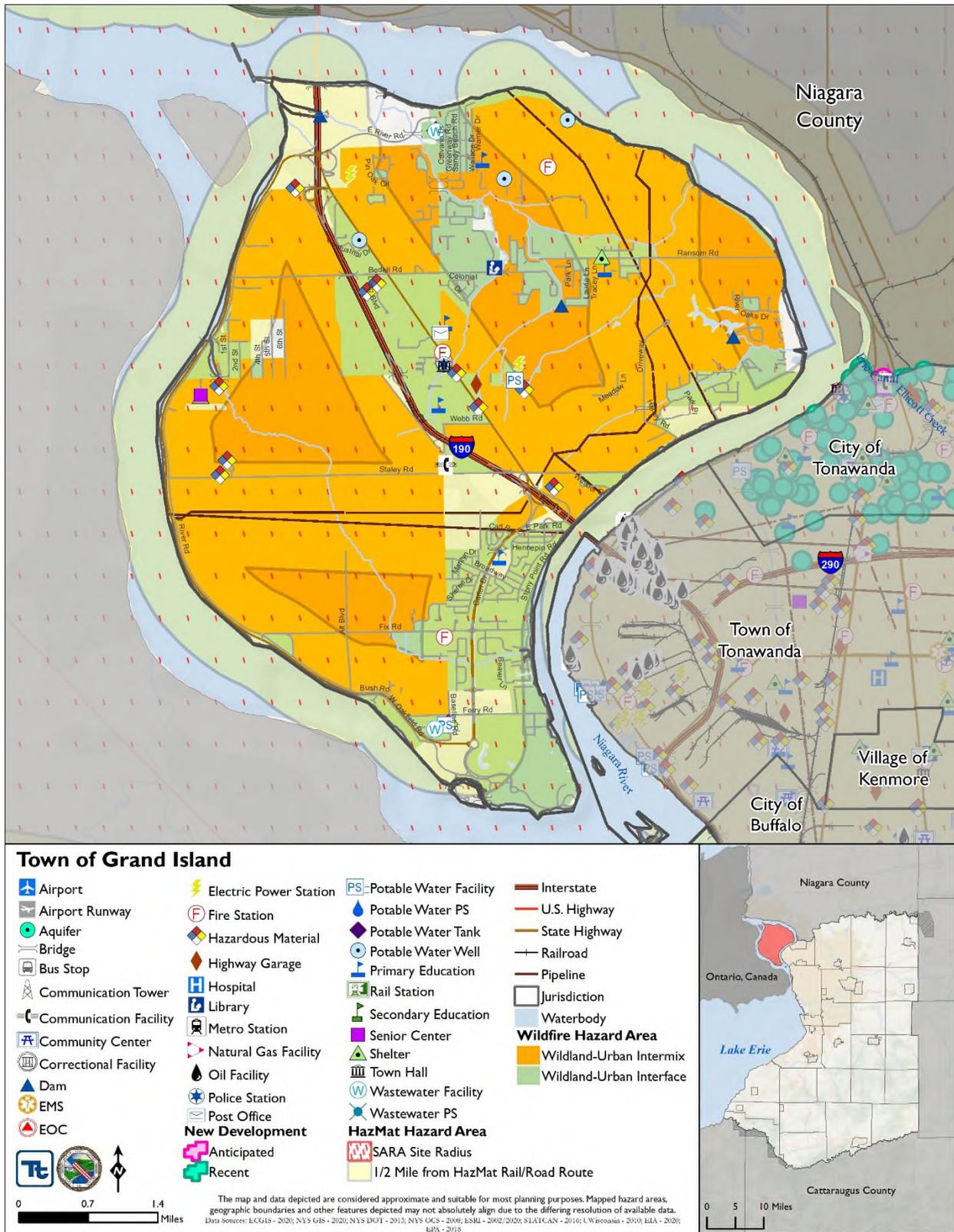




Figure 9.25-3. Town of Grand Island Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Grand Island’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.25-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.25-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
August 11-15, 2015	Flash Flood	No	Although the county was impacted the Town of Grand Island did not report damage.
October 28-29, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 12, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 18, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
January 11, 2017	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
March 8, 2017	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
March 13, 2017	Winter Storm	No	Although the county was impacted the Town of Grand Island did not report damage.
July 20, 2017	Tornado	No	Although the county was impacted the Town of Grand Island did not report damage.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
January 2, 2018	Blizzard	No	Although the county was impacted the Town of Grand Island did not report damage.
October 6, 2018	Lightning	No	Although the county was impacted the Town of Grand Island did not report damage.
February 24, 2019	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted the Town of Grand Island did not report damage.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted the Town of Grand Island did not report damage.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Grand Island’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Grand Island. The Town of Grand Island has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the coastal erosion risk should be decreased from High to Medium, that the earthquake hazard risk should be decreased from Medium to Low and the Severe Storm risk should be decreased from High to Low. These changes reflect the town’s risk assessment.

Table 9.25-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Medium	Medium	Low	High	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	Low	Medium	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction



Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.25-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Buckhorn Marsh Dam & Dike	Dam	X	X	2022-Town Grand Island-002

Source: FEMA 2021

Identified Issues

After review of the Town of Grand Island’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Grand Island has identified the following vulnerabilities within their community:

- The town’s municipal building lacks backup emergency power. The phone system (VOIP) utilizes UPS to remain functional. In the event of a power outage, very little emergency operations capability would be possible during and after an emergency.
- The Buckhorn Marsh Dam & Dike is in the Special Flood Hazard Area.
- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The town contains repetitive loss flood properties
- Some homeowners are unaware of their exposure to flood risk
- The town was unable to identify capacity of emergency shelters and temporary housing locations.

9.25.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.





Table 9.25-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost		
	East Park Outfall Reconstruction – replacing existing deteriorated storm sewer outfall at East Park and East River Roads	Erosion, Flooding	Prevent erosion and properly direct storm water to the Niagara River	Engineering Department	Complete	\$ 106,000		1. Discontinue 2. 3. Complete
	Fix Road Drainage Improvements – installing 1500 linear feet of 18” diameter new storm sewer	Drainage, Flooding	alleviate drainage problems and flooding and to improve capacity in the 2300 block of Fix Road	Engineering Department	Complete			1. Discontinue 2. 3. Complete
	Ferry Village Drainage Improvements- replacing severely deteriorated 140 linear feet of 24” diameter culvert pipe	Drainage, Flooding	Alleviate flooding and drainage problems to improve capacity on Elmwood Road	Engineering Department	Complete			1. Discontinue 2. 3. Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering and Water Resources	Complete	N/A		1. Discontinue 2. 3. Ordinance was recently updated.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Grand Island has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Engineering Department repaired the stormwater pond on Amy Drive, including excavation of two silted ponds to reduce stormwater and repair backups.
- The Bedell Road drainage/culvert was replaced to improve hydraulics and carrying capacity.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Grand Island participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.25-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	X	-	-	-	-	X
Cyber Attack	-	X	-	-	X	-	-	-	-	X
Earthquake	-	X	-	-	X	-	-	-	-	X
Expansive Soils	-	X	-	-	X	-	-	-	-	X
Extreme Temperature	-	X	-	-	X	-	-	-	-	X
Flood	-	X	-	X	X	X	X	-	-	X
Hazardous Materials	-	X	-	-	X	-	-	-	-	X
Landslide	-	X	-	-	X	-	-	-	-	X
Pandemic	-	X	-	-	X	-	-	-	-	X
Severe Storm	-	X	-	-	X	-	-	-	-	X
Severe Winter Storm	-	X	-	-	X	-	-	-	-	X
Utility Failure	-	X	-	-	X	-	-	-	-	X
Wildfire	-	X	-	-	X	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.25-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Grand Island would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.25-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Section 9.25: Town of Grand Island

Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Grand Island-001	Floodplain Administrator to attend training on floodplain management	3	Flood	<p>Problem: Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.</p> <p>Solution: Obtain/host training and certification for floodplain managers.</p>	No	No	Within 3 years	FPA, Emergency Manager	\$3,000	Certified floodplain managers trained Floodplain management improved.	County or municipal budget	High	EAP	PR
2022-Town Grand Island-002	Encourage protection of the Buckhorn Marsh Dam & Dike to the 0.2% annual chance flood event	1	Flood	<p>Problem: The NYSDEC owned Buckhorn Marsh Dam & Dike is in the Special Flood Hazard Area. The dam provides important flood protection services.</p> <p>Solution: The town will contact New York State, owner of the Buckhorn Marsh Dam and Dike to protect it to the 500-year flood level. New York State will survey the dam to determine what protections are necessary and carry out the necessary upgrades. The NYSDEC will report findings to the town.</p>	Yes ●	No	Within 3 years	Town Engineer, NYSDEC	TBD per engineering feasibility analysis	Ensure this critical facility continues to provide flood protection services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-Town Grand Island-003	Protect the town's municipal building from power outage	1	All Hazards, Utility Failure	<p>Problem: The Town Municipal building lacks emergency power and is vulnerable to utility failure with potential disruption to service from this important facility.</p> <p>Solution: Town staff will conduct a feasibility analysis to determine the proper size backup</p>	Yes	No	Within 3 years	Town Board, Emergency Manager	~\$75,000 for a backup generator	Ensure this critical facility continues to provide government services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES





Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				generator to install at the municipal building. Town will install and maintain the generator.										
2022-Town Grand Island-004	Repetitive Loss Properties	1, 2, 3	Flood	<p>Problem: There are seven Repetitive Loss Properties within the town. These properties will benefit from removal, acquisition or mitigation.</p> <p>Solution: The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	Within 3 years	Town Board, FPA, homeowners	Low to conduct Outreach	Provides an option to residents in the floodplain to protect themselves and their property	HMGP, BRIC, FMA, cost share with homeowners	High	SIP	PP
2022-Town Grand Island-005	Community flood risk outreach	3	Flood	<p>Problem: Some homeowners are unaware of their exposure to flood risk, including potential location of structures within the Special Flood Hazard Area.</p> <p>Solution: The town will work to notify all property owners with residences within the floodplain of the risk of flooding. The town will provide guidance and contacts to property owners to help with property disposition.</p>	No	No	Within 5 years	FPA	Staff time	Increase public awareness of risks posed by flooding.	Municipal budget	High	EAP	PR



Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Grand Island-006	Determine capacity of Emergency Shelters and Temporary Housing locations	1	All Hazards	Problem: The town is not able to identify the capacity of emergency shelters and temporary housing locations	No	No	Within 3 years	Town Board	Staff time	Ensure that emergency shelters and temporary housing locations provide adequate capacity to deal with post disaster demand	Municipal budget	High	LPR	ES, PR
				Solution: The town will work with the county to identify the capacity of emergency shelters and temporary housing locations										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ◆ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





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- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.25-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Grand Island-001	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-002	Protect the Buckhorn Marsh Dam & Dike to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-003	Protect the town's municipal building from power outage	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Grand Island-004	Repetitive Loss Properties	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-005	Community flood risk outreach	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022-Town Grand Island-006	Determine capacity of Emergency Shelters and Temporary Housing locations	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.25.9 Action Worksheets

The following action worksheets have been developed by the Town of Grand Island to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Grand Island Action Worksheet			
Project Name:	Protect the town's municipal building from power outage		
Project Number:	2022-Town Grand Island-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Town Municipal building lacks emergency power and is vulnerable to utility failure leading to potential disruption of service at this important facility which houses emergency services such as police, water, and engineering services.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will conduct a feasibility analysis to determine the proper size backup generator to install at the municipal building. Town staff will install and maintain the generator.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensure this critical facility continues to provide government services
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	~\$75,000 for a backup generator	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Board, Emergency Manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Develop a dedicated solar array	High	Variable power service, infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the town's municipal building from power outage	
Project Number:	2022-Town Grand Island-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided at the municipal building
Property Protection	1	Project will protect the municipal hall from utility failure risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	3 years
Agency Champion	1	Town Board, Emergency Manager
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Grand Island Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Town Grand Island-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	There are seven Repetitive Loss Properties within the town. These properties will benefit from removal, acquisition, or mitigation.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	Estimated Benefits (losses avoided):	Provides an option to residents in the floodplain to protect themselves and their property
Useful Life:	20 years	Goals Met:	1,2,3
Estimated Cost:	Staff time	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, BRIC, FMA, cost share with homeowners
Responsible Organization:	Town Board, FPA, homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Forced evictions	Very High	infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Town Grand Island-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect residents who live in repetitive loss properties
Property Protection	1	Project will protect the homes from flood risk
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	3 year
Agency Champion	1	Town Board, FPA, homeowners
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



9.26 Town of Hamburg

This section presents the jurisdictional annex for the Town of Hamburg. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Hamburg’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Hamburg’s hazard mitigation plan primary and alternate points of contact. The Town of Hamburg followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Management and Code Enforcement. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Sean Crotty, Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2811 Email: scrotty@thpdny.org	Name/Title: Nicholas Pikul, Deputy Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2835 Email: npikul@thpdny.org
NFIP Floodplain Administrator	
Name/Title: Roger Gibson, Supervising Code Enforcement Officer Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2210 Email: rgibson@townofhamburgny.com	

9.26.2 Municipal Profile

The Town of Hamburg is 41 square miles in size and is named after the German City of the same name. The town is on the county’s western side and is one of the county’s “Southtowns”. The town includes the Villages of Hamburg and Blasdell. Hamburg is bounded by Lake Erie to the west, the Town of Lackawanna to the north, the Town of Orchard Park to the east, and the Town of Eden to the south. Eighteenmile Creek traverses the town.

The Town of Hamburg was formed from the larger town of Willink. In 1850, the town was further reduced to form the Towns of East Hamburg and West Seneca. The New York State Thruway (Interstate 90), U.S. Route 62, US 20, and NY Route 5 pass through the town. The first white landowner in the area was John Cummings, who built a grist mill in 1806. In 1852, the Erie Railroad was built through the area. In 1868 the Erie County





Fair came to the town and has been there since that time. Weekly publication of the *Erie County Independent* began in 1875 (Wikipedia, Town of Hamburg, accessed 2020). Polish and Italians immigrants began to arrive in the area around 1890 to work in the area’s rapidly growing steel industry (Town of Hamburg website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of Hamburg was 44,974. The estimated 2019 population was 45,985, a 2.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.9 percent of the population is 5 years of age or younger and 19.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Jurisdictional Capability Assessment and Integration

The Town of Hamburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Town of Hamburg’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Hamburg. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.26-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	IBC2020 Hamburg Town Code Chapter 76	Local	Code Enforcement
Comments: It is the intent of this chapter to provide for the administration and enforcement of the provisions of all laws, codes, ordinances, regulations and orders applicable to: <ul style="list-style-type: none"> • The location, design, materials, construction, alteration, repair, equipment, maintenance, use, occupancy, removal and demolition of buildings, structures and appurtenances within the Town. • Fire prevention and fire safety regulations consistent with nationally recognized good practices for safeguarding of life and property from the dangers of fire and explosions arising from hazardous conditions in the use or occupancy of buildings or premises and from the storage and use of hazardous substances, materials and devices. 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Zoning Code	Yes	Yes	Hamburg Town Code Chapter 280	Local	Code Enforcement
<p>Comment: A Comprehensive Zoning Plan is hereby established for the area of the Town of Hamburg outside the Villages of Blasdell and Hamburg by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The Comprehensive Zoning Plan, set forth in the text and map which constitute this chapter, is adopted in order to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to enhance the environment by the conservation of certain open land areas with certain desirable or unique characteristics worthy of preservation; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; and to preserve and promote the attractiveness of the community.</p>					
Subdivision Ordinance	Yes	Yes	Hamburg Town Code Chapter 230	Local	Planning Department
<p>Comment: The public health, safety, morals and general welfare require harmonious, orderly and progressive development of land within towns of the state. In furtherance of this purpose, regulations of the subdivision of land by Town governing authorities is desired for the following purposes, among others:</p> <ul style="list-style-type: none"> • To encourage the development of economically sound and stable communities. • To assure the provision of required streets, utilities and other facilities and service to new land developments. • To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments. • To assure the provision of needed public open spaces and building sites in new land developments through the dedication or reservation of land for recreational educational and other public purposes. • To assure, in general, the wise development of new areas in harmony with the Master Plan of the town. • To assure coordination of intergovernmental public improvement plans of the town. • To assure coordination of intergovernmental public improvement plans and programs within the county. • To assure proper legal description, identification, monumentation and recording of real estate boundaries. • (9) To secure equitable handling of all subdivision plats by providing uniform standards and procedures, thus providing suitable sites for building purposes and human habitation. 					
Stormwater Management Ordinance	Yes	Yes	Hamburg Town Code Chapter 280-351	Local	Engineering Department
<p>Comment: No application for approval of a land development activity shall be reviewed until the appropriate board has received a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in this article and Chapter 226A.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	No	-	-	-
<p>Comment: None</p>					
Site Plan Review	Yes	Yes	Town of Hamburg Code Chapter 280-333	Local	Planning Department
<p>Comment: All applications requiring a special use permit are also subject to site plan review and the requirements of this section. Applications only requiring site plan review may have some of the following requirements waived by the Town, based on the tower's location and size. Applications for microcells requiring site plan approval may have some of these requirements waived (many may not be applicable to these types of installations).</p> <ul style="list-style-type: none"> • All applicants, after obtaining Town of Hamburg and other required approvals, must obtain a building permit from the Code Enforcement Officer of the Town of Hamburg. The Code Enforcement Officer is hereby authorized to issue building permits under this article if it is determined that an applicant has met the requirements established in this article. • B. Site plan applications will be processed by the Town of Hamburg Planning Board. The intent of site plan review is to evaluate site plans and require changes consistent with minimizing conflicts which may result between the site layout and design of proposed uses and natural site conditions and features and/or existing or planned adjacent uses. Site plan review is also responsible 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
for ensuring that development comply with clearly calculated planning goals and policies as are provided in the Town of Hamburg's Comprehensive Plan and other area-specific planning documents.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Town of Hamburg Code Chapter 115	Local	Code Enforcement
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; Control filling, grading, dredging and other development which may increase erosion or flood damages; Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and Qualify and maintain for participation in the National Flood Insurance Program. <p>Meets state requirements – BFE+2 feet for all construction in the SFHA (residential and non-residential)</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	SPDES GP	NYS	NYS DEC
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Update in progress 2021	Local	Planning Department
Comment: The Town of Hamburg is preparing a new Comprehensive Plan, which will guide development and land use decisions here for the next 15 years.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	Stormwater Management Plan	NYS	NYS DEC
Comment: The Town stormwater management program is in compliance with the requirements of the Federal and State Phase II Stormwater Regulations.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	Yes	Yes	Local Waterfront Revitalization Program, 2011	Local, Federal	Town Board
Comment: The LWRP includes policies to be used to determine an appropriate balance between economic growth and development and preservation that will permit the beneficial use of waterfront resources in the Town without undo impacts to Lake Erie or adjacent upland areas. Policies are related to Developed Waterfront areas, Natural Waterfront areas, Public Waterfront areas, and Working Waterfront areas.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	Yes	Town of Hamburg/Erie County CEMP (In progress review)	Local/County	Emergency Management
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Yes	Not Indicated	Local	Emergency Management
Comment: HIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the state's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.					
Post-Disaster Recovery Plan	Yes	Yes	Erie County CEMP	County	Emergency Management
Comment: Post Disaster Recovery is a section of the CEMP.					
Continuity of Operations Plan	Yes	Yes	Town of Hamburg/Erie County CEMP (In progress review)	Local/County	Emergency Management
Comment: The COOP states that all emergency response activities within the county will utilize the National Incident Management System (NIMS). This plan employs a MAC structure that includes a MACC coordinator, a Planning section (situation unit / resource unit / strategic foresight unit), a Logistics section, Joint Information Center (JIC) and agency/organization representatives.					
Public Health Plan	Yes	Yes	Erie County Plan	County	Emergency Management
Comment: Public Health Emergency Preparedness involves several county Departments.					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Hamburg to oversee and track development.

Table 9.26-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Inspection
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Underutilized Sites Study completed January 2018

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Hamburg and their current responsibilities which contribute to hazard mitigation.



Table 9.26-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board is responsible for decisions on land use planning in Hamburg and specifically subdivision and site plan review and approval, advice toward revisions of the Comprehensive Plan and the review and granting of special use permits. Approvals of the Planning Board are independent of those of the Town Board.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals – Approval of Variances
Planning Department	Yes	See Above
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The "Conservation Advisory Board" is a member of the New York State Association of Conservation Commissions, and is charged with doing environmental assessments on all new projects in the Town of Hamburg. The assessments are done in accordance with NYS SEQRA law. The assessments are provided to the Planning Board and the Town Board to guide them in their decisions. Other functions of the CAB are: <ul style="list-style-type: none"> • The preservation of open space/green space – including acquisitions by the DEC and Town. • Evaluation of wetlands and other natural resources. • Assisting the DEC, the Army Corps of Engineers and other agencies as necessary. • Advising the Town Board, Building Inspection and Engineering departments on environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Hamburg Community Development Department
Public Works/Highway Department	Yes	The Town of Hamburg Highway Department performs numerous secondary tasks, in addition to the primary responsibilities of Road Maintenance, Snow Removal, Drainage, and Brush/Rubbish Pickup. The department is responsible for maintenance of right-of-ways for safety and beautification purposes. This includes cutting brush and removal of trees where necessary. The department works with the Town Board to alleviate off road, backyard, and side yard problems when many residents are involved. We also regularly clean drop inlets as part of our drainage system maintenance. The department responds to notices of excavation given by the Underground Facilities Protective Organization, protecting underground lines from damage. The department maintains its own fleet of over 50 vehicles and a large tool inventory. The department's own mechanic shop conducts its own state vehicle inspections and 90% of its own vehicle repairs. Small engine repair, carpentry, and welding work is also completed by the department.
Construction/Building/Code Enforcement Department	Yes	Building Inspection Responsibilities: Enforce the New York State Uniform Fire Prevention and Building Code and the Town of Hamburg, Village of Hamburg and Village of Blasdell Zoning Codes. Reviews plans for building permits to ensure the plans, specifications and any other information that may be required is in compliance with all codes before issuing the proper permits Performs inspections on all building permits to ensure compliance with proper codes.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		Address complaints and alleged violations for validity and resolution per zoning codes and property maintenance compliance, if there is a violation and it is not corrected we will bring the property owner into court and the judge will decide the final disposition. Conducts fire inspections on commercial building and multiple unit apartment buildings to verify all smoke detectors and exit signs are functioning properly, fire extinguishers, sprinkler systems and fire suppression systems are inspected and exit ways are clear of debris. Receives and maintains storm water pollution Prevention Plan (SWPPP) reports for private subdivisions and commercial construction.
Emergency Management/Public Safety Department	Yes	The Town of Hamburg Public Safety Dispatch Center provides dispatching services to many agencies in the South Towns of Erie County, New York. The primary agencies served are the Police, Fire and EMS (Emergency Medical Services) units of the Town of Hamburg. This includes all of the Villages of Blasdell, and Hamburg. The Dispatch Center is the contact point for the Dog Control Officers throughout the Town of Hamburg. The Dispatch Center also answers all 911 hardwired telephone calls within the Town of Hamburg, and dispatches the Southtowns Hazmat Team, and the Town of Hamburg Water Rescue Unit. The Dispatch Center is also the afterhours contact point for many Town Agencies, including the Buildings and Grounds, and Town Highway Departments.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department (see above)
Mutual aid agreements	Yes	Highway agreements with the Village of Hamburg, Erie County DPW and NYS DOT. Emergency Services agreements as part of the Erie County Fire, Law Enforcement & Emergency Services Mutual Aid Agreements.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	Yes	Engineering Department
Professionals trained in conducting damage assessments	Yes	Engineering Department
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department/Planning Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Surveyor(s)	Yes	Engineering Department
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	Yes	Administration
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Hamburg.

Table 9.26-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Community Development
Capital improvements project funding	Yes, Finance
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes, Town Board
Impact fees for homebuyers or developers of new development/homes	Yes, Community Development
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Hamburg.

Table 9.26-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	OEM
Personnel skilled or trained in website development	Yes	IT Department
Hazard mitigation information available on your website	Yes	IT Department
Social media for hazard mitigation education and outreach	Yes	OEM
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning and Zoning



Outreach Resources	Available? (Yes/No)	Comment:
Other programs already in place that could be used to communicate hazard-related information	Yes	Community Development/ IDA
Warning systems for hazard events	Yes	OEM
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Hamburg.

Table 9.26-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.26-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.26.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Roger Gibson, Supervising Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Hamburg.

Table 9.26-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Hamburg	90	202	\$1,824,818	66	37

Source: FEMA, 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town of Hamburg is vulnerable to flooding, but does not maintain a list of property owners that are interested in flood mitigation, nor a list of properties that have been damaged by flooding. There are currently no RiskMAP projects underway, however a property on Big Tree Road was previously mitigated against flood damages. Substantial Damage determinations are made by reviewing construction repair estimates, if the cost to repair is 50% or more of the market value, minus the land value. Flood Hazard maps adequately address the flood risk within the town.

NFIP Compliance

Town of Hamburg Code Enforcement is responsible for floodplain management, however there are no certified floodplain managers on staff. Code Enforcement is responsible for plan reviews, permitting, and inspections. The Flood Damage Prevention Ordinance is located in Chapter 115 of the Town Code, and meets minimum requirements. The most recent Community Assistance Visit was in 2019. There are no outstanding compliance issues.

9.26.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Hamburg has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation routes are determined by NYSDOT via Predesignated Routes and are dependent on the event.

Sheltering

The Town of Hamburg has identified the following designated emergency shelters within the Town.

Table 9.26-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The Town will work with the county to identify and designate an Emergency Shelter. See Mitigation Action 2022-T. Hamburg-#001							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Hamburg has identified the following sites suitable for placing temporary housing units.

Table 9.26-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The Town will work with the county to identify temporary housing locations. See Mitigation Action 2022-T. Hamburg-#002					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Hamburg has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.26-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The Town will work with the county to identify and designate Permanent Housing Locations. See Mitigation Action 2022-T. Hamburg-#002					



9.26.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.26-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.26-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	51	0	56	0	92	0	106	0	76	0	85	0
Multi-Family	45	0	17	0	23	0	19	0	6	0	34	0
Other (commercial, mixed-use, etc.)	23	0	20	0	15	0	12	0	12	0	17	0
Total Permits Issued	119	0	93	0	130	0	137	0	94	0	136	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Arthur Ct Town Homes	Townhomes			South Park Ave				Complete				
Brookview Apts	Apts			Southwestern Blvd				Complete				
Deer Springs Subdivision	Single Family Residential							Complete				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Fosterbrook Apts	Apts			Southwestern Blvd								
Pleasant Creek	Single Family											
Rolling Ridge Acres	Single Family											

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.26.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Hamburg’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Hamburg has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.





Figure 9.26-1. Town of Hamburg Hazard Area Extent and Location Map 1

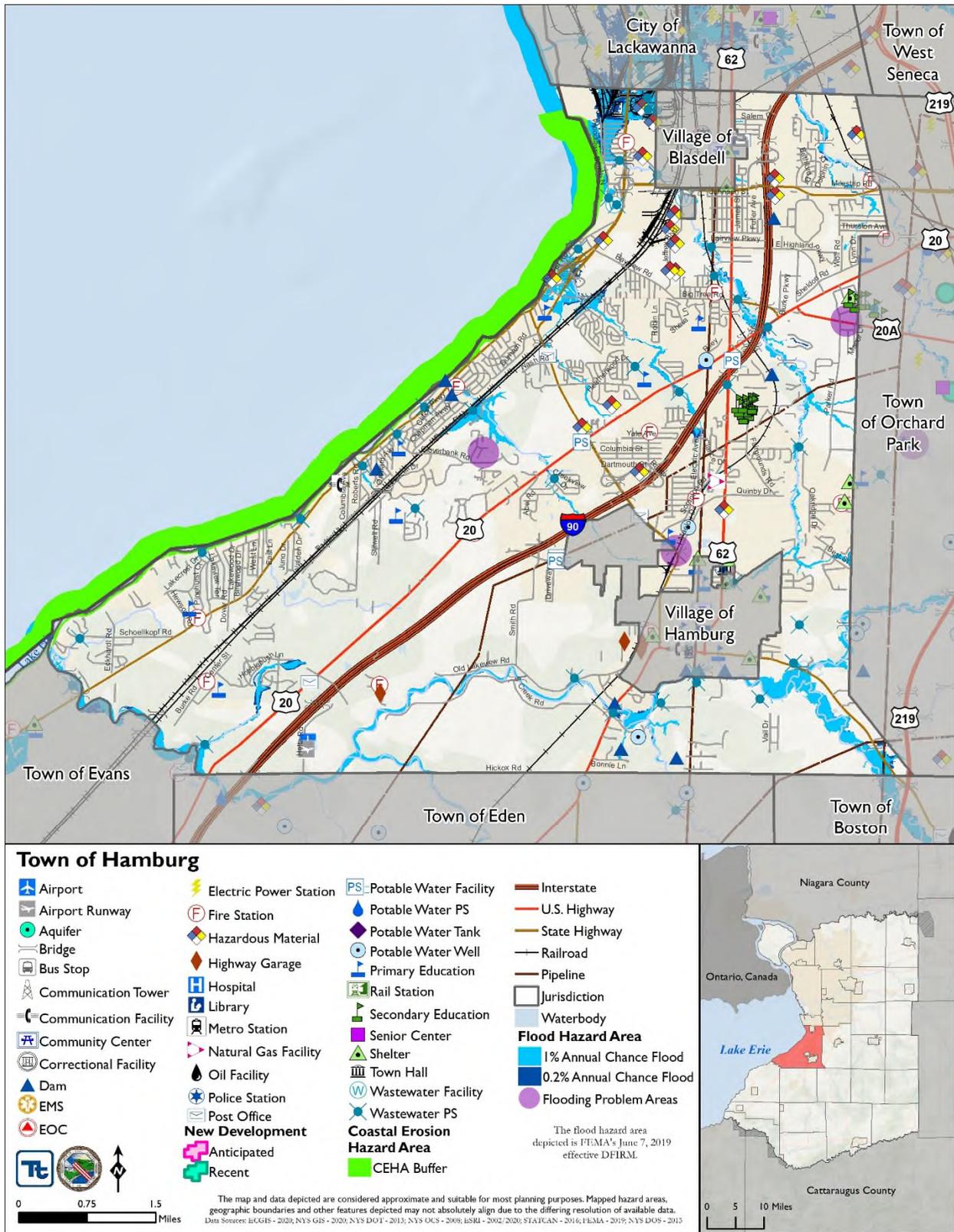




Figure 9.26-2. Town of Hamburg Hazard Area Extent and Location Map 2

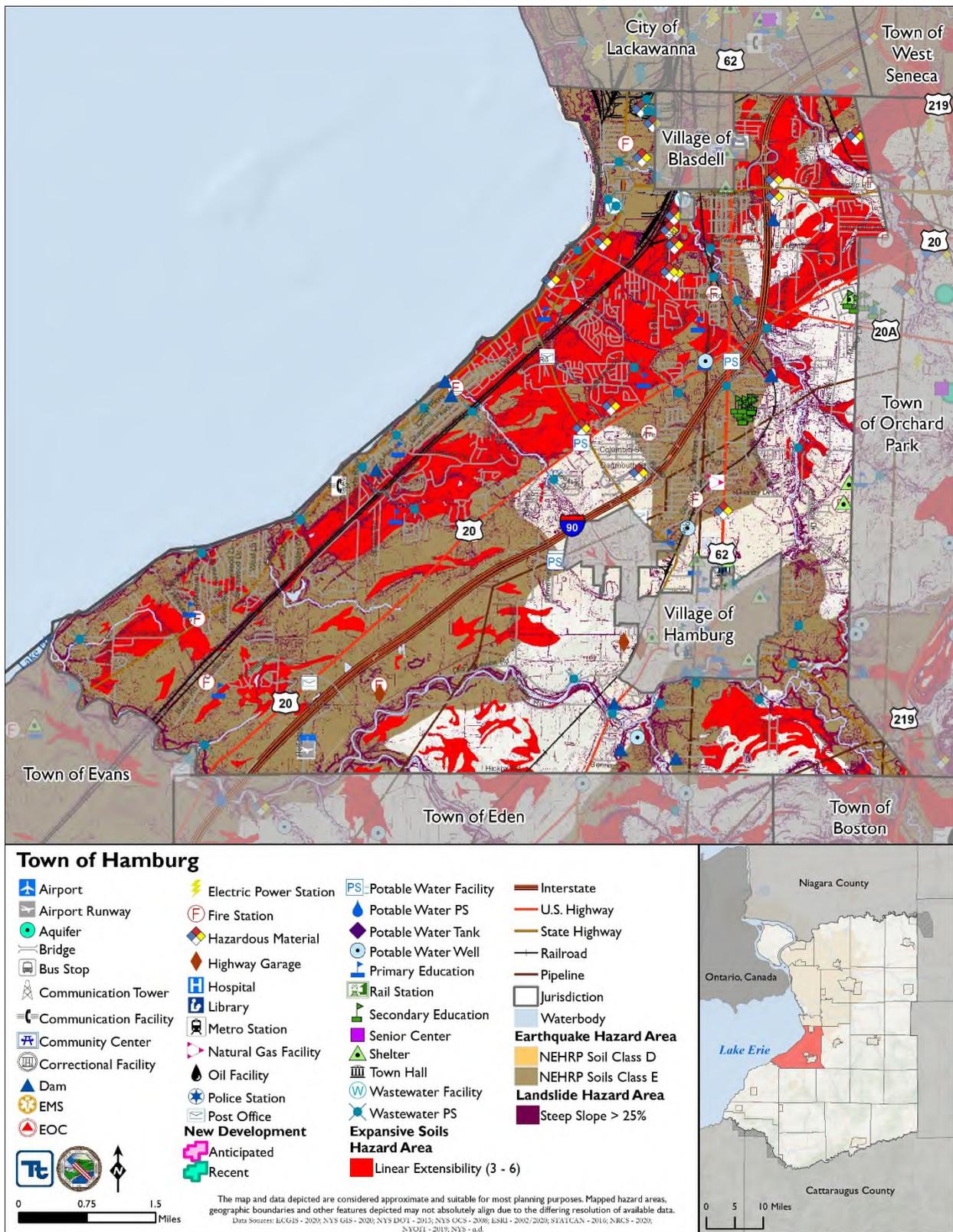
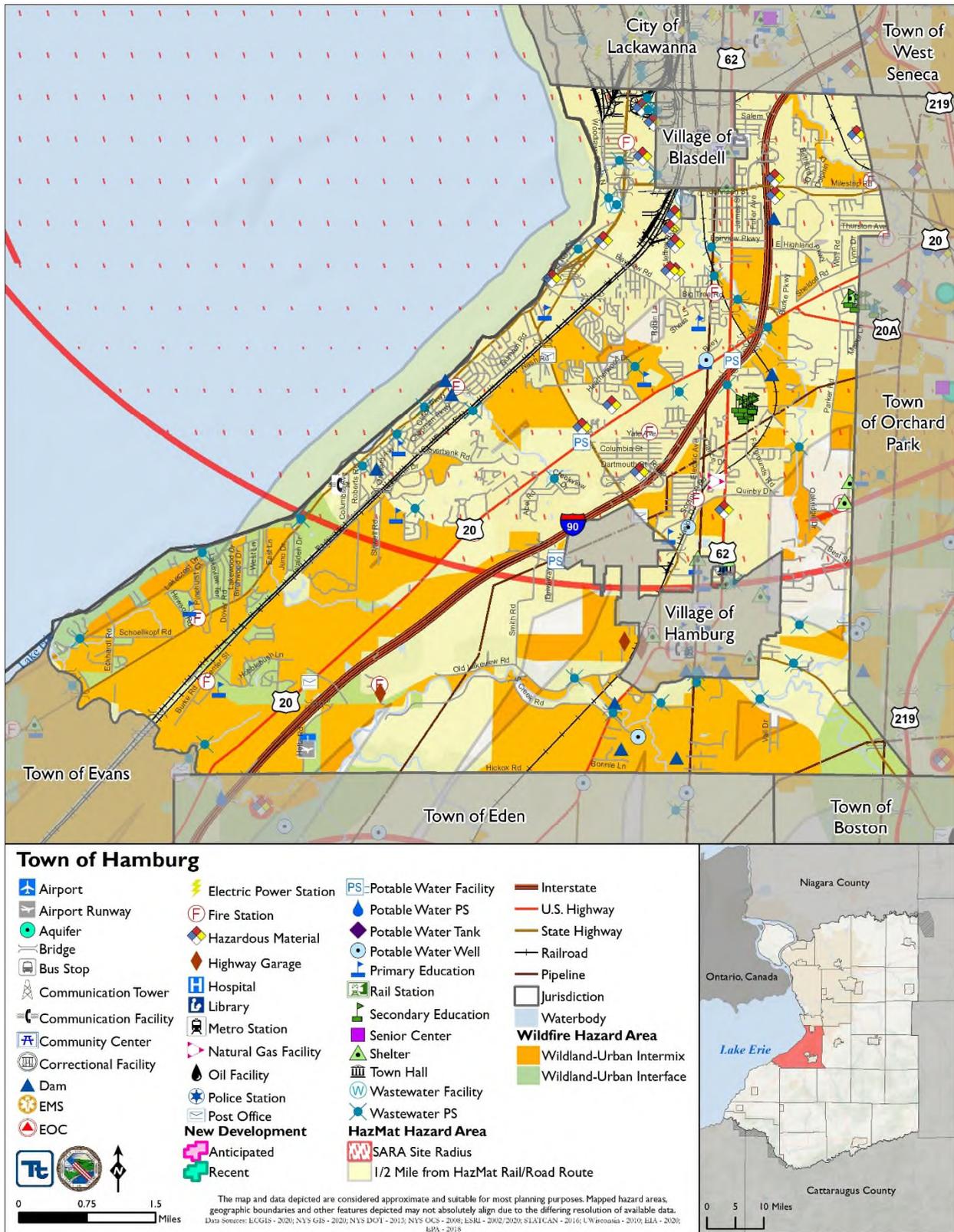




Figure 9.26-3. Town of Hamburg Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Hamburg’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.26-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.26-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 9, 2015	Lake Effect Snow	No	Lake effect snow moved across Lake Erie, creating blizzard-like conditions with zero visibility and wind gusts of 45 mph. A portion of the New York State Thruway was closed Friday morning, with rates of snow falling up to four inches per hour.	Estimated snowfall totals reached 19 inches in Hamburg.
January 1, 2016	Lake Effect Snow	No	Bands of lake effect snow developed over the course of New Year’s Eve, with peak snowfall on New Year’s Day reaching snowfall peaks of two inches per hour, and reports of thunder within the band.	Estimated snowfall totals reached 10 inches in Hamburg.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 9 inches of snow was reported in Hamburg.
February 12, 2016	Lake-Effect Snow	No	Lake effect snow bands formed across Lake Erie in the morning, and later off Lake Ontario bringing two inches of snow per hour. The snowfall was during the early morning commute and caused several accidents and slowed traffic.	An estimated 8 inches of snow was reported in Hamburg.
February 15, 2016	Winter Storm	No	A low pressure system moved across Pennsylvania into New York, bringing minor snow accumulations and half an inch of ice. Heaviest snowfalls were in Rochester (22 inches).	An estimated 10 inches of snow was reported in Hamburg.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or more and school busses were unable to bring	Total snowfall report in Hamburg amounted to 23 inches.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	
March 8, 2017	High Wind	No	A deep low pressure system brought strong winds to the entire region with sustained winds up to 49 mph and gusts reaching 81 mph. Hundreds of thousands of people were without power in Monroe County, NY alone. Strong winds derailed 12 train cars in Batavia (Genesee County). Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the high winds.	Measured wind gusts reached 75 mph in Hamburg.
June 27, 2017	Hail	No	Thunderstorms in Orchard Park and West Seneca produced three-quarter inch hail.	Three-quarter inch (0.75) hail was reported in Hamburg.
July 20, 2017	Thunderstorm Wind/Tornado	No	A cluster of thunderstorms resulted in four tornadoes across Western NY.	A tornado began in Hamburg before moving across Orchard Park. Hundreds of car windows were blown out at the Hamburg Fairgrounds, where several buildings were damaged, including the Grandstand. Numerous trees were downed across the fairgrounds. An NWS storm survey confirmed an EF2 tornado touched down in Hamburg.
August 4, 2017	Thunderstorm Wind	No	Thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, winds partially tore the roof off a building. One inch hail was also reported.	Law enforcement reported trees down by thunderstorm winds in the Village of Hamburg.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 12 inches of snow were reported in Hamburg.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightning throughout the duration of the event.	An estimated 16 inches of snow were reported in Hamburg
December 29, 2017	Lake-Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 9 inches of snow were reported in Hamburg.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Fifteen (15) inches of snow were reported in Hamburg.
October 27- November 1, 2019	Lakeshore Flooding and High Winds	DR-4472-NY	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	Hoover Beach in Hamburg became inundated from lakeshore flooding. Homes were flooded on Grand Island and along Route 5 near Hamburg. Water levels



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				reached 10.67 feet above low water. Rainfall totals reached 2.3 inches in Hamburg.
November 27, 2019	High Wind	No	A strong low pressure front followed by a cold front produced favorable conditions for high winds and storms across western NY. Water Levels in Lake Erie peaked at 9.56 feet above low water and remained above flood stage for four hours.	Peak wind speeds reached 66 mph in Hamburg.
January 12, 2020	High Wind	No	Wind gusts along the Lake Erie shore exceeded 65 mph, resulting in widespread damage in all lakeshore counties.	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg. Due to the seiche, water levels peaked in Buffalo at 9.85 feet above low water.
January 18, 2020	Lakeshore Flood	No	Heavy snowfalls and precipitation followed by a cold front resulted in a seiche on Lake Erie that caused lakeshore flooding throughout the county. Peak water levels on Lake Erie reached 8.18 feet above low water.	The seiche on Lake Erie resulted in flooding and the closure of Route 5 in Hamburg.
February 26, 2020	Lake-Effect Snow	No	A low-pressure system brought lake-effect snow across Lakes Erie and Ontario. Widespread snow accumulations of 1-2 feet of snow occurred east of Lake Erie, accompanied by strong wind gusts and lakeshore flooding. The biggest seiche of the month occurred during the event, brining the water level in Lake Erie to 7.5 feet above low water.	Sustained wind speeds reached 56 mph in Hamburg. Minor flooding along Route 5 was reported.
August 25, 2020	Thunderstorm Wind	No	A cold front generated scattered thunderstorms throughout the evening, increasing in intensity as they crossed Lake Ontario moving south into Buffalo.	Several trees were down onto Smith Road in Hamburg.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Hamburg’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its





potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Hamburg. The Town of Hamburg has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Town of Hamburg indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.26-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	High	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.26-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
George Ricaby Co Dam #1	Dam	A	V	2022-T. Hamburg-004
Rogers Road PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003
Wanakah PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003
Woodlawn Beach PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003



Source: Effective DFIRM

Identified Issues

After review of the Town of Hamburg’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Hamburg has identified the following vulnerabilities within their community:

- A community of approximately 100 homes on Lake Erie at Hoover Beach are at extreme risk of flooding and freezing due high wave action and ice buildup.
- The town does not have any designated Emergency Shelter Locations.
- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain).
- The George Ricaby Co Dam #1 is located within the 0.2% SFHA (500-year floodplain).
- High water from creek floods over golf course causing substantial damage to grounds causing financial impact on town.
- The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.
- Thurston Avenue experiences ongoing drainage problems causing road closures and damages during storm events.
- A blocked pipe at Twin Willows causes flooding and drainage issues during storm events.
- Flood-prone areas include:
 - 18 Mile Golf Course
 - Wanakah Heights
 - Thurston/Richmond Area
 - Eckhardt Rd at Boston State

9.26.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.26-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
-	18 Mile Creek Golf Course Flood Mitigation Project	Flooding	Town Engineering	High water from creek floods over golf course causing substantial damage to grounds causing financial impact on Town	No Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Hamburg-005 2. 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Smith Road Box Culvert Replacement	Flooding	Town Engineering	Flooding 30 residential properties and roadway upstream of inadequate sized culvert	Complete	Cost	-	1. Discontinue 2. 3. Complete
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Town-wide drainage study to assess infrastructure: To adequately measure the ability to handle storm water and drainage	Flooding	Town Engineering	Aging infrastructure	No Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Hamburg-006 2. 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Installation of reinforced break wall along Hoover Beach neighborhood along Lake Erie	Coastal Flooding	Town Engineering	Not Identified	Complete	Cost	-	1. Discontinue 2. 3. Property was sold, discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost		
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to update and revise floodplain management practices as new regulations from FEMA are put in place.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Code Enforcement and Engineering	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to update and revise floodplain management ordinances as new FIRMs are released.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Join the Community Rating System (CRS)	Flooding	Town Engineering	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to complete the necessary requirements to join the CRS system through the NFIP.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Hamburg has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Hamburg participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.26-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X									X
Cyber Attack	X									X
Earthquake	X									X
Expansive Soils	X									X
Extreme Temperature	X									X
Flood	X	X		X	X		X		X	X
Hazardous Materials	X									X
Landslide	X									X
Pandemic	X									X
Severe Storm	X	X							X	X
Severe Winter Storm	X	X							X	X
Utility Failure	X									X
Wildfire	X									X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.26-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Hamburg would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.26-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Hamburg-001	Emergency Shelters	1, 2, 3	All Hazards	Problem: The town does not have any designated Emergency Shelter Locations.	No	No	Short	Town of Hamburg	Low	High, establishes shelter location	Municipal Budget	High	LRP	ES
				Solution: The town will work with the county to identify and designate an Emergency Shelter that meets state and ADA compliance requirements.										
2022-T. Hamburg-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.	No	No	Short	Town of Hamburg	Low	High, identifies alternative housing locations for damaged properties	Municipal Budget	High	LRP	ES
				Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the County to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										
2022-T. Hamburg-003	Wastewater Pump Stations Flood Protections	1, 2	Flood	Problem: The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain).	Yes 💧	No	Short	Town of Hamburg DPW	Medium-High	High, reduces flooding at critical facilities	FMA, CDBG	High	SIP	SP
				Solution: The town will conduct a feasibility assessment to determine										





Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>										
2022-T. Hamburg-004	George Ricaby Co Dam #1 Flood Protections	1, 2, 3	Flood	<p>Problem: The George Ricaby Co Dam #1 is located within the 0.2% SFHA (500-year floodplain).</p> <p>Solution: The privately owned George Ricaby Co Dam #1 is classified as a Class D dam, posing no hazard to the town. The town will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The town will aid in any flood mitigation measures as determined by the owner as necessary.</p>	Yes	No	6 months	Town of Hamburg	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-T. Hamburg-005	18 Mile Creek Golf Course Flood Mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: High water from creek floods over golf course causing substantial damage to grounds causing financial impact on town.</p> <p>Solution: The town will work with the owners of the 18 Mile Creek Golf course to conduct a flood vulnerability analysis to determine sources and causes of flooding. Based on the findings of the analysis, the town and owners will implement projects to reduce flooding on the</p>	No	No	Short	Town of Hamburg DPW, 18 Mile Golf Course	Medium-High	High, reduces flooding and financial burden	FMA, CDBG	High	SIP	SP



Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Course and to the town roads and nearby properties. Options include: sump pumps or drainage systems to redirect runoff, flood proofing barriers and adding vegetation to reduce runoff and damages.										
2022-T. Hamburg-006	Town and Village Drainage Study	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.</p> <p>Solution: The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.</p>	No	No	3 years	Town of Hamburg, Village of Hamburg Engineering and DPW	Low to conduct study, High to implement	High, reduces roadway flooding and storm impacts	FMA, BRIC, HMGP	High	LPR, SIP	PR, SP
2022-T. Hamburg-007	Thurston Ave Drainage	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Thurston Avenue experiences ongoing drainage problems causing road closures and damages during storm events.</p> <p>Solution: The Town of Hamburg Engineering Department will conduct a feasibility analysis of the roadway to assess the cause of the flooding issues and provide recommendations to improve drainage. The town will then implement the findings of the study, including upsizing and replacing culverts, installing sump pumps and drainage outlets, and other</p>	No	No	Short	Town of Hamburg Engineering	High	High, reduces flooding and road closures	FMA, HMGP, Municipal Budget	High	SIP	SP



Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				non-structural flood control methods as necessary.										
2022-T. Hamburg-008	Twin Willow Drainage	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	<p>Problem: A blocked pipe at Twin Willows causes flooding and drainage issues during storm events.</p> <p>Solution: The Town of Hamburg Engineering Department will conduct a feasibility analysis of the roadway to assess the cause of the flooding issues and provide recommendations to improve drainage. The town will then implement the findings of the study, including upsizing and replacing culverts, installing sump pumps and drainage outlets, and other non-structural flood control methods as necessary.</p>	No	No	Short	Town of Hamburg Engineering	High	High, reduces flooding and road closures	FMA, HMGP, Municipal Budget	High	SIP	SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR)* – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.26-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Hamburg-001	Emergency Shelters	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-002	Temporary and Permanent Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-003	Wastewater Pump Stations Flood Protections	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-T. Hamburg-004	George Ricaby Co Dam #1 Flood Protections	1	1	1	1	1	0	-1	1	1	1	0	1	1	1	10	High
2022-T. Hamburg-005	18 Mile Creek Golf Course Flood Mitigation	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-T. Hamburg-006	Town and Village Drainage Study	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-007	Thurston Ave Drainage	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-008	Twin Willow Drainage	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.26.9 Action Worksheets

The following action worksheets have been developed by the Town of Hamburg to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Wastewater Pump Stations Flood Protections		
Project Number:	2022-T. Hamburg-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	High, reduces flooding at critical facilities
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	Medium-High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	1-2 years	Potential Funding Sources:	FMA, CDBG
Responsible Organization:	Town of Hamburg DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate pump stations	\$500,000	Not cost effective
	Decommission pump stations	N/A	Not feasible, remaining stations cannot handle capacity needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Wastewater Pump Stations Flood Protections	
Project Number:	2022-T. Hamburg-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at critical facilities
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	Town supports project
Legal	1	
Fiscal	-1	Town will seek funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Town and Village Drainage Study		
Project Number:	2022-T. Hamburg-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces roadway flooding and storm impacts
Useful Life:	30 years	Goals Met:	1, 2, 3
Estimated Cost:	Low to conduct study, High to implement	Mitigation Action Type:	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FMA, BRIC, HMGP
Responsible Organization:	Town of Hamburg, Village of Hamburg Engineering and DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Shared Services Agreements with Town/Village
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	N/A	May not solve issues, not cost effective
	Build bridges at intersections	N/A	Need to determine cause and source of flooding
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Town and Village Drainage Study	
Project Number:	2022-T. Hamburg-006	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flooding
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village support project
Legal	1	
Fiscal	-1	Will need to seek funding to implement
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Shares services agreement with town/village
Total	12	
Priority (High/Med/Low)	High	



9.27 Village of Hamburg

This section presents the jurisdictional annex for the Village of Hamburg. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Hamburg’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.27.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Hamburg’s hazard mitigation plan primary and alternate points of contact. The Village of Hamburg followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Emergency Management and Code Enforcement. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.27-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ric Dimpfl Jr., Emergency Manager Address: 100 Main Street, Hamburg, NY 14075 Phone Number: 716-491-8684 Email: ricdimpfl@roadrunner.com	Name/Title: Sean Crotty, Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2811 Email: scrotty@thpdny.org
NFIP Floodplain Administrator	
Name/Title: Roger Gibson, Supervising Code Enforcement Officer Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2210 Email: rgibson@townofhamburgny.com	
Additional Contributors	
Name/Title: Jason Cozza, Village Administrator Method of Participation: Provided data and information	
Name/Title: Dean Messing, Assistant Emergency Manager Method of Participation: Provided data and information	

9.27.2 Municipal Profile

The Village of Hamburg is 2.5 square miles in size and lies in the southeast part of the Town of Hamburg, south of Buffalo. Eighteen Mile Creek flows in the south part of the village towards Lake Erie. The village is located entirely within the Town of Hamburg. US Route 62 passes through the village.



The village was first settled by whites in 1806 and was then a rural farming community for generations. The town was first known as White’s Corners. Early settlers located in what is now the village center. As Hamburg’s population increased, new businesses and residences were built. The village incorporated in 1874 at which time the population of the approximately 700. By 1900, the village’s population had grown to approximately 2,000. After World War II, the village developed suburban-scaled neighborhoods and commercial nodes (Village of Hamburg Comprehensive Plan, 2012).

According to the U.S. Census, the 2010 population for the Village of Hamburg was 9,409. The estimated 2019 population was 9,636, a 2.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.8 percent of the population is 5 years of age or younger and 19.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.27.3 Jurisdictional Capability Assessment and Integration

The Village of Hamburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.27.3). The Village of Hamburg’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Hamburg. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.27-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 123	Local	Code Enforcement
Comment: It is the purpose of this chapter to provide for the administration and enforcement of the Uniform Fire Prevention and Building Code established by Article 18 of the Executive Law as added by Chapter 707 of the Laws of 1981 of the State of New York, as the same may be applicable to the Village of Hamburg, New York.					
Zoning Code	Yes	Yes	Village Code Chapter 250	Local	Code Enforcement



Section 9.27: Village of Hamburg

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The purposes of this chapter, regulations and zoning districts, as outlined on the Zoning Map, are to provide for orderly growth in accordance with a comprehensive plan, to lessen congestion in the streets, to secure safety from fire, flood and other dangers, to provide adequate light and air, to prevent overcrowding of land, to avoid undue concentration of population, to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements, and to promote the health, safety and general welfare of the public.</p>					
Subdivision Ordinance	Yes	Yes	Village Code Chapter 207	Local	Code Enforcement
<p>Comment: By authority of the resolution adopted by the Village Board of Trustees on the 24th day of July, 1967, pursuant to the provision of Article VIA of the Village Law, the Planning Commission of the Village of Hamburg is empowered and authorized to approve plans for land subdivision within the Village of Hamburg. These regulations are adopted for the purpose of providing for the future growth and development of the village and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health and welfare of its population.</p>					
Stormwater Management Ordinance	Yes	Yes	Village Code Chapter 200	Local	Code Enforcement
<p>Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 200-1A. This chapter seeks to meet those purposes by achieving the following objectives:</p> <ul style="list-style-type: none"> • Meet the requirements of minimum measures 4 and 5 of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, as amended or revised; • Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01, as amended or revised; • Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; • Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	No	-	-	-
<p>Comment: None</p>					
Site Plan Review	Yes	Yes	Village Code Chapter 250-19	Local	Code Enforcement
<p>Comment: In addition to all other powers provided by law the Planning Commission is empowered to approve, disapprove or approve with modifications special permits required by this chapter. The procedures hereinafter set forth for site plan review shall also apply to special permits and in addition if the application indicates that a special permit will be required, the Building Inspector shall, not less than five days prior to the meeting of the Planning Commission at which the application is to be considered, mail a notice which briefly but clearly describes the intent of the proposed special permit to all property owners abutting and within 100 feet of the property which is the subject of the proposed special permit. If the application is approved or approved with modifications, the Building Inspector shall issue the permit, provided that the Building Inspector has determined that all code requirements have been met and approved modifications, if any, have been met.</p>					
Environmental Protection Ordinance	No	No	-	-	-
<p>Comment: None</p>					



Section 9.27: Village of Hamburg

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Village Code 146	Local	Code Enforcement
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas, by provisions designed to: <ul style="list-style-type: none"> Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities; Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; Control filling, grading, dredging and other development which may increase erosion or flood damages; Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and Qualify for and maintain participation in the National Flood Insurance Program. 					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	2012 Comprehensive Plan	Local	Village of Hamburg
Comment: The Primary Objectives of the Comprehensive Plan Update were: a.) Review the existing comprehensive plan to determine which recommendations have already been accomplished and what items still remain and determine whether remaining actions still make sense in light of the Village's vision and primary goals. b.) Revise existing policy/strategy sections and provide additional to address needs and issues. Primary Focus Areas: This update concentrated on several key areas within the Village: a.) Main Street - Professional Office b.) Lake Street Corridor c.) Buffalo Street d.) Pine Street e.) West End (industrial area). The plan addresses future land use issues, such as the boundaries and uses in the Commercial District, the Lake Street Corridor, protecting the character of Main Street between Lake and Center and addressing the Village's west end – near the train tracks.					
Capital Improvement Plan	Yes	No	Done annually with Village budget	Local	Village of Hamburg
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					



Section 9.27: Village of Hamburg

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Yes	No	Not Indicated	Local	Village of Hamburg
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	Yes	No	<ul style="list-style-type: none"> Shared Maintenance Facilities Plan Underutilized Sites Study 	Local	Village of Hamburg
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Hamburg to oversee and track development.

Table 9.27-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town of Hamburg issues on behalf of Village of Hamburg
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Underutilized Sites Study Completed January 2018

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Hamburg and their current responsibilities which contribute to hazard mitigation.

Table 9.27-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planning Board	Yes	Reviews site plans, including new construction
Zoning Board of Adjustments	Yes	Hears requests for variances to village code
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Village has Advisory Commission
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Village has Volunteer Committee
Public Works/Highway Department	Yes	DPW Superintendent
Construction/Building/Code Enforcement Department	Yes	Town of Hamburg
Emergency Management/Public Safety Department	Yes	OEM Coordinator
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Website may be used for these purposes, currently no mass notification system.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW mitigates natural disasters regarding wind events, snow events, and rain events, among others.
Mutual aid agreements	Yes	Town of Hamburg
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer or Building Code Officer
Planners or engineers with an understanding of natural hazards	Yes	Engineer or Building Code Officer
Staff with expertise or training in benefit/cost analysis	Yes	Clerk/Treasurer
Professionals trained in conducting damage assessments	Yes	Chief Building Official
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	OEM Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-



Fiscal Capability

The table below summarizes financial resources available to the Village of Hamburg.

Table 9.27-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Other State Grants as eligible for mitigation

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Hamburg.

Table 9.27-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Village Administrator/Clerk-Treasurer
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Police and Recreation Social Media Accounts
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Environmental Commission, Planning Commission, ZBA
Other programs already in place that could be used to communicate hazard-related information	Yes	Annual Newsletter to Community
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	Yes	School Safety Plans
Other	No	-



Community Classifications

The table below summarizes classifications for community programs available to the Village of Hamburg.

Table 9.27-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.27-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.27.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.



NFIP Floodplain Administrator (FPA)

Mr. Roger Gibson, Supervising Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Hamburg.

Table 9.27-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Hamburg	5	26	\$214,636	7	1

Source: FEMA, 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

There are no areas prone to flooding or floodplains within the village. Therefore, the village does not maintain a list of property owners that are interested in flood mitigation projects, nor are there any RiskMAP projects currently underway. The flood hazard maps for the village adequately address the flood risk. There have been zero homes that have previously been mitigated against flood damages. The Code Enforcement Officer makes Substantial Damage determinations based on if the repair cost of a home is 50 percent or more of the market value, excluding land.

NFIP Compliance

The Town of Hamburg Code Enforcement Officer is responsible for floodplain management within the Village of Hamburg. There are no certified floodplain managers within the own or Village of Hamburg. NFIP Administration services available to the village include plan review, engineering review, and inspections.

The village determines if proposed developments to existing structures qualify as a “substantial improvement” if the construction estimates exceed 50 percent of the market value of the structure, excluding land.

Local Law 146-2 of the Village of Hamburg Code refers to the Village Flood Damage Prevention Ordinance, which meets or exceeds minimum requirements. Village site plan review supports floodplain management and discourages development within flood-prone areas.

There are no outstanding NFIP compliance issues within the village.

9.27.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Hamburg has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 62, Route 20, and Route 5 can be used for evacuations going North or South from the village.





- Lakeview Road can be used for evacuations East or West from the village.
- Interstate 90 could be used to evacuate residents in either direction, as well as Route 391-S.
- The best evacuation route is event-dependent, and the village can contact residents through the media, or a reverse-911 call to provide current information.

Sheltering

The Village of Hamburg has identified the following designated emergency shelters within the village.

Table 9.27-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Hamburg High School	Legion Drive	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers, bathrooms
Hamburg Middle School	Division Street	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers, bathrooms
Charlotte Avenue School	Charlotte Avenue	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers, bathrooms
Union Pleasant Grade School	Pleasant Avenue	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers, bathrooms

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Hamburg has identified the following sites suitable for placing temporary housing units.

Table 9.27-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The village indicated that they could use all the schools within the village for temporary housing, as well as hotels as they all have the necessary utilities. The schools would be the first choice.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Hamburg has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.27-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Hampton Inn	Camp Road	Dependent on rooms available	Hotel	Yes	None
Quality Inn	Camp Road	Dependent on rooms available	Hotel	Yes	None
Super 8	Camp Road	Dependent on rooms available	Hotel	Yes	None

9.27.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.27-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.27-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	-	2	-	5	-	15	-	38	-	4	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	23	-	18	-	25	-	17	-	24	-	16	-
Total Permits Issued	25	-	20	-	30	-	32	-	62	-	20	-
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
Country Meadows	Residential	278 units		South Lake Street	None		Complete					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None indicated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.27.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Hamburg’s risk assessment results and data used to determine the hazard ranking discussed later in this section.



Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Hamburg has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.27-1. Village of Hamburg Hazard Area Extent and Location Map 1



Village of Hamburg

- | | | | |
|------------------------|------------------------|------------------------------------|--------------------------|
| Airport | Electric Power Station | Potable Water Facility | Interstate |
| Airport Runway | Fire Station | Potable Water PS | U.S. Highway |
| Aquifer | Hazardous Material | Potable Water Tank | State Highway |
| Bridge | Highway Garage | Potable Water Well | Railroad |
| Bus Stop | Hospital | Primary Education | Pipeline |
| Communication Tower | Library | Rail Station | Jurisdiction |
| Communication Facility | Metro Station | Secondary Education | Waterbody |
| Community Center | Natural Gas Facility | Senior Center | Flood Hazard Area |
| Correctional Facility | Oil Facility | Shelter | 1% Annual Chance Flood |
| Dam | Police Station | Town Hall | 0.2% Annual Chance Flood |
| EMS | Post Office | Wastewater Facility | Flooding Problem Areas |
| EOC | New Development | Wastewater PS | |
| | Anticipated | Coastal Erosion Hazard Area | |
| | Recent | CEHA Buffer | |



The map and data depicted are considered approximate and suitable for most planning purposes. Mapped hazard areas, geographic boundaries and other features depicted may not absolutely align due to the differing resolution of available data. Data sources: EGIS - 2020; NYS GIS - 2020; NYS DOT - 2013; NYS OCS - 2008; ESRI - 2002/2020; STATCAN - 2016; FEMA - 2019; NYS DOS - 2013

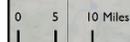
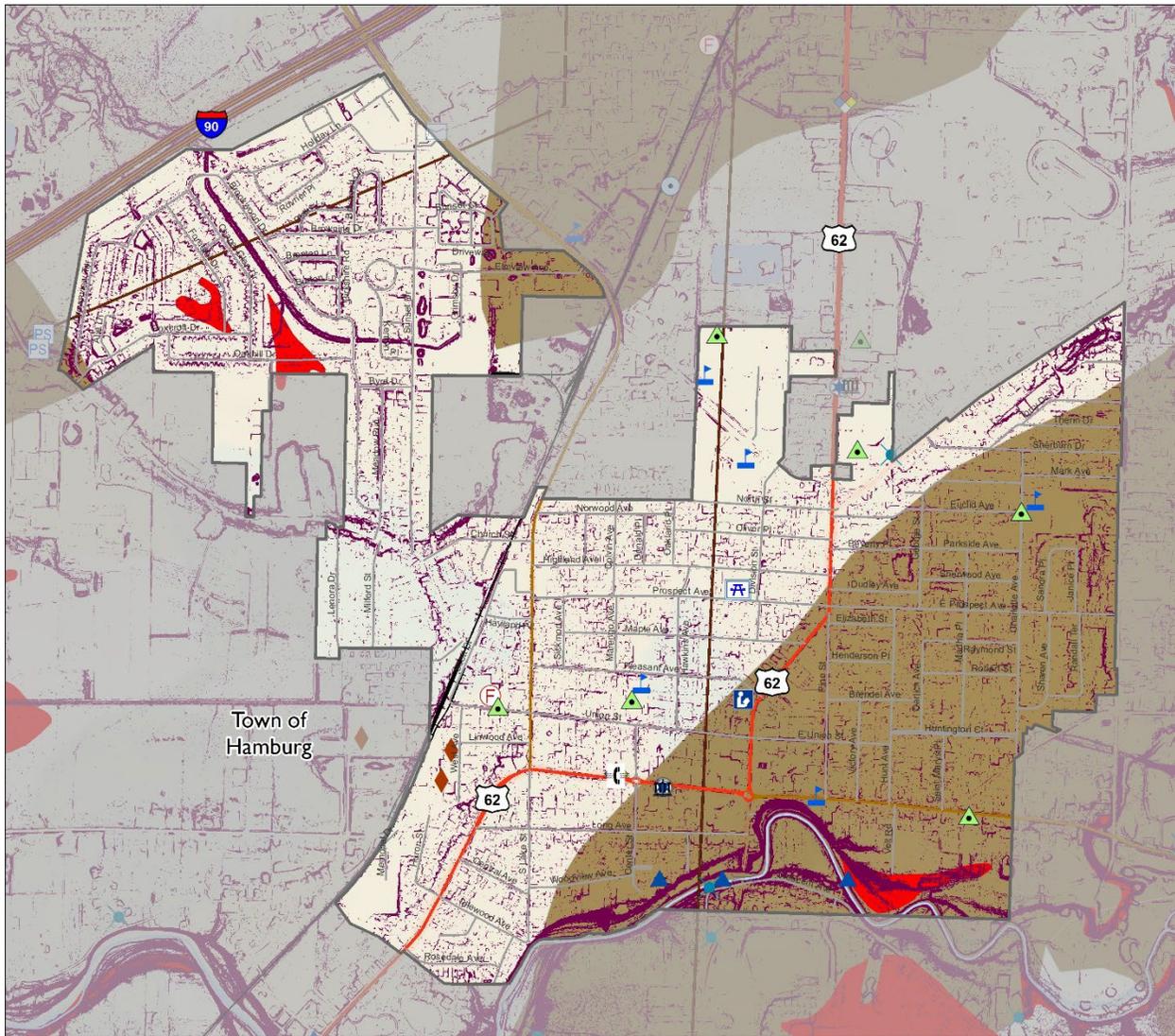




Figure 9.27-2. Village of Hamburg Hazard Area Extent and Location Map 2



Village of Hamburg

- | | | | |
|------------------------|------------------------|------------------------------------|------------------------|
| Airport | Electric Power Station | Potable Water Facility | Interstate |
| Airport Runway | Fire Station | Potable Water PS | U.S. Highway |
| Aquifer | Hazardous Material | Potable Water Tank | State Highway |
| Bridge | Highway Garage | Potable Water Well | Railroad |
| Bus Stop | Hospital | Primary Education | Pipeline |
| Communication Tower | Library | Rail Station | Jurisdiction |
| Communication Facility | Metro Station | Secondary Education | Waterbody |
| Community Center | Natural Gas Facility | Senior Center | Earthquake Hazard Area |
| Correctional Facility | Oil Facility | Shelter | NEHRP Soils Class E |
| Dam | Police Station | Town Hall | Landslide Hazard Area |
| EMS | Post Office | Wastewater Facility | Steep Slope > 25% |
| EOC | New Development | Wastewater PS | |
| | Anticipated | Expansive Soils Hazard Area | |
| | Recent | Linear Extensibility (3 - 6) | |

0 0.15 0.3 Miles

The map and data depicted are considered approximate and suitable for most planning purposes. Mapped hazard areas, geographic boundaries and other features depicted may not absolutely align due to the differing resolution of available data.
 Data Sources: Esri GIS - 2020; NYS GIS - 2020; NYS DOT - 2013; NYS GIS - 2008; ASRI - 2002/2020; STA/PCAN - 2016; NRCS - 2020; NYOIT - 2019; NYS - n.d.

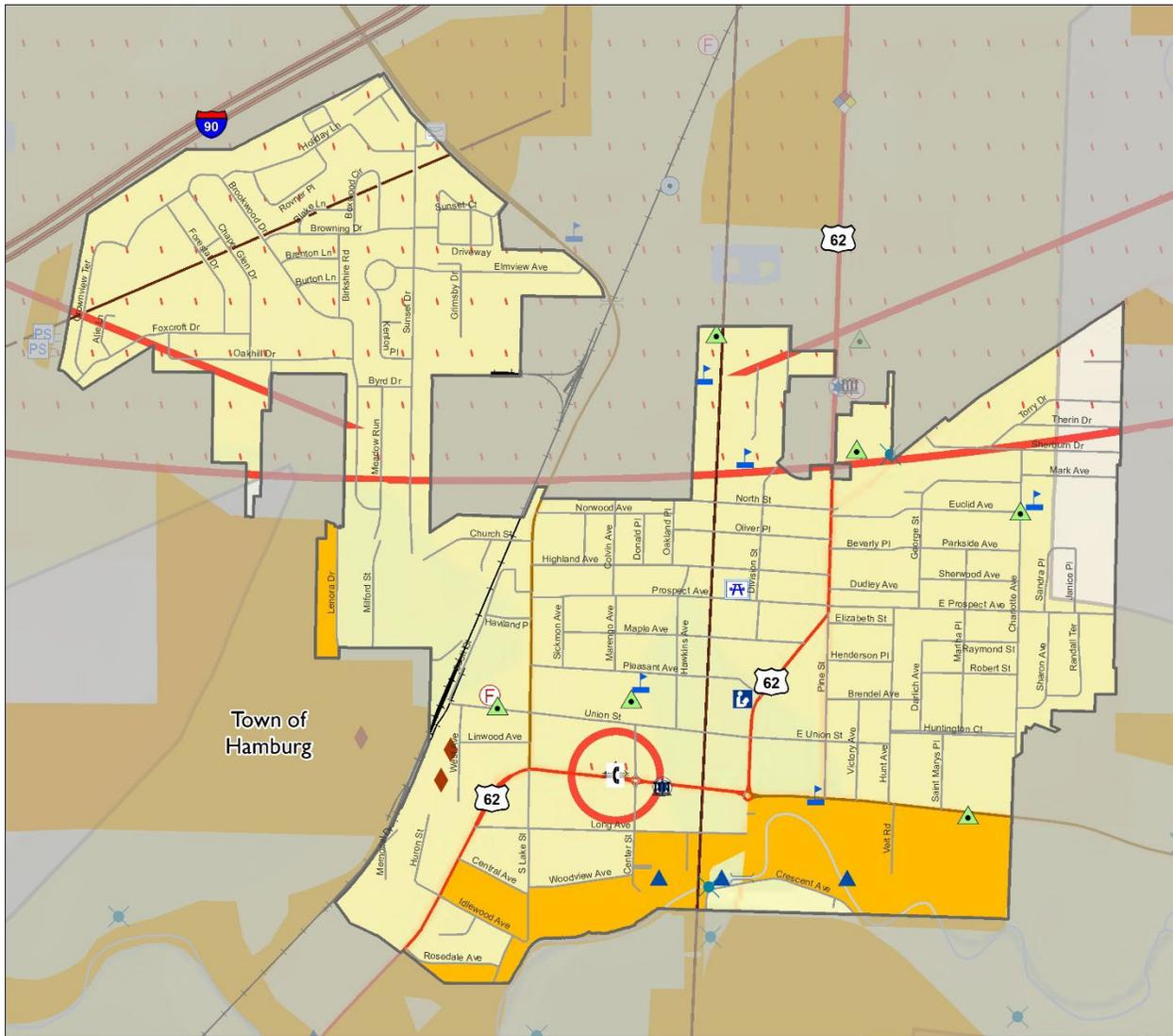


0 5 10 Miles





Figure 9.27-3. Village of Hamburg Hazard Area Extent and Location Map 3



Village of Hamburg

- | | | | |
|------------------------|------------------------|--------------------------------------|--------------------------|
| Airport | Electric Power Station | Potable Water Facility | Interstate |
| Airport Runway | Fire Station | Potable Water PS | U.S. Highway |
| Aquifer | Hazardous Material | Potable Water Tank | State Highway |
| Bridge | Highway Garage | Potable Water Well | Railroad |
| Bus Stop | Hospital | Primary Education | Pipeline |
| Communication Tower | Library | Rail Station | Jurisdiction |
| Communication Facility | Metro Station | Secondary Education | Waterbody |
| Community Center | Natural Gas Facility | Senior Center | Wildfire Hazard Area |
| Correctional Facility | Oil Facility | Shelter | Wildland-Urban Intermix |
| Dam | Police Station | Town Hall | Wildland-Urban Interface |
| EMS | Post Office | Wastewater Facility | |
| EOC | New Development | Wastewater PS | |
| | Anticipated | HazMat Hazard Area | |
| | Recent | SARA Site Radius | |
| | | 1/2 Mile from HazMat Rail/Road Route | |

The map and data depicted are considered approximate and suitable for most planning purposes. Mapped hazard areas, geographic boundaries and other features depicted may not absolutely align due to the differing resolution of available data. Data Sources: ECGIS - 2020; NYS GIS - 2020; NYS DOT - 2013; NYS OCS - 2008; ESRI - 2002/2020; STATCAN - 2016; UWaterloo - 2010; IGA - 2020; IGA - 2019





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Hamburg’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.27-14 provides details regarding municipal-specific loss and damages the Village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.27-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 9, 2015	Lake Effect Snow	No	Lake effect snow moved across Lake Erie, creating blizzard-like conditions with zero visibility and wind gusts of 45 mph. A portion of the New York State Thruway was closed Friday morning, with rates of snow falling up to four inches per hour.	Estimated snowfall totals reached 19 inches in Hamburg.
January 1, 2016	Lake Effect Snow	No	Bands of lake effect snow developed over the course of New Year’s Eve, with peak snowfall on New Year’s Day reaching snowfall peaks of two inches per hour, and reports of thunder within the band.	Estimated snowfall totals reached 10 inches in Hamburg.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 9 inches of snow was reported in Hamburg.
February 12, 2016	Lake-Effect Snow	No	Lake effect snow bands formed across Lake Erie in the morning, and later off Lake Ontario bringing two inches of snow per hour. The snowfall was during the early morning commute and caused several accidents and slowed traffic.	An estimated 8 inches of snow was reported in Hamburg.
February 15, 2016	Winter Storm	No	A low pressure system moved across Pennsylvania into New York, bringing minor snow accumulations and half an inch of ice. Heaviest snowfalls were in Rochester (22 inches).	An estimated 10 inches of snow was reported in Hamburg.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or more and school busses were unable to bring	Total snowfall report in Hamburg amounted to 23 inches.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	
March 8, 2017	High Wind	No	A deep low pressure system brought strong winds to the entire region with sustained winds up to 49 mph and gusts reaching 81 mph. Hundreds of thousands of people were without power in Monroe County, NY alone. Strong winds derailed 12 train cars in Batavia (Genesee County). Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the high winds.	Measured wind gusts reached 75 mph in Hamburg.
June 27, 2017	Hail	No	Thunderstorms in Orchard Park and West Seneca produced three-quarter inch hail.	Three-quarter inch (0.75) hail was reported in Hamburg.
July 20, 2017	Thunderstorm Wind/Tornado	No	A cluster of thunderstorms resulted in four tornadoes across Western NY.	A tornado began in Hamburg before moving across Orchard Park. Hundreds of car windows were blown out at the Hamburg Fairgrounds, where several buildings were damaged, including the Grandstand. Numerous trees were downed across the fairgrounds. An NWS storm survey confirmed an EF2 tornado touched down in Hamburg.
August 4, 2017	Thunderstorm Wind	No	Thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, winds partially tore the roof off a building. One inch hail was also reported.	Law enforcement reported trees down by thunderstorm winds in the Village of Hamburg.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 12 inches of snow were reported in Hamburg.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightning throughout the duration of the event.	An estimated 16 inches of snow were reported in Hamburg
December 29, 2017	Lake-Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 9 inches of snow were reported in Hamburg.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Fifteen (15) inches of snow were reported in Hamburg.
October 27- November 1, 2019	Lakeshore Flooding and High Winds, DR-4472-NY	Yes	An intense storm system bringing record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over \$5.5 million in damages to homes and property in Erie County alone was reported.	Hoover Beach in Hamburg became inundated from lakeshore flooding. Homes were flooded on Grand Island and along Route 5 near Hamburg. Water levels



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				reached 10.67 feet above low water. Rainfall totals reached 2.3 inches in Hamburg.
November 27, 2019	High Wind	No	A strong low pressure front followed by a cold front produced favorable conditions for high winds and storms across western NY. Water Levels in Lake Erie peaked at 9.56 feet above low water and remained above flood stage for four hours.	Peak wind speeds reached 66 mph in Hamburg.
January 12, 2020	High Wind	No	Wind gusts along the Lake Erie shore exceeded 65 mph, resulting in widespread damage in all lakeshore counties.	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg. Due to the seiche, water levels peaked in Buffalo at 9.85 feet above low water.
January 18, 2020	Lakeshore Flood	No	Heavy snowfalls and precipitation followed by a cold front resulted in a seiche on Lake Erie that caused lakeshore flooding throughout the county. Peak water levels on Lake Erie reached 8.18 feet above low water.	The seiche on Lake Erie resulted in flooding and the closure of Route 5 in Hamburg.
February 26, 2020	Lake-Effect Snow	No	A low-pressure system brought lake-effect snow across Lakes Erie and Ontario. Widespread snow accumulations of 1-2 feet of snow occurred east of Lake Erie, accompanied by strong wind gusts and lakeshore flooding. The biggest seiche of the month occurred during the event, brining the water level in Lake Erie to 7.5 feet above low water.	Sustained wind speeds reached 56 mph in Hamburg. Minor flooding along Route 5 was reported.
August 25, 2020	Thunderstorm Wind	No	A cold front generated scattered thunderstorms throughout the evening, increasing in intensity as they crossed Lake Ontario moving south into Buffalo.	Several trees were down onto Smith Road in Hamburg.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Hamburg’s risk assessment results and data used to determine the hazard ranking.





Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Hamburg. The Village of Hamburg has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.27-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.27-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Schoepflin Mill Dam	Dam	X	X	2022-V. Hamburg-001

Source: Effective DFIRM

Identified Issues

After review of the Village of Hamburg’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Hamburg has identified the following vulnerabilities within their community:

- During extended power outages, most residential homes do not have power backups. The longest period of power loss lasted four to five days, and most residents chose to shelter-in-place.

9.27.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.27-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
-	-	Drainage, Flooding	Engineering	Town Drainage Study incorporating Hamburg Village	No Progress	Level of Protection	-	1. Include in 2022 HMP 2. See 2022-V. Hamburg-004 3.
-	-	Flooding	Town Code Review and Enforcement	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Complete	Level of Protection	-	1. Discontinue 2. 3. Complete. Updated April 2019
-	-	Flooding	Town Code Review and Enforcement	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Complete	Level of Protection	-	1. Discontinue 2. 3. Complete. Updated April 2019
-	-	Flooding	Town Engineering	Join the Community Rating System (CRS)	No Progress	Level of Protection	-	1. Discontinue 2. 3. No longer priority



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Hamburg has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Indicated

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Hamburg participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.27-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils										
Extreme Temperature										
Flood	X	X		X	X		X		X	
Hazardous Materials										
Landslide										
Pandemic										
Severe Storm	X	X			X				X	
Severe Winter Storm	X	X			X				X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.27-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Hamburg would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.27-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Hamburg-001	Schoepflin Mill Dam Flood Mitigation	1, 2, 3	Flood	<p>Problem: The Schoepflin Mill Dam is located within the 1% SFHA (100-year floodplain).</p> <p>Solution: The privately owned Schoepflin Mill Dam is classified as a Class D dam, posing no hazard to the village. The village will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The village will aid in any flood mitigation measures as determined by the owner as necessary.</p>	Yes 💧	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-V. Hamburg-002	Repetitive Loss Homeowner Outreach	1, 2, 3	Flood	<p>Problem: There are 7 repetitive loss properties within the Village, and 1 NFIP policy holder living within the 1% SFHA (100-year floodplain).</p> <p>Solution: The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>	No	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces flooding at private homes	Municipal Budget	High	EAP	PI
2022-V. Hamburg-003	Earthquake Outreach at Critical Facilities	1, 2, 3	Earthquake	<p>Problem: Several critical facilities in the village are in the earthquake hazard area (NEHRP Soil Class E). Including:</p> <ul style="list-style-type: none"> • Hamburg Public Library • Hamburg Town Police Department at 100 Main Street • SS Peter & Paul School 	Yes	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces impacts from earthquakes	Municipal Budget	High	EAP	PI



Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<ul style="list-style-type: none"> Charlotte Avenue Elementary School Village of Hamburg Hall Schoepflin Mill Dam Hamburg North Branch Dam Woodview Park Dam Charlotte Avenue Elementary School Trinity Episcopal Church (Shelter) Crescent Avenue PS (Wastewater Pump Station) <p>Solution: The village will conduct outreach to the above owners about the soil type and provide information about the potential of increased earthquake/ground shaking risk. The village will support property protections for increased earthquake resistance, or strengthening the building code and construction requirements in the area.</p>										
2022-V. Hamburg-004	Town and Village Drainage Study	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.</p> <p>Solution: The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump</p>	No	No	3 years	Town of Hamburg, Village of Hamburg Engineering and DPW	Low to conduct study, High to implement	High, reduces roadway flooding and storm impacts	FMA, BRIC, HMGP	High	LPR, SIP	PR, SP



Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				pumps, or upsizing culverts as necessary.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.





- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.27-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Hamburg-001	Schoepflin Mill Dam Flood Mitigation	1	1	1	1	0	0	1	1	1	1	0	1	1	0	10	High
2022-V. Hamburg-002	Repetitive Loss Homeowner Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-V. Hamburg-003	Earthquake Outreach at Critical Facilities	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-V. Hamburg-004	Town and Village Drainage Study	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.27.9 Action Worksheets

The following action worksheets have been developed by the Village of Hamburg to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Schoepflin Mill Dam Flood Mitigation		
Project Number:	2022-V. Hamburg-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Schoepflin Mill Dam is located within the 1% SFHA (100-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	The privately owned Schoepflin Mill Dam is classified as a Class D dam, posing no hazard to the village. The village will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The village will aid in any flood mitigation measures as determined by the owner as necessary.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	High, reduces flooding at critical facilities
Useful Life:	30 years	Goals Met:	1, 2, 3
Estimated Cost:	Low to conduct outreach	Mitigation Action Type:	Education and Awareness Programs
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	Municipal Budget, FMA
Responsible Organization:	Village of Hamburg Code Enforcement	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Decommission Dam	\$500,000	Privately owned, dam is not in hazardous condition, unnecessary
	Reinforce Dam	\$500,000	Privately owned, dam is not in hazardous condition, unnecessary
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Schoepflin Mill Dam Flood Mitigation	
Project Number:	2022-V. Hamburg-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Critical Facility in SFHA
Property Protection	1	Protects downstream properties
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	Village does not own dam
Fiscal	1	
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Town and Village Drainage Study		
Project Number:	2022-V. Hamburg-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces roadway flooding and storm impacts
Useful Life:	30 years	Goals Met:	1, 2, 3
Estimated Cost:	Low to conduct study, High to implement	Mitigation Action Type:	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FMA, BRIC, HMGP
Responsible Organization:	Town of Hamburg, Village of Hamburg Engineering and DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Shared Services Agreements with Town/Village
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	N/A	May not solve issues, not cost effective
	Build bridges at intersections	N/A	Need to determine cause and source of flooding
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Town and Village Drainage Study	
Project Number:	2022-V. Hamburg-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flooding
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village support project
Legal	1	
Fiscal	-1	Will need to seek funding to implement
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Shares services agreement with town/village
Total	12	
Priority (High/Med/Low)	High	



9.28 Town of Holland

This section presents the jurisdictional annex for the Town of Holland. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Holland’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.28.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Holland’s hazard mitigation plan primary and alternate points of contact. The Town of Holland followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: council, supervisor, and building inspector. The disaster coordinator and town council member represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.28-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael C. Kasprzyk – Supervisor Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-9443x1 Email:mkasprzyk@townofhollandny.com	Name/Title: Geoff Hack – Councilman / Disaster Coordinator Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-3191 Email:hckgff23@gmail.com
NFIP Floodplain Administrator	
Name/Title: Michael C. Kasprzyk – Supervisor Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-9443x1 Email:mkasprzyk@townofhollandny.com	

9.28.2 Municipal Profile

The Town of Holland is in southeast Erie County, approximately 25 miles from downtown Buffalo. The town is bordered by the Town of Sardinia to the south, the Town of Colden to the west, the Town of Wales to the north, and the Town of Java (Wyoming County) to the east. The Town of Holland is 36 square miles in size. (Town of Holland 2012)

The Town of Holland is named after the Holland Land Company. The first part of the town to be settled was the northern edge, known as the "Humphrey Valley," along what is now Rt. 16. In 1818, the Town of Holland was officially formed from the original Town of Willick. Although primarily agrarian for many generations, Holland today has few large farms. Some light industry remains active. (Town of Holland 2020)





According to the U.S. Census, the 2010 population for the Town of Holland was 3,401. The estimated 2019 population was 3,355, a 1.4 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.3 percent of the population is 5 years of age or younger and 16.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.28.3 Jurisdictional Capability Assessment and Integration

The Town of Holland performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.28.3). The Town of Holland’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Holland. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.28-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 55 (Building Construction)	Local	Town Board
Comment: <i>The main purpose of building codes are to protect public health, safety and general welfare as they relate to the construction and occupancy of buildings and structures.</i>					
Zoning Code	Yes	No	Chapter 120 (Zoning); adopted by the Town Board on 4/11/1973	Local	Town Board
Comment: <i>Guidelines for community safety include the following: 1) Existing natural features, such as trees, brooks, drainage channels and views, shall be retained. Whenever such features interfere with the proposed use of such property, a retention of the maximum amount of such features consistent with the use of the property shall be required. 2) Light industrial uses are not permitted if they may result in hazard of fire or explosion or other physical hazard to any adjacent building or to any plant growth on any land adjacent to the site of the use. 3) Excavations made to a water-producing depth shall be properly sloped to the waterline, with banks sodded or surfaced with soil of an equal quality to adjacent land area topsoil; such topsoil required under this section shall be planted with trees, shrubs, legumes or grasses upon the parts of such areas where revegetation is possible. 4) All pond building permit applications shall be accompanied by a site plan drawn to scale showing the total acreage of the property, property lines, existing features and structures (i.e., dwellings, accessory structures, drives, septic fields, wells, floodplains, wetlands, streams and topographical features) and the proposed pond location.</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	Yes	No	Chapter 104 (Subdivision of Land); adopted by the Town Board on 4/11/1973	Local	Town Board
<p>Comment: <i>The subdivision ordinance incorporates resilience related measures through the following means: 1) Where a subdivision is traversed by a drainageway, channel or stream, a drainageway easement, conforming substantially to the lines of such watercourse, shall be provided. The easement shall be 20 feet wide or such width as will be adequate to preserve natural drainage and provide sufficient width for maintenance. 2) Floodways, as defined by the United States Army Corps of Engineers, and land deemed by the Planning Board to be otherwise uninhabitable shall not be platted for residential occupancy nor for such other uses as may increase danger to health, life or property or aggravate the flood hazard. Floodplain areas subject to periodic minor flooding may be developed, provided that structures are adequately floodproofed as provided in Chapter 69, Flood Damage Prevention.</i></p>					
Stormwater Management Ordinance	No	Yes – for county	-	County	-
<p>Comment:</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: <i>Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	No	-	-	-
<p>Comment:</p>					
Site Plan Review	Yes	Yes	Chapter 77 – development plan review Local Law Number 5 of 1993.	Local	Town Board
<p>Comment: <i>The application must contain an endorsement by the State and/or County Health Department indicating compliance with the standards of the applicable sanitary code, Public Health Law or the applicable health codes. In the event that the proposed open development area does not require approval of the State and/or County Health Departments, a statement to this effect must be submitted with the application and verified by the State and/or County Health Department.</i></p> <p><i>All requirements of the State Environmental Quality Review Act shall be complied with by the applicant prior to consideration by the Town Board.</i></p>					
Environmental Protection Ordinance	Yes	Yes	Chapter 16 – Environmental Council.	Local	Environmental Advisory Council/ Planning Board
<p>Comment: <i>The intent of the council and the protection ordinance is for the town to comply with local and state environmental protection ordinances and protect the health and safety of the community.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 69 (Flood Damage Prevention); adopted by Town Board on 8/13/2008	Federal	Town Supervisor
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <p><i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i></p> <p><i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i></p> <p><i>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i></p> <p><i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i></p> <p><i>F. Qualify for and maintain participation in the National Flood Insurance Program.</i></p> <p><i>The Town Supervisor is the appointed floodplain administrator for the town. Duties include: permit application review, using flood data, notify proper agencies about watercourse alterations, conduct site inspections, issue certificate of compliance, and retain information. For new construction or substantial improvements for residential and non-residential properties in the SFHA, the town requires the lowest floor be elevated to or above two feet above the BFE.</i></p>					
Municipal Separate Storm Sewer System (MS4)	No- NA	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Holland Comprehensive Plan (January 2018)	Town	Planning
<p><i>Comment: The goals of the comprehensive plan include the following: 1) Establish riparian regulations to manage disturbance of land and limit removal of natural vegetation within 100 feet of streams. 2) Identify and map key natural assets including forest blocks, wetlands, stream and riparian areas and connecting corridors to prioritize restoration and protection. 3) Encourage responsible timber harvesting and best management practices on County Forests to ensure protection of associated wetlands and streams.</i></p>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Operation Plan, 2019	Local	Town OEM
Comment: <i>The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Holland to oversee and track development.

Table 9.28-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building and Zoning Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Flood Zone
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town is rural and has abundant land, though it is privately owned.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Holland and their current responsibilities which contribute to hazard mitigation.

Table 9.28-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board reviews requests for special use permits and development projects, and makes recommendations to the Town Board.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals hears and deliberates applications for variances to town ordinances. The committee meets on an "as needed" basis. Appeal applications are available from the Building Zoning Officer.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planning Department	Yes	Members of the Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The environmental commission conducts various reviews on local and regional development to mitigate any environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department
Construction/Building/Code Enforcement Department	Yes	Building and Zoning
Emergency Management/Public Safety Department	No	New York State Police substation (unmanned) at Town Hall
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Highway Department
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Supervisor is the appointed FPA for the town
Surveyor(s)	No	-
Emergency Manager	Yes	Town Emergency Management
Grant writer(s)	Yes	Various individuals on a volunteer basis
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Holland.



Table 9.28-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Holland.

Table 9.28-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk and Supervisor
Personnel skilled or trained in website development	Yes	Town Clerk and Supervisor
Hazard mitigation information available on your website	Yes	Website
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	None	-
Warning systems for hazard events	Yes	CODE Red and Alert NY
Natural disaster/safety programs in place for schools	None	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Holland.

Table 9.28-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.28-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderated
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Moderated
Severe Winter Storm	Moderated
Utility Failure	Medium
Wildfire	Medium

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

NOTE: For severe storm and severe winter storm, limited resources could overburden the town’s ability to provide services to the community. For utility failure, a lack of generators at key, town facilities could overload the capacity when needed. Addressed in mitigations actions 1, 2, and 3.

9.28.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael C. Kasprzyk – Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Holland.





Table 9.28-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Holland	3	2	\$2,738	0	2

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town does not have any areas prone to flooding and does not maintain a list of properties interested in flood mitigation. The Town does not have any ongoing RiskMAP projects underway or planned. The Town has not made any substantial damage determinations and has not mitigated any properties within the town. Flooding has not changed significantly in the town and the flood maps adequately address flood risk within the town.

NFIP Compliance

The supervisor is responsible for floodplain management, though the town does not have any certified floodplain managers on staff. The town does not have adequate resources to address climate change and no staff is in need of assistance to support the town flood mitigation program. The current town NFIP program provides EC GIS System and building inspection services to its community. For substantial improvement determination, the building inspector is in charge of determination.

At this time, there are no barriers to running an effective NFIP program and the current program does not have any violations. The town received a CAC visit on May 5, 2020.

Town supervisor is in charge of floodplain prevention ordinance and the program meets the basic requirements. Given the town’s characteristics, the municipality does not have any additional plans pertaining to the NFIP program and is not interested in participating in the FEMA CRS Program.

9.28.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Holland fire department has identified routes and procedures to evacuate residents prior to and during an event. In the time of event and magnitude, the town FD will determine best routes for evacuation. The main routes that are considered evacuation routes are state and county routes. Most municipal routes are not evacuation routes, though based on the location of the event, municipal routes might have to be used.

Sheltering

The Town of Holland has identified the following designated emergency shelters within the town.



Table 9.28-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Community Center	3 Legion Dr	100	No	Yes	Yes	HFD EMT	None
Holland School	103 Canada St	500	No	Yes	Yes	HFD EMT	None
Town Hall	47 Pearl St	50	No	Yes	Yes	HFD EMT	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Holland has identified the following sites suitable for placing temporary housing units.

Table 9.28-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Park	Legion Drive	5	Park	Water and Electric	None
Three Valley	Olean Rd	50	Camp Site	Electric	None
Mountain Meadows	Parker Rd	50	Camp Site	Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Holland has not identified permanent housing locations, but will work with the county and land owners to determine future locations for permanent housing locations.

Table 9.28-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Mountain Meadows	Parker Rd	50	Camp Site	Electric	None

9.28.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.28-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.28-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	0	7	0	2	0	2	0	5	0	8	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	1	0	0	0	0	0	0	0	3	0	2	0
Total Permits Issued	3	0	7	0	2	0	2	0	8	0	11	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
R & S Development	Commercial	3		Olean Rd		Near Caz Creek		Not in flood plain				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
R & S Development	Commercial	Up to 15		Olean Rd		Near Caz Creek		Not in flood plain				

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.28.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Holland’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Holland has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.28-1. Town of Holland Hazard Area Extent and Location Map 1

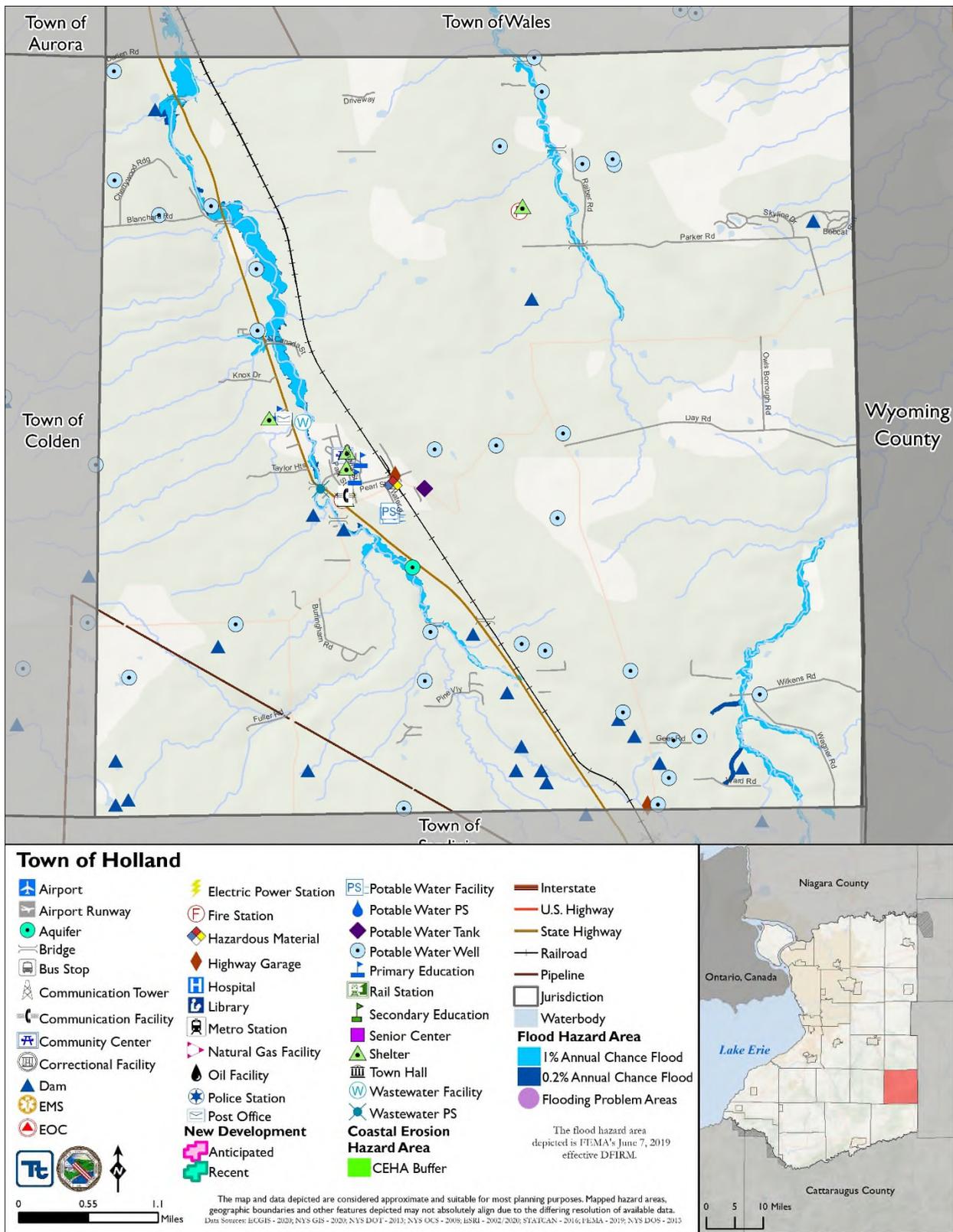




Figure 9.28-2. Town of Holland Hazard Area Extent and Location Map 2

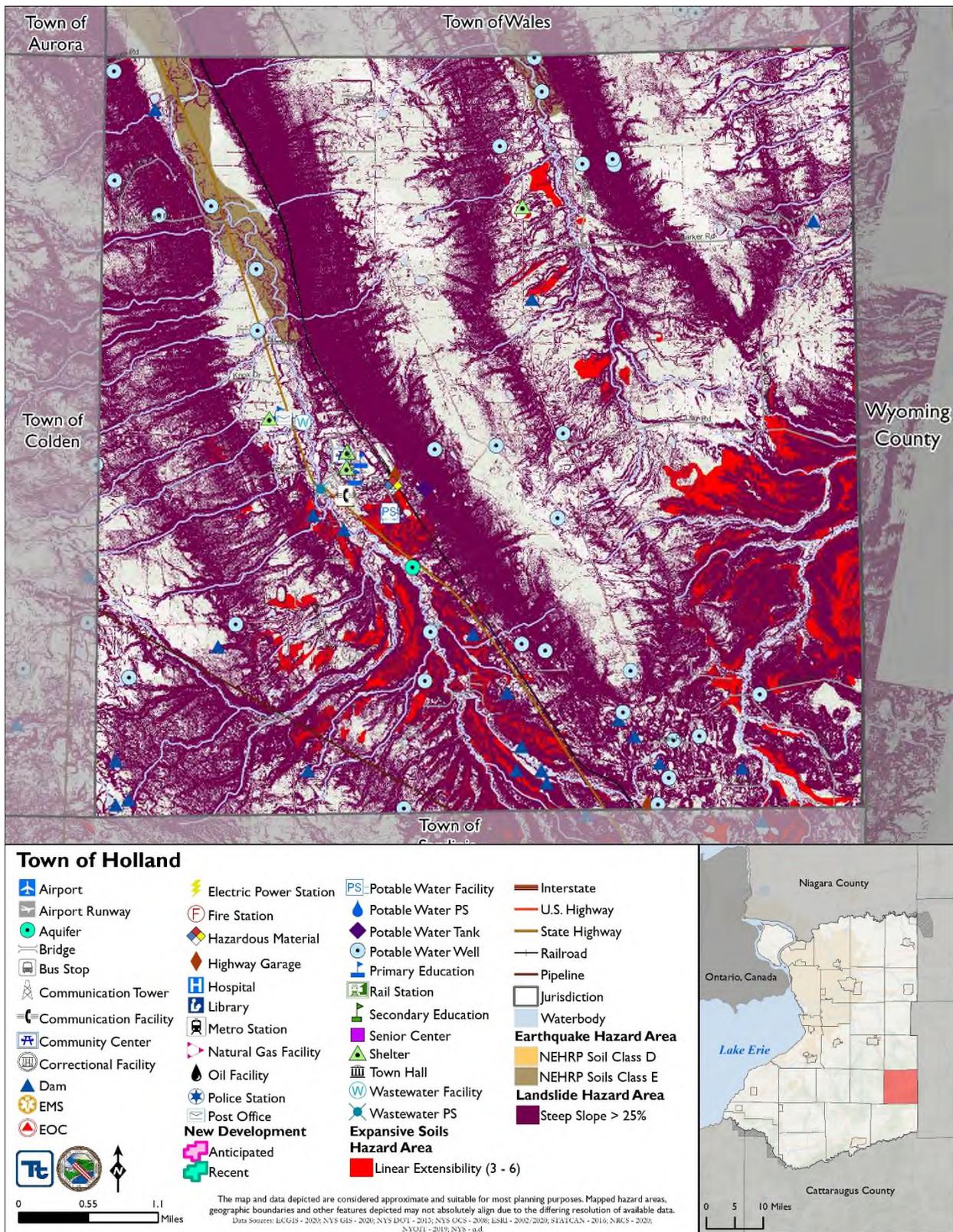
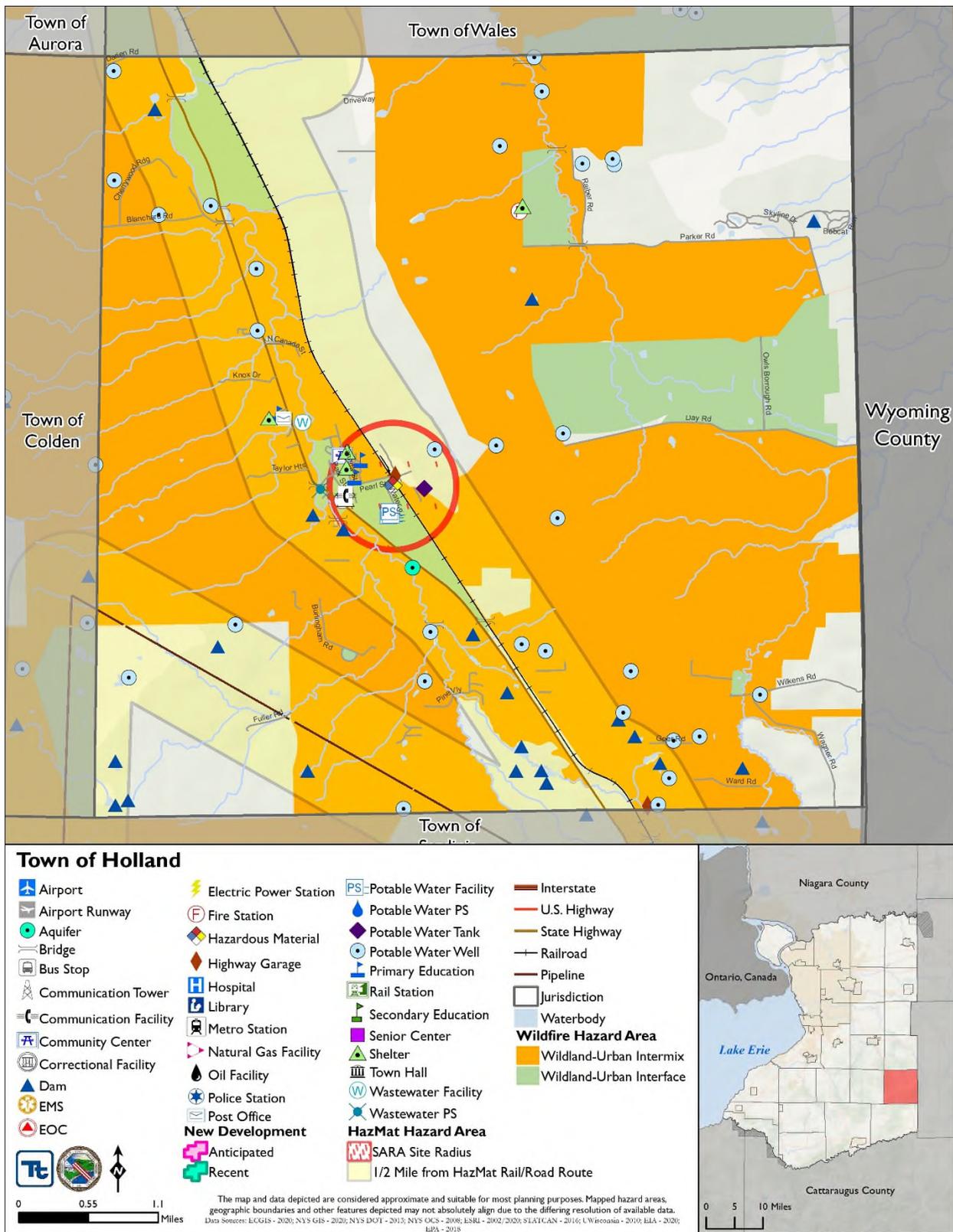




Figure 9.28-3. Town of Holland Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Holland’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.28-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.28-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wires in Forestville, Sardinia, Cheektowaga, and South Wales.	
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees.	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Increased expenses for manpower and equipment, contractor cost
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the low sliced through western New York trailing it and ushering in very gusty winds.	
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	No	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	No	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
July 16, 2020	Tornado	No	A mesoscale convective vortex pulled a pair of fronts across the area during the afternoon and evening near the time of peak heating. Due to cloud cover ahead of the MCV, instability was not very strong, however shear was impressive. Helicity values were impressive, and the presence of the MCV likely added to it locally over the western Southern Tier. Precipitable water values were between 1.75 and 2 inches, which resulted in torrential rainfall in concert with severe thunderstorm development.	Trees uprooted, power loss, and home damage.
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable





Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Holland’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Holland. The Town of Holland has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- Flooding is more of an issue than surrounding communities, the town adjusted the ranking from low to medium.
- Wildfires have historically not been an issue for the municipality; ranking adjusted from medium to low

Table 9.28-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Medium	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Medium	Medium	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).



The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.28-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
No critical facilities in the floodplain				

Source: 2021 GIS

Identified Issues

After review of the Town of Holland’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Holland has identified the following vulnerabilities within their community:

- The town does not have a salt barn and the salt is stored outside and often gets buried in snow as a result. There have been times where municipal staff need to continuously keep the pile free from snow. As a result, the operations and response of the Highway Department is hindered during a snowstorm, which is one of the highest hazards in the community.
- The town Highway Department community center (2 Legion Drive) (which is used as the community emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event. It is critical that both remain operational through all hazard events and have power at all times.
- Both Fire Departments (Building #1 @ 49 North Main Street and #2 7640 Hunters Creek Road) do not have generators, except for a portable generator which is not enough power for power the entire facility. Due to the lack of backup power, the facilities cannot adequately operate during a power outage. This is essential as the departments provide emergency services to the town.
- Cellular service throughout the town is limited and causes communications disruptions. Due to the relatively rural characteristic of the town, municipal services have limited capacity to respond to emergencies in areas where lack of cell service exists.
- The Hamlet of Holland has a box culvert that is in disrepair on Pearl/ Canada/ Route 16, running east to west. It drains into Cazenovia Creek. Recently, there was remedial work conducted to reduce road flooding, but further work and improvements need to be done to increase capacity of existing stormwater drainage and prevent further road flooding that often occurs now with increasing rain events.
- Vermont St, Partridge, Warner Gulf , Old Route 16/ South Protection Road are all routes that are in severe disrepair. However, the town does not have jurisdictional authority over these routes because they are owned by the County. These roads have major drainage issues (shoulders and ditches are in disrepair) and need to be rebuilt prior to rehab of the road itself, beyond re-pavement. According to the town, many of the county roads do not have shoulders and have clogged stormwater systems which would need to be repaired, prior to any upgrading.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.28.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.





Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.28-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
1	Provide portable generators, improvising shelter, and restore electric power	Ice Storm	Ice storms causing extensive damage primarily to electric wires	Holland Fire Dept, Power Co.	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Public awareness about wildfires, recruit new firefighters, enforce codes	Wildfire	Fire damages to structures	Holland Vol. Fire Dept	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Improve shelter planning, public awareness about winter storm events, plowing and salting roads	Winter Snowstorm, Transportation	Low temperatures, Large amount of snow	Holland DPW	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Provide warming shelters	Extreme Low Temperatures	Loss of heat in homes	Holland Disaster Coordinator	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue No longer applicable
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Debris removal from waterways and culverts	Flooding	Flooded homes and highways	Dept. of Public Works	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
6	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Flood Plain Admin	Ongoing Capability	Cost	-	1. Discontinue
						Level of protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
7	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Flood Plain Admin	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
7	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Flood Plain Admin	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	None	3. Complete



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Holland has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- No additional actions identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Holland participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.28-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood		X				X		X	X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Error! Reference source not found. summarizes the comprehensive range of specific mitigation initiatives the Town of Holland would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.28-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CIS Category
2022-Holland Town - 001	Salt Barn	1,2	Severe Winter Storm	<p>Problem: The town does not have a salt barn and the salt is stored outside and often gets buried in snow as a result. There have been times where municipal staff need to continuously keep the pile free from snow. As a result, the operations and response of the Highway Department is hindered during a snowstorm, which is one of the highest hazards in the community.</p> <p>Solution: The town would like to install a new facility at 14 Edgewood Drive, same location as the highway facility. The facility would be used to house the town's salt supply. Current efforts would reduce overall manpower needed to maintain salt pile and would facilitate the response time of the various Highway Department workers.</p>	Yes	No	2 years	Highway Department	\$300,000	High	HMGP, Climate Smart Communities Grant Program	High	SIP	SP
2022-Holland Town - 002	Generator Installation	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Failure	<p>Problem: The town Highway Department and Community Center (2 Legion Drive) (which is used as the community emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event. It is critical that both remain operational through all hazard events and have power at all times.</p> <p>Solution: Install a 3-phase generator that will provide adequate electricity to the two separate facilities. The town engineer would need to be consulted to determine the best location of the generator and the proper size generator to power both facilities. Once determined, the town will purchase and install the generator</p>	Yes	No	1 year	Highway Department, Town Engineer	\$100,000	High	HMGP	High	SIP	ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Holland Town - 003	Fire Department Generator Installation	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Outage	<p>Problem: Both Fire Departments (Building #1 @ 49 North Main Street and #2 7640 Hunters Creek Road) do not have generators, except for a portable generator which is not enough power for power the entire facility. Due to the lack of backup power, the facilities cannot adequately operate during a power outage. This is essential as the departments provide emergency services to the town.</p> <p>Solution: Install a 3-phase generator that will provide adequate electricity to the two separate facilities. The town engineer would need to be consulted to determine the best location of the generator and the proper size generator to power both facilities. Once determined, the town will purchase and install the generator</p>	Yes	No	1 year	Town Fire Department	\$100,00	High	HMGP, Department of Homeland Security Grant Program (HSGP), Assistance to Firefighters Grant Program	High	SIP	SP
2022-Holland Town - 004	Verizon Cell Tower	1,2	All	<p>Problem: Cellular service throughout the town is limited and causes communications disruptions. Due to the relatively rural characteristic of the town, municipal services have limited capacity to respond to emergencies in areas where lack of cell service exists.</p> <p>Solution: Working with cellular providers (e.g. Verizon), the town will conduct a feasibility study to determine the best locations to install towers and cellular antennas. Once identified, the town will work with cellular providers to install towers and antennas.</p>	No	No	2 years	Town Board, Engineer, Verizon and other cellular providers	\$150,000	High	Municipal Budget	High	SIP	ES
2022-Holland Town - 005	Box Culvert Replacement	1,2	Flood, Severe Storm	<p>Problem: The Hamlet of Holland has a box culvert that is in disrepair on Pearl/Canada/ Route 16, running east to west. It drains into Cazenovia Creek. Recently, there was remedial work conducted to reduce road flooding, but further work and improvements need to be done to</p>	No	No	2 years	Town DPW	\$500,000	High	HMGP, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement	High	SIP	SP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>increase capacity of existing stormwater drainage and prevent further road flooding that often occurs now with increasing rain events.</p> <p>Solution: Working with the town engineer and Highway Department, a study will be done to determine the proper size needed to upgrade the culvert. Once the proper size is determined, the town will work on removing the old culvert and replacing it with a new one to increase capacity.</p>							Project (WQIP) Program, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG)			
2022-Holland Town - 006	County Road Assessment	2,3,4	Flood, Severe Storm	<p>Problem: Vermont St, Partridge, Warner Gulf , Old Route 16/ South Protection Road are all routes that are in severe disrepair. However, the town does not have jurisdictional authority over these routes because they are owned by the County. These roads have major drainage issues (shoulders and ditches are in disrepair) and need to be rebuilt prior to rehab of the road itself, beyond repavement. According to the town, many of the county roads do not have shoulders and have clogged stormwater systems which would need to be repaired, prior to any upgrading.</p> <p>Solution: Working with the County, conduct an assessment on the existing county roads in the Town of Holland to prioritize areas in need of repair to reduce hazardous road conditions. Once identified, the town and county will work to make the repairs and upgrades.</p>	No	No	5 years	Town DPW and Erie County	Low for Municipality, High for County	High	Municipal Budget, Transportation Investment Generating Economic Recovery (TIGER), HMGP, County DPW Funds	High	SIP	SP, ES
2022-Holland Town - 007	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p>	No	No	Within 3 years	Supervisor	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood	BRIC, HMGP, FMA, cost share by homeowners	High	EAP, SIP	PI, PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).						threatened homes				

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ◆ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.28-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Holland Town - 001	Salt Barn	1	1	1	0	1	1	-1	0	1	1	0	1	1	1	9	High
2022-Holland Town - 002	Generator Installation	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Holland Town - 003	Fire Generator Installation	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Holland Town - 004	Verizon Cell Tower	1	1	1	0	1	1	0	1	1	0	1	0	0	1	9	High
2022-Holland Town - 005	Box Culvert Replacement	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Holland Town - 006	County Road Assessment	1	1	1	1	1	1	-1	1	1	0	0	0	0	1	8	Medium
2022-Holland Town - 007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.28.9 Action Worksheets

The following action worksheets have been developed by the Town of Holland to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Salt Barn		
Project Number:	2022-Holland Town - 001		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Winter Storm		
Description of the Problem:	The town does not have a salt building. Currently there is no salt barn and the salt is stored outside and often gets buried in snow as a result. Sometimes the municipality needs to have someone to continuously keep the salt pile free of any snow. As a result, the operations and response of the DPW is hindered during a snowstorm, which is one of the highest hazards in the community.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install a new facility at 14 Edgewood drive same location as the highway facility. Approximate costs are 300000 and would be used to house the town's salt supply. Current efforts would reduce overall manpower needed to maintain salt pile and would facilitate the response time of the various DPW workers.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Increase overall capacity and improve response time
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$300,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, Climate Smart Communities Grant Program
Responsible Organization:	Town DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Coordinate with neighboring town salt barn	Low	Would protect salt from natural elements but other issues will continue
	Build Salt Barn	\$300,000	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Salt Barn	
Project Number:	2022-Holland Town - 001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project will increase capacity to protect life
Property Protection	1	This project helps protect life
Cost-Effectiveness	1	This is the most cost-effective option
Technical	0	The technical aspects have not been fully realized
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	The town does not have adequate resources to address this issue
Environmental	0	The does not have any adverse nor positive impact on the environment
Social	1	This has a positive impact on the community
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses concerns to multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	The DPW
Other Community Objectives	1	Reduces exposure to rain and loss of salt
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Generator Installation		
Project Number:	2022-Holland Town - 002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The town Highway Department and Community Center (2 Legion drive) (which is used as the community the emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event and it is critical to increase capacity of these sites to facilitate and streamline response.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a 3-phase generator that can provide adequate electricity to the two separate facilities. As the facilities do not have any current generator, the town engineer would need to be consulted to determine the best location of the generator. Additionally, the capacity has not yet been determined so the town engineer would also need to determine that as well.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$100,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP
Responsible Organization:	Town DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar	High	Variant based on weather
	Generator	High	Best solution
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Generator Installation	
Project Number:	2022-Holland Town - 002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Fire Generator Installation		
Project Number:	2022-Holland Town - 003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Both Fire Department (Building #1 @ 49 North Main St and #2 7640 Hunters Creek Road) does not have generator, except for a portable generator which is not enough power for power the entire facility. Currently the facility does have adequate to operate the facility at a minimum, but by investing in a new generator, the town would be able to better facilitate emergency response, especially during a severe storm or aver a hazard event.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a 3-phase generator that can provide adequate electricity to the two separate facilities. As the facilities do not have any current generator, the town engineer would need to be consulted to determine the best location of the generator. Additionally, the capacity has not yet been determined so the town engineer would also need to determine that as well.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$100,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, Department of Homeland Security Grant Program (HSGP), Assistance to Firefighters Grant Program
Responsible Organization:	Town DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar Generator	High	Variant based on weather
	Generator	High	Best solution
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Fire Generator Installation	
Project Number:	2022-Holland Town - 003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



9.29 Village of Kenmore

This section presents the jurisdictional annex for the Village of Kenmore. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Kenmore’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.29.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Kenmore’s hazard mitigation plan primary and alternate points of contact. The Village of Kenmore followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including the Village Clerk and Police Department. The Police Department represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.29-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Kathleen Johnson, Clerk/Treasurer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-583-0557 (cell) 716-873-5700 Email: kjohnson@vi.kenmore.ny.us	Name/Title: AJ Kiefer, Captain, Kenmore Police Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-262-6624 (cell) 716-875-1234 (work) Email: akiefer@kenmorepolice.org
NFIP Floodplain Administrator	
Name/Title: Michael Berns, Code Enforcement Officer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-913-4353 (cell) 716-873-5700 Email: mberns@vi.kenmore.ny.us	

9.29.2 Municipal Profile

The Village of Kenmore is located within the southern part of the Town of Tonawanda, and together the two are referred to as "Ken-Ton". It is bordered on three sides by the town and on the south by the City of Buffalo. The village is in the northwest corner of Erie County and is 1.4 square miles in area. No significant waterways/waterbodies are located within the village. NYS 265 and NYS Route 384 traverse it.

The Village of Kenmore was "Buffalo's First Suburb". Following the Civil War, the City of Buffalo's population grew very quickly. With the invention of electric streetcars, people were able to live further than walking distance from their jobs. Around 1888, the first homes and then neighborhoods began to be laid out on future Village of Kenmore territory just north of Buffalo. The first church in the village was erected in 1891 and the first store opened in 1897. The village incorporated in 1899 (Village of Kenmore 2020).





According to the U.S. Census, the 2010 population for the Village of Kenmore was 15,423. The estimated 2019 population was 15,132, a 1.9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.29.3 Jurisdictional Capability Assessment and Integration

The Village of Kenmore performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.29.3). The Village of Kenmore’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Kenmore. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.29-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	No	Local Law 1962, Chapter 7, Buildings and Building Regulations	Local	Code Enforcement
Comment: Proactive management of construction will help mitigate against different hazards.					
Zoning Code	Yes	No	LL1-2015; Chapter 25, Zoning	Local	Planning Board, Village Board
Comment: Establishes minimum stormwater management requirements. Easement shall provide for access to the facility at reasonable times for periodic inspection by the village to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this article. Enactment of zoning will protect against hazard exposure.					
Subdivision Ordinance	Yes	Yes	LL7-2018, Chapter 17 Planning and Development; Subdivision	Local	Code Enforcement, Planning Board
Comment: Avoid, minimize, or mitigate natural hazards and protect natural resources. There shall be no subdivision of land in the village without planning board approval.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	Yes	Yes	LL1-2008 and Village of Kenmore. 1970. Chapter 18 Sewers and Sewage Disposal.	Local	Village DPW
Comment: Avoid, minimize, or mitigate natural hazards and protect natural resources. There shall be no subdivision of land in the village without planning board approval. Provide for the health, safety, and general welfare of the citizens of the village through the regulation of stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. Controls discharges to waterways.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	LL1-2015; Chapter 25, Zoning	Local	Village Planning Board
Comment: The Zoning Code includes growth management components, such as requiring site plan review for most development proposals.					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	LL1-2015; Chapter 25, Zoning	Local	Village Planning Board
Comment: Site plan review requirements for locations, dimensions, grades and flow directions of existing sewers, drainage ditches, culverts, and water lines, as well as other communication facilities or underground and above ground utilities within or adjacent to the property. The planning board will pay special attention to the adequacy of structures, roadways, and landscaping in areas susceptible to flooding, ponding, or erosion.					
Flood Damage Prevention Ordinance	Yes	Yes	Local Law#2 2019, Article 2, Chapter 8 Flood Damage Prevention	Local	FPA
<p>Comment: BFE+2 feet is required for all construction in the SFHA (residential and non-residential). It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ol style="list-style-type: none"> (1) Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; (4) Control filling, grading, dredging and other development which may increase erosion or flood damages; (5) Regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards to other lands; and (6) Qualify and maintain for participation in the National Flood Insurance Program. 					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 18 Sewers and Sewage Disposal	Local	Public Works Department
Comment: The Village participates as an MS4 and is required to limit pollution discharge into stormwater channels.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan for the Village of Kenmore Business District, 2003	Local	Planning Board
Comment: Comprehensive planning will incorporate hazard risk into land use deliberations.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Kenmore to oversee and track development.





Table 9.29-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The village Building Department administers construction permits
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	The village is fully developed, and no buildable land remains.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Kenmore and their current responsibilities which contribute to hazard mitigation.

Table 9.29-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Village Department of Public Works staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	The Building Department administers the building code in part of reduce exposure to risk.
Emergency Management/Public Safety Department	No	The village does not have an Emergency Management Department
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Police, via social media including Facebook, Village website, One Pause Code Red
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Neighboring Fire Districts provide added capacity in emergency response.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village works with a consultant engineering firm.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	The village works with a consultant engineering firm.
Planners or engineers with an understanding of natural hazards	Yes	Planning and Zoning Boards incorporate natural hazards exposure into review of development proposals.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	The Building Inspector and Police are trained in damage assessment.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Michael Borth, Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	The Police Captain is the designated Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Consultant engineer

Fiscal Capability

The table below summarizes financial resources available to the Village of Kenmore.

Table 9.29-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	CHIPS, EWR, Pave NY
Open Space Acquisition funding programs	N/A
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Kenmore.

Table 9.29-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk
Personnel skilled or trained in website development	No	The village retains a consultant technical professional.
Hazard mitigation information available on your website	Yes	The town website contains information about flooding and drainage problems.
Social media for hazard mitigation education and outreach	Yes	The Police Department employs Facebook as social media
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning Board/ZBA
Other programs already in place that could be used to communicate hazard-related information	Yes	Village website, Police, social media, news media, One Pause/Code Red
Warning systems for hazard events	Yes	NY Alert/NY Warn
Natural disaster/safety programs in place for schools	N/A	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Kenmore.

Table 9.29-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,





future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.29-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.29.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Berns, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Kenmore.

Table 9.29-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Kenmore	1	8	\$3,379	0	0

Source: FEMA 2020a and 2020b
 Notes:
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village did not identify particular locations that are prone to flooding. The village does not maintain a list of properties that have been damaged by flooding. The village does not maintain a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the village. The village did not identify how many (if any) properties have been mitigated. The village’s flood hazard maps adequately address the flood risk within the jurisdiction.



NFIP Compliance

The Village of Kenmore does not have any outstanding NFIP compliance violations that need to be addressed. There is no record of a Community Assistance Visit (CAV) or a Community Assistance Contact having occurred with the village. The Building Department is responsible for floodplain administration however, there are not any certified floodplain managers on staff. The village does not have access to resources to determine possible future flooding conditions from climate change. The village feels that its floodplain management staff would benefit from assistance or training to support its floodplain management program. The town references construction estimates and knowledge of value of work and scope state and federal authorities for their NFIP administration services as well as how to determine if proposed development on an existing structure would qualify as a substantial improvement. The Planning Board’s site plan review process is an important component of the local NFIP administration. The village identified that the barriers to include a lack of knowledge about the location of floodplains and a disregard for regulations/limitations on property. There are outstanding issues with NFIP compliance involving the elevation of flood gates and a missing development permit. The village’s NFIP program meets minimum requirements.

9.29.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Kenmore identified two designated evacuation routes. The village will coordinate with county and state agencies when needed. The evacuation routes are listed below:

- Delaware Avenue, Elmwood Avenue and Colvin Boulevard, which traverses north to south.
- Kenmore Avenue, which traverses east to west.

Sheltering

The Village of Kenmore has identified the following designated emergency shelters within the village.

Table 9.29-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Kenmore Community Center	135 Wilber, Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	No	Yes	No	Kenmore	Kitchen on premises
Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	No	Yes	Yes	Kenmore	Kitchen on premises



Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Kenmore has identified the following sites suitable for placing temporary housing units.

Table 9.29-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kenmore Community Center	135 Wilber; Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	Community Center	All available	Unknown
Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	Public School	All available	Unknown
Roosevelt Elementary	283 Washington; Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	unknown	All available	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Kenmore has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.29-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The village did not identify any permanent housing locations. Village staff will identify and coordinate with the county on identifying these sites as addressed in Proposed Mitigation Action #2022-Village Kenmore-005					

9.29.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.29-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.29-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0	0	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
The village did not identify any recent major developments												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
The village did not identify any major developments anticipated in the next 5 years.												

SFHA Special Flood Hazard Area (1% flood event). The Village did not provide building permit data.

* Only location-specific hazard zones or vulnerabilities identified.

9.29.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Kenmore’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Kenmore has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.29-1. Village of Kenmore Hazard Area Extent and Location Map 1

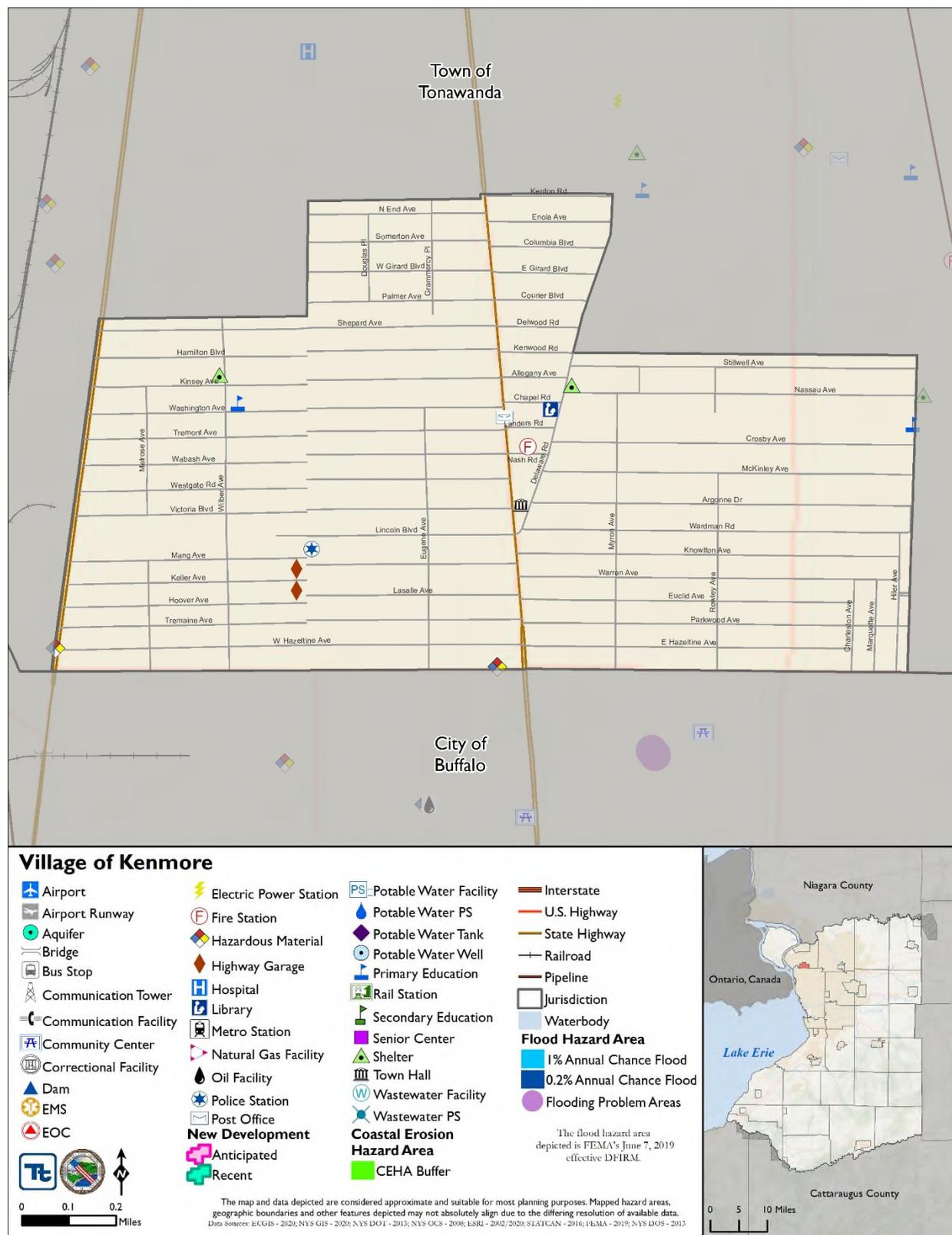




Figure 9.29-2. Village of Kenmore Hazard Area Extent and Location Map 2

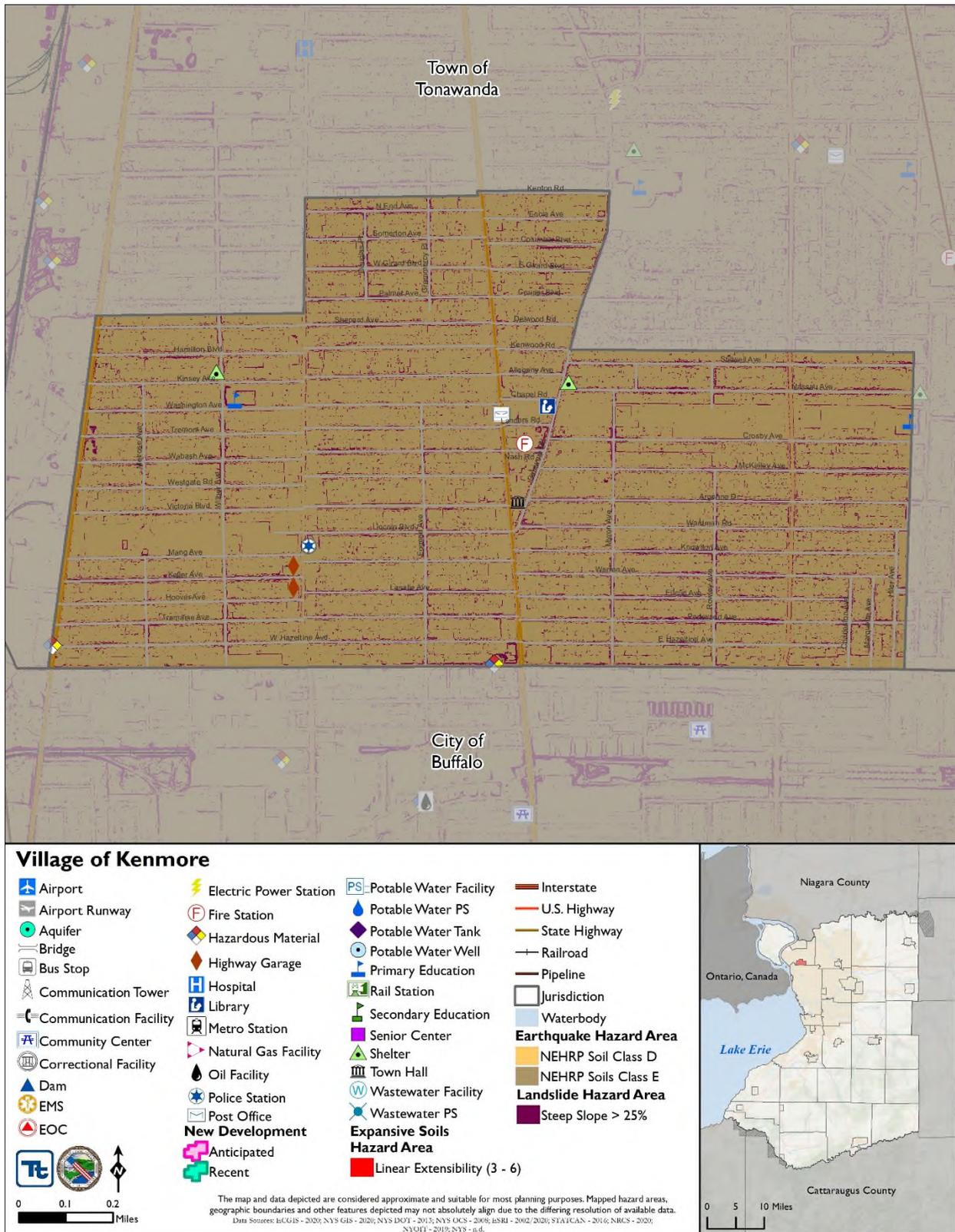
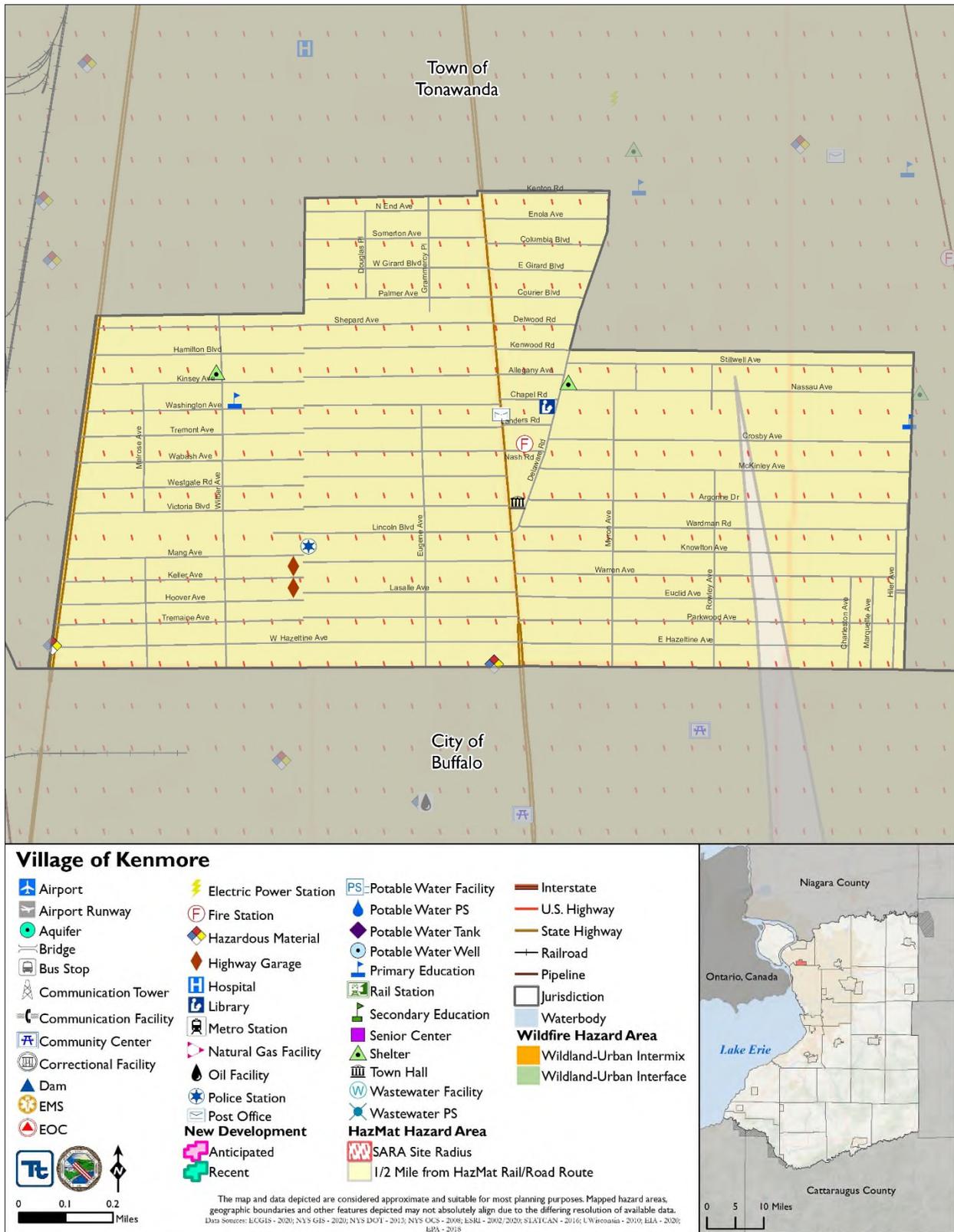




Figure 9.29-3. Village of Kenmore Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Kenmore’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.29-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.29-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county was impacted by this event, the village did not report any damage
October 28-29, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted by this event, the village did not report any damage
November 12, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
November 18, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
January 11, 2017	High Wind	No	Although the county was impacted by this event, the village did not report any damage
March 8, 2017	High Wind	No	Although the county was impacted by this event, the village did not report any damage
March 13, 2017	Winter Storm	No	Although the county was impacted by this event, the village did not report any damage
July 20, 2017	Tornado	No	Although the county was impacted by this event, the village did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted by this event, the village did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
January 2, 2018	Blizzard	No	Although the county was impacted by this event, the village did not report any damage
October 6, 2018	Lightning	No	Although the county was impacted by this event, the village did not report any damage
February 24, 2019	High Wind	No	Although the county was impacted by this event, the village did not report any damage
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted by this event, the village did not report any damage
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted by this event, the village did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Kenmore’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Kenmore. The Village of Kenmore has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results and the village agrees with the relative risk of the hazards of concern to the community.

Table 9.29-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood





Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.29-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Percent Structure Damage	Addressed by Proposed Action
		1% Event	0.2% Event		
None Identified					

Source: FEMA DFIRM



Identified Issues

After review of the Village of Kenmore’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Kenmore has identified the following vulnerabilities within their community:

- The municipal building lacks a back-up power source.
- Floodplain management capabilities need improvement.
- Stormwater catch basins need rebuilding.
- There may be Repetitive Loss Properties in the village.
- The village should identify locations for permanent housing for use after a natural disaster.

9.29.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.29-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Backup power generation for Village Municipal Building to prevent loss of government functions	All Hazards	Location at 2919 Delaware Ave, Kenmore, NY 14217	Village DPW	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Adopt the new FIRM's and replace our local law with DEC's model floodplain management law	Flooding	Not Identified	Village DPW, Village Board	Complete			<ol style="list-style-type: none"> Discontinue Complete
	Work with DEC for preparing policies and procedures to administer the program.	Flooding	Not Identified	Village DPW	Completed			<ol style="list-style-type: none"> Discontinue Complete
	Have personnel attend Flood Plain Managers training and become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Village DPW, Village Board	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Work with local homeowners to determine interest in inclusion in a grant application to FEMA for mitigation project funding (flood proof/elevate/acquire) and apply to FEMA on homeowner behalf	Flooding	Frequent flooded properties	Village DPW	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
		Flooding		Village DPW	Ongoing			<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection Damages Avoided; Evidence of Success	
	Cleaning of existing storm sewer by flushing systems of silt and debris		Done over a five-year period to prevent/correct flood problems					<ol style="list-style-type: none"> Ongoing capability
	Rebuild existing storm catch basins	Flooding	Alleviate water restriction caused by broken concrete in catch basin	Village DPW	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Village Board	Completed			<ol style="list-style-type: none"> Discontinue Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Village Board	Completed			<ol style="list-style-type: none"> Discontinue Complete
	Install creek gauging stations and conduct annual flood channel inspections/clearing	Flooding	Not Identified	Village Board	Ongoing			<ol style="list-style-type: none"> Discontinue Ongoing capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Kenmore did not identify any mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Kenmore participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.29-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	X	-	-	-	-	-	X
Cyber Attack	-	X	-	X	-	-	-	-	-	X
Earthquake	-	X	-	X	-	-	-	-	-	X
Expansive Soils	-	X	-	X	-	-	-	-	-	X
Extreme Temperature	-	X	-	X	-	-	-	-	-	X
Flood	X	X	-	X	X	X	-	-	-	X
Hazardous Materials	-	X	-	X	-	-	-	-	-	X
Landslide	-	X	-	X	-	-	-	-	-	X
Pandemic	-	X	-	X	-	-	-	-	-	X
Severe Storm	-	X	-	X	X	-	-	-	-	X
Severe Winter Storm	-	X	-	X	-	-	-	-	-	X
Wildfire	-	X	-	X	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.29-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Kenmore would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.29-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village Kenmore-001	Protect the village municipal building from power interruption	1	All Hazards, Utility Failure	<p>Problem: The municipal building lacks back-up power source. Vulnerable to Utility Failure hazard.</p> <p>Solution: The village will conduct an engineering analysis to determine what size of generator should be installed to provide backup power for the Village municipal building. The Village DPW will then purchase and install the generator</p>	Yes	No	Within 3 years	Village DPW, Village Board	~\$75,000 for a generator	Operational continuity of critical facility services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Municipal Budget	High	SIP	ES
2022-Village Kenmore-002	Improve floodplain management capabilities	3	Flood	<p>Problem: Floodplain management staff at the village could benefit from additional training.</p> <p>Solution: Procure trainings in floodplain management capabilities.</p>	No	No	Within 2 years	FPA, Village Board	\$5,000	Improve administration of floodplain management in the village.	Municipal budget	High	LPR	PR
2022-Village Kenmore-003	Rebuild stormwater catch basins	1	Flood, Severe Storm	<p>Problem: Stormwater catch basins are inadequately sized or not functioning properly. During storm events this can cause pooling on village roads.</p> <p>Solution: The Village DPW will conduct an engineering design of stormwater catch basin repair measures.</p>	No	No	Within 5 years	Village DPW, Village Board	TBD by engineer's analysis	Improve stormwater management within the village	FEMA HMGP, BRIC, Municipal Budget	High	SIP	SP





Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				The Village DPW will then complete the chosen repair measures.										
2022-Village Kenmore-004	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.</p>	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, local cost share by residents	High	SIP	PP
2022-Village Kenmore-005	Identify locations and capacity for permanent housing and determine capacity of emergency	2	All Hazards	<p>Problem: Village cannot identify locations for residents to live permanently or temporarily.</p>	No	No	Within 3 years	Village FPA	Staff time	Ensure residents a location to live after a disaster	Municipal funds	High	EAP	ES



Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	shelters and temporary housing locations			Solution: Work with the County to identify these housing locations and capacities										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.





- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.29-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village Kenmore-001	Protect the village municipal building from power interruption	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- Village Kenmore -002	Improve Floodplain management capabilities	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022- Village Kenmore -003	Rebuild stormwater catch basins	1	1	1	1	1	1	1	1	1	1	1	0	1	0	12	High
2022-Village Kenmore-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022-Village Kenmore-005	Identify locations for temporary and permanent housing	1	1	1	1	0	1	1	1	0	0	1	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.29.9 Action Worksheets

The following action worksheets have been developed by the Village of Kenmore to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Village of Kenmore Action Worksheet			
Project Name:	Protect the village's municipal hall from power outage		
Project Number:	2022-Village Kenmore-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The village municipal building lacks back-up power source and is vulnerable to the Utility Failure hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will conduct an engineering analysis to determine what size of generator should be installed to provide backup power for the village municipal building. The Village DPW will then purchase and install the generator		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations at the village municipal building
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	~\$75,000 for a backup generator	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Municipal Budget
Responsible Organization:	Village DPW, Village Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new municipal hall	Very High	Prohibitively expensive
	Install solar farm to supply power	High	Variable power generation, infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the village municipal hall from power outage	
Project Number:	2022-Village Kenmore-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided at the municipal building
Property Protection	1	Project will protect the municipal hall from utility failure risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 3 years
Agency Champion	1	Village DPW, Village Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Village of Kenmore Action Worksheet			
Project Name:	Rebuild stormwater catch basins		
Project Number:	2022-Village Kenmore-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Stormwater catch basins are inadequately sized or not functioning properly. During storm events this can cause pooling on village roads.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village DPW will conduct an engineering design of stormwater catch basin repair measures. The Village DPW will then complete the chosen repair measures.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Reduce flooding risk	Estimated Benefits (losses avoided):	Reduce flooding risk
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by engineer's analysis	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	FEMA HMGP and PDM, Municipal Budget
Responsible Organization:	Village DPW, Village Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Stormwater Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Cease providing stormwater services	Very High	Prohibitively expensive, increased flooding
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Rebuild stormwater catch basins	
Project Number:	2022-Village Kenmore-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect safe passage along roadways during flooding events.
Property Protection	1	Project will protect roadways and property from flood damage.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Village DPW, Village Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.30 City of Lackawanna

This section presents the jurisdictional annex for the City of Lackawanna. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Lackawanna’s risk and vulnerability; the different capabilities utilized in the city; and an action plan that will be implemented to achieve a more resilient community.

9.30.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Lackawanna’s hazard mitigation plan primary and alternate points of contact. The City of Lackawanna followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including: the Mayor’s Office and Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.30-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Annette Iafallo, Mayor Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6464 Email: Mayor@lackny.com	Name/Title: Anthony DeSantis, Public Works Commissioner Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6426 Email: dpwcommissioner@lackny.com
NFIP Floodplain Administrator	
Name/Title: Richard Stanton, Director of Development Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6421 Email: development@lackny.com	
Additional Contributors	
Name/Title: John Wolf, Director of Public Safety/Emergency Manager Method of Participation: Provided data and information, supported mitigation strategy	
Name/Title: Richard Juda, Attorney Method of Participation: Provided data and information, supported mitigation strategy	

9.30.2 Municipal Profile

The City of Lackawanna is approximately six square miles. The city is bounded on the north by the City of Buffalo, on the east by the Town of West Seneca, on the south by the Town of Hamburg and the Village of Blasdell and to the west by Lake Erie. Exit 55 W of the New York State Thruway services Lackawanna. U.S. Rt. 62 and New York Rt. 5 also traverse the city.



The Seneca Indians were original inhabitants of the area that became Lackawanna. Around 1780, the British helped the Seneca establish log cabin villages on Buffalo Creek and supplied them with clothing, agricultural equipment and seeds. In 1838, the Seneca Indians were forced to leave the Buffalo Reservation and white settlers moved in. In 1899, John Albright purchased all the land along the shore of Lake Erie for Republic Steel which would become the largest steel plant in the world at that time (City of Lackawanna 2020).

According to the U.S. Census, the 2010 population for the City of Lackawanna was 18,141. The estimated 2019 population was 17,831, a 1.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.3 percent of the population is 5 years of age or younger and 16.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.30.3 Jurisdictional Capability Assessment and Integration

The City of Lackawanna performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.30.3). The City of Lackawanna’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Lackawanna. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.30-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	NYS Unified Building Code, Chapter 75 Building Code Administration.	Local	City Code Enforcement
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the City of Lackawanna.					
Zoning Code	Yes	No	City Code Chapter 230 Zoning	Local	Code Enforcement



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The purpose of the City Council in adopting this chapter is to provide for the orderly development of the City of Lackawanna in accordance with the recently adopted City of Lackawanna Comprehensive Plan. The Zoning Chapter is developed to:</p> <ul style="list-style-type: none"> • Protect the character and values of open space, residential, commercial, industrial and institutional land uses; • Regulate the location and intensity of buildings and uses; • Preserve and protect significant natural features and vegetation, thereby preventing ecological damage and visual blight which occur when those features or vegetation are eliminated or substantially altered to serve economic purposes alone; • Encourage the use of the Lake Erie shoreline within the boundaries of the City of Lackawanna as a unique resource with regional significance; • Preserve and promote the general attractiveness of the city and ensure that structures and land use arrangements are aesthetically harmonious with surrounding structures and land uses; • Facilitate the provision of adequate transportation and parking facilities to maximize the utility of transportation infrastructure, protect the safety of pedestrians and motorists, and promote the convenience of consumers and employers; • Encourage the efficient use of community development infrastructure while preventing the overcrowding of land and excessive concentration of population; • Provide adequate open spaces for light, air and outdoor uses; and • Protect persons and property from damage and injury due to fire or flood; and to respect and implement the purposes and scope of the Federal Flood Insurance Study for the City of Lackawanna, and all amendments thereto, as a guide to orderly flood plain management in the City of Lackawanna. 					
Subdivision Ordinance	Yes	No	City Code Chapter 144 Land Subdivision Regulations	Local	Development
<p>Comment: The purpose of these regulations shall be to provide rules, regulations and standards to guide land subdivision within the City of Lackawanna in order to promote the public health, safety, convenience and general welfare of the city. They shall be administered to ensure the orderly growth and development, conservation, protection and proper use of land and adequate provision for circulation, utilities and services and to ensure that land utilized for building purposes shall be without danger to health or peril from fire, flood or other menace and that provision is made for adequate light and air, fire protection, recreation areas and other amenities.</p>					
Stormwater Management Ordinance	Yes	Yes	City Code Chapter 185 Sewers Article IX Storm Drainage	Local	Code Enforcement
<p>Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the City through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02. The objectives of this article are:</p> <ul style="list-style-type: none"> • To meet the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02; • To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes; • To prohibit illicit connections, activities and discharges to the MS4; • To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and • To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. 					
Post-Disaster Recovery Ordinance	No	-	-	-	-
<p>Comment: None</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	-	-	-	-
<p>Comment: None</p>					
Site Plan Review	Yes	No	City Code Chapter 230-71 Site Plan Review	Local	Code Enforcement
<p>Comment: The Planning and Development Board is authorized to review and approve, approve with modifications or conditions or disapprove site plans in accordance with the standards outlined in this chapter. Site plan review and site plan approval by the City of Lackawanna</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning and Development Board shall be required for all uses, buildings and structures that require site plan approval as outlined in this chapter. Fees outlined and adopted by the City of Lackawanna will apply to all site plan reviews.					
Environmental Protection Ordinance	Yes	Yes	City Code Chapter 114 Environmental Quality Review, SEQR Article 8 NY ECL	Local	All city agencies, boards, departments, and offices
Comment: The purpose of this chapter is to implement, for the City of Lackawanna, the provisions of the State Environmental Quality Review Regulations, thereby incorporating environmental factors into existing planning and decision-making processes.					
Flood Damage Prevention Ordinance	Yes	Yes	City Code Chapter 230-68 Flood Development Permits	Local	Floodplain Administrator
<p>Comment: It is the purpose of this section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; Control filling, grading, dredging and other development which may increase erosion or flood damages; Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and Qualify for and maintain participation in the National Flood Insurance Program. <p>The city requires BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	City Code Chapter 185 Sewers Article IX Storm Drainage	Local	Code Enforcement
<p>Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the city through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02. The objectives of this article are:</p> <ul style="list-style-type: none"> To meet the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02; To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes; To prohibit illicit connections, activities and discharges to the MS4; To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. 					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	Yes	Comprehensive Plan, 2017	Local	Planning
Comment: The Comprehensive Plan outlines the goals and objectives which guide decision making and development into the future. The plan focuses on a range of goals in areas such as population, housing, economy and growth, land use, recreation, parks and open space, environment, transportation, infrastructure and community services.					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	City of Lackawanna Local Waterfront Revitalization Program May 2018	Local	Planning
Comment: The City of Lackawanna Waterfront Revitalization Area includes all lands and waters in the city extending from the Lake Erie shoreline inland to the eastern right-of-way of New York State Route 5, between the Lackawanna/Hamburg border to the south and the Lackawanna/Buffalo border to the north.					
Stormwater Plan	Yes	No	Stormwater Management Plan	Local	Planning
Comment: A plan for controlling stormwater runoff and pollutants from a site during and after construction activities. For all land development activities subject to review and approval by the Zoning Officer or Planning and Development Board under mobile home or site plan regulations, the applicant or developer shall be required to submit a SWPPP that complies with the requirements of this article to the SMO, and the land development activity shall be reviewed subject to the standards contained in this article.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	Yes	No	City of Lackawanna Local Waterfront Revitalization Program May 2018	Local	Planning
Comment: The City of Lackawanna Waterfront Revitalization Area includes all lands and waters in the city extending from the Lake Erie shoreline inland to the eastern right-of-way of New York State Route 5, between the Lackawanna/Hamburg border to the south and the Lackawanna/Buffalo border to the north.					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	Yes	No	Brownfield Opportunity Plan	Local, Federal	City, BOA
<p>Comment: The Lackawanna First Ward BOA represents a unique opportunity for the community and the City to work together to capitalize on core strengths, mitigate environmental and market challenges and capture projected local and regional growth industries, making economic growth and community renewal the focus for the First Ward. As the strategy for the Lackawanna First Ward BOA evolved, boundaries for smaller Target Areas, each with distinct qualities, assets and potential, were first identified and then revised. Each area represents a logical collection of land parcels and has its own development emphasis. While the Target Areas are unique in character, land uses within and between areas are complementary. This provides a vibrant overall land use mix while ensuring compatibility between adjacent uses.</p>					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the City of Lackawanna to oversee and track development.



Table 9.30-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Development and Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	Not Officially but available land maps are kept

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Lackawanna and their current responsibilities which contribute to hazard mitigation.

Table 9.30-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning and Development Board has the authority to perform the following duties: <ul style="list-style-type: none"> • Prepare or change a Comprehensive Plan for the City of Lackawanna; • Make investigations, maps, reports and recommendations regarding planning and development matters, upon its own initiative or referral by the City Council or Zoning Board of Appeals, provided such expenditures do not exceed appropriations; • Refer matters to the County Planning Agency for review in accordance with § 239-m of the General Municipal Law; • Review and approve, approve with conditions or deny site plans; • Review and comment on all proposed zoning amendments; and • Adopt, after public hearing and City Council approval, such rules and regulations as it deems reasonably necessary to carry out its duties under this chapter and with regard to any subject over which it has jurisdiction under any law.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals has duties that include but are not limited to: <ul style="list-style-type: none"> • Interpretation. Upon appeal from a decision by the Zoning Officer, the Zoning Board of Appeals shall decide any question involving interpretation of any provisions of this chapter. Such appeal shall be initiated within 60 calendar days of the adverse decision. • Refer matters to the County Planning Agency for review in accordance with § 239-m of the General Municipal Law. • Variances. On an appeal from an order, requirement, decision or determination of any administrative official charged with the enforcement of this chapter, where it is alleged by the appellant that there are practical difficulties or unnecessary hardships in the way of carrying out the strict applications of this chapter, the Zoning Board of Appeals may grant a variance in the strict application of this chapter in accordance with Article VII.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works is responsible for weekly garbage removal, recycling, grass, yard waste, and branches, bridge and road updates, and ice and snow removal from roadways.
Construction/Building/Code Enforcement Department	Yes	<p>The City of Lackawanna Department of Code Enforcement works closely with all departments within city government. The Code Enforcement Officer dedicates his time to enforcing Ordinances and New York State Statutes. But more importantly, the Code Enforcement Officer promotes education and cooperation between community partners and the citizens we serve. Through enforcement and education we hope to preserve and improve the quality of life and public safety for all who work, live in and visit our community.</p> <p>As Code Enforcement Officers, this position is to enforce the City of Lackawanna Municipal Code and the New York State Uniform Codes, particularly as it relates to land use, property maintenance and building construction. These efforts can improve the quality of the city's neighborhoods, protect property values and the environment and keep Lackawanna a safe and desirable community. Specifically, the Code Enforcement Officer concentrates on the investigation and abatement of complaints involving land use (zoning), housing conditions (substandard structures), abandoned vehicles, signs, pools, fences and general public nuisances. Code enforcement also serves the Building Department, which enforces ordinances pertaining to new construction, reconstruction, additions, demolitions and storm water and floodplain regulations.</p>
Emergency Management/Public Safety Department	Yes	The Department of Public Safety contains the following divisions: Police Department, Fire Department, Animal Control.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	CodeRED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Annual Inspections of Smokes Creek with NYSDEC
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineers outsourced with coordination by Public Works and Development
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineers outsourced with coordination by Public Works and Development
Planners or engineers with an understanding of natural hazards	Yes	Engineers outsourced with coordination by Public Works and Development
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Engineers outsourced with coordination by Public Works and Development
Personnel skilled or trained in GIS and/or Hazards United States	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
(HAZUS) – Multi-Hazards (MH) applications		
Scientist familiar with natural hazards	Yes	Engineers outsourced with coordination by Public Works and Development
NFIP Floodplain Administrator (FPA)	Yes	Development Director
Surveyor(s)	Yes	Retained as necessary
Emergency Manager	No	-
Grant writer(s)	No	Currently seeking new grant writers
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Attorney with strong environmental law background on staff

Fiscal Capability

The table below summarizes financial resources available to the City of Lackawanna.

Table 9.30-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Engineering or Development
Capital improvements project funding	Yes – admin and finance department
Authority to levy taxes for specific purposes	Yes – Mayor
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – admin and finance department
Incur debt through special tax bonds	Yes – Mayor
Incur debt through private activity bonds	Yes – admin and finance department
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes – Development
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Development

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Lackawanna.

Table 9.30-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	The Public Information Officer direct reports to the Mayor.
Personnel skilled or trained in website development	Yes	City Hall staff member trained as webmaster for City web-site – works in collaboration with Public Information Officer
Hazard mitigation information available on your website	Yes	Information is hosted on the city website (www.lackawannany.org) under Public Safety-Code Red System.



Outreach Resources	Available? (Yes/No)	Comment:
Social media for hazard mitigation education and outreach	Yes	Facebook (Lackawanna NY 0 City Government). City also has a Twitter handle which is less frequently used but can be.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red phone notification system. Also, direct relationships with local media.
Warning systems for hazard events	Yes	Code Red phone notification system
Natural disaster/safety programs in place for schools	N/A	Lackawanna City School District runs independently from city government and would lead such efforts.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Lackawanna.

Table 9.30-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.30-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.30.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Richard Stanton, Director of Development

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Lackawanna.

Table 9.30-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Lackawanna	184	94	\$118,735	0	164

Source: FEMA 2020a, FEMA 2020b

Notes: SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The city has identified areas around the creek bank as flood prone although there has been no flooding in recent years. The city keeps a list of property owners that are interested in flood mitigation projects for their properties, around 10 a year. However, there have been no properties that have been mitigated by either elevation or acquisition. There are currently no RiskMAP projects being undertaken within the city. The city also notes that the flood hazard maps available accurately address flood risk.

Substantial Damage determinations are made by via inspections completed by the Code Enforcement Official, but no such events have been declared.

NFIP Compliance

The Development Department is responsible for floodplain management. There are no certified floodplain managers (CFM) within the city, and no barriers to an effective NFIP program have been identified. The Code Enforcement and Development Departments review all floodplain building permit submissions from builders. The Code Enforcement Official determines if proposed developments qualify as “substantial improvements.” The Planning Board and Zoning Board both consider floodplains and take flood risk into account when developing codes and reviewing site plans.



Chapter 230-68 of the City Code details the local Flood Damage Prevention Ordinance, last amended on April 29, 2019. The floodplain management program meets minimum requirements. The city does not participate in the Community Rating System (CRS) program. The most recent Community Assistance Contact (CAC) was on June 26, 1998 and the most recent Community Assistance Visit (CAV) was on May 16, 2018. There are currently no outstanding compliance issues.

9.30.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Lackawanna has identified the following routes and procedures to evacuate residents prior to and during an event.

- Contact NFTA for bussed; first and second would take Martin Road to senior center, the third and fourth would take Abbot and/or Ridge Road to senior center.

Sheltering

The City of Lackawanna has identified the following designated emergency shelters within the city.

Table 9.30-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Lackawanna Senior Center	230 Martin Rd, Lackawanna, NY 14218	Unknown	No	Yes	Yes	Red Cross	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Lackawanna has identified the following sites suitable for placing temporary housing units.

Table 9.30-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-C. Lackawanna -#013					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning



requirements and floodplain laws. The City of Lackawanna has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.30-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-C. Lackawanna -#013					

9.30.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.30-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.30-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	5	0	2	0	6	0	6	1	2	1	3	1
Multi-Family	0	0	1	0	1	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	2	0	1	0	1	0	11	0	1	0	9	0
Total Permits Issued	7	0	4	0	8	0	17	1	3	1	12	1
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
Time Release Property	Manufacturing	1		6 Dona Street	None		95% Complete					
Sucro	Manufacturing	5		2303 Hamburg Turnpike	None		50% Complete					
Premium Coffee	Commercial	1		2520 Hamburg Turnpike	None		Open Food Prep					
Steelwinds	Wind Energy	14		2303 Hamburg Turnpike	None		Construction on-going					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Uniland Spec Building	Manufacturing/distribution	1		8 Dona Street	None		Permits Approved					
Splash Pad Park	Recreational	3		600 Ridge Rd	None		Environmental Review Stage					
Mt. Olive	Senior Housing/Medical/Youth Facility	3		66 Wasson Ave	Non		Plan Review					



300 Commerce	PPE Manufacturing	1	300 Commerce Dr	None	Permitting
Warsaw Bridge Replacement	Public Infrastructure	1	Warsaw Street	Floodplain	Engineering
City Hall Replacement	Public Infrastructure	1	2838 South Park Avenue	None	Architecture Planning

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.30.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Lackawanna’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Lackawanna has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.30-1. City of Lackawanna Hazard Area Extent and Location Map 1

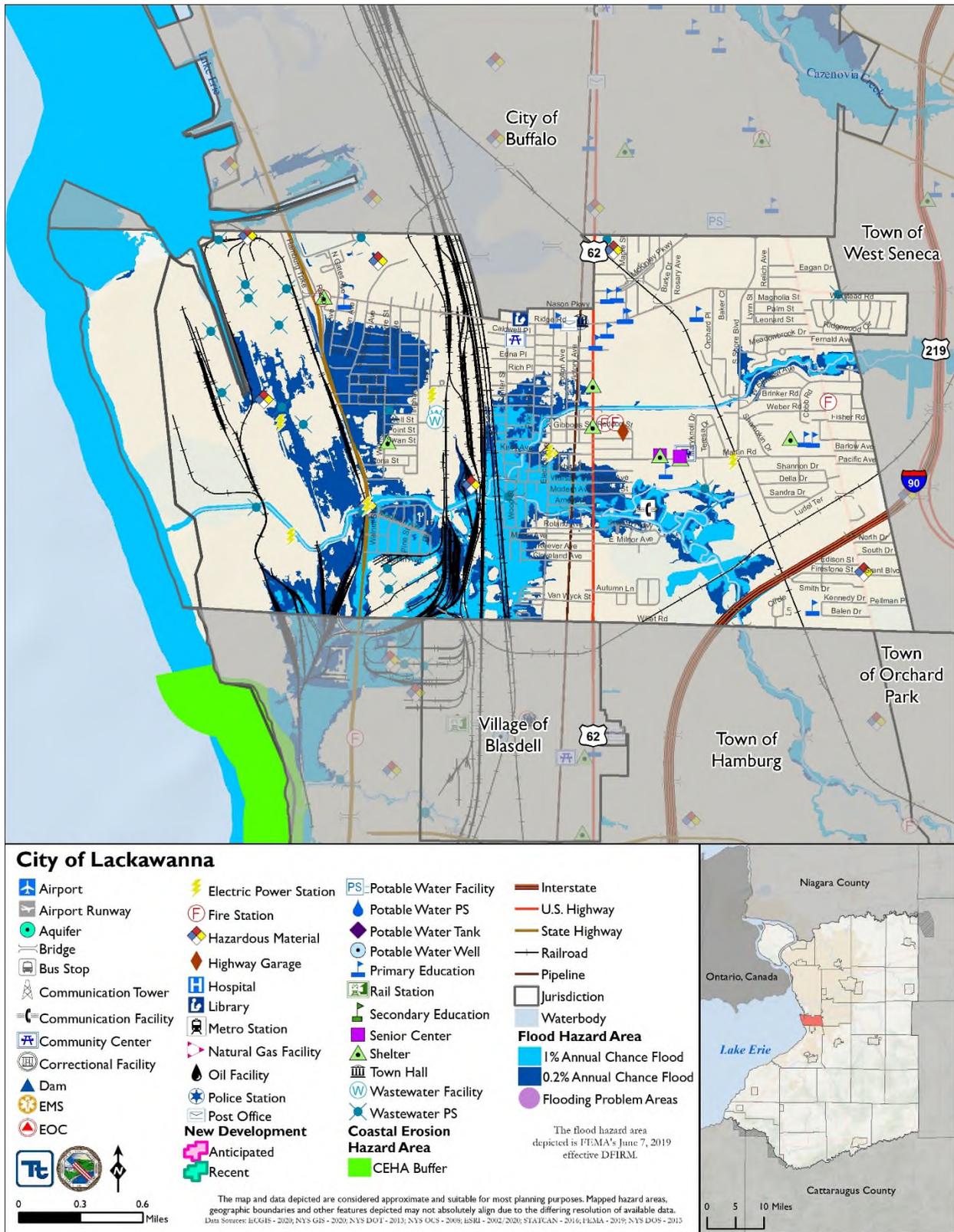




Figure 9.30-2. City of Lackawanna Hazard Area Extent and Location Map 2

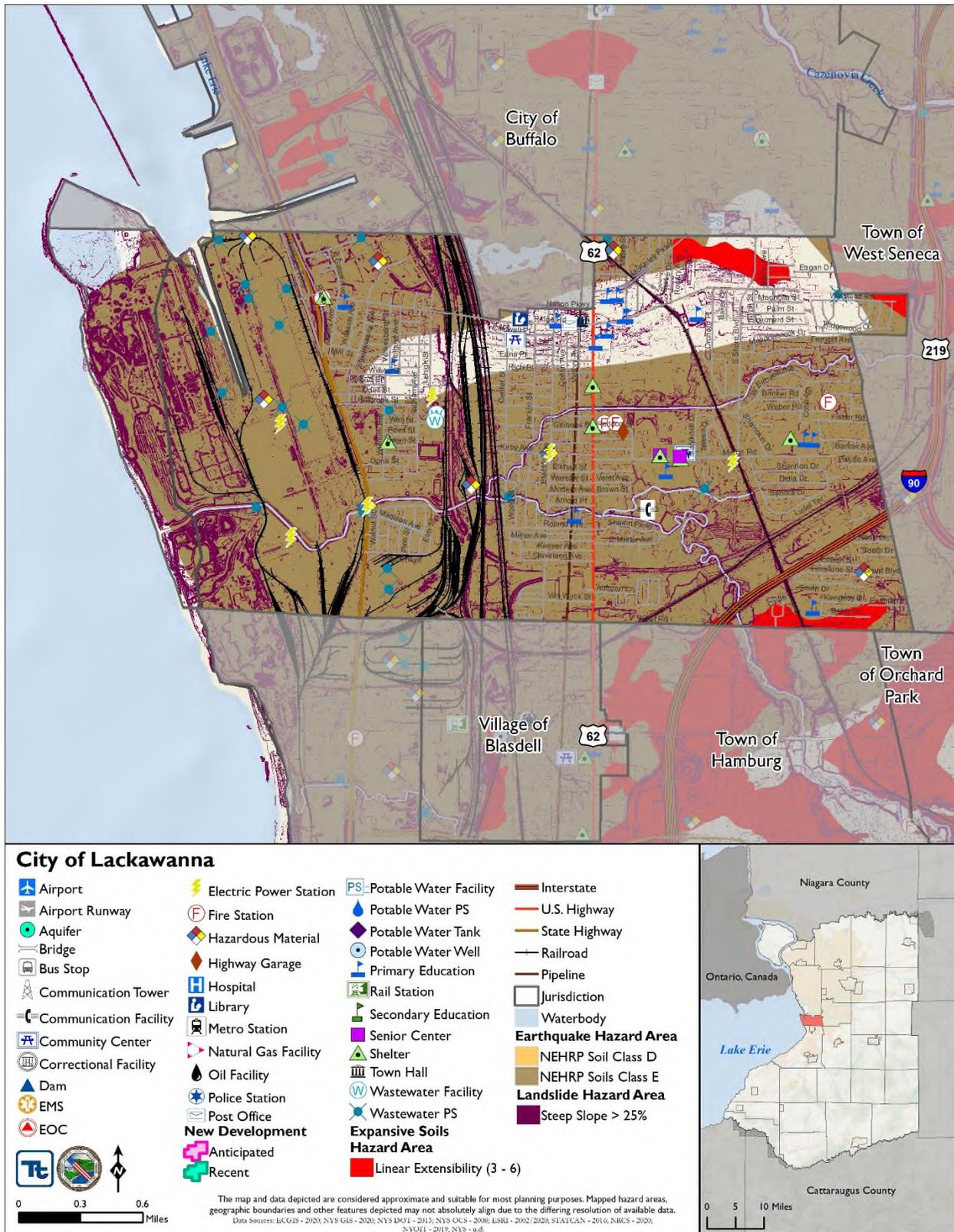
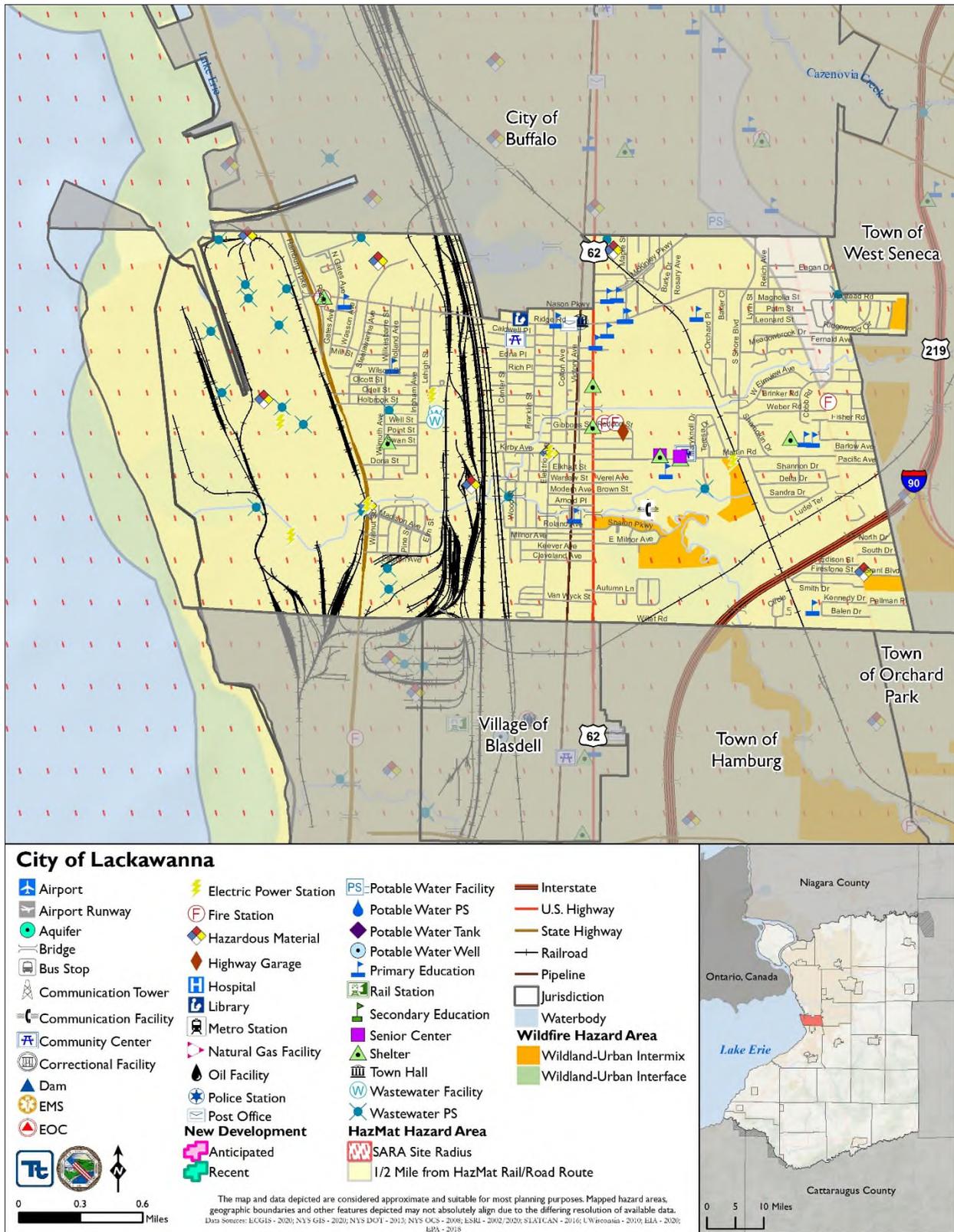




Figure 9.30-3. City of Lackawanna Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Lackawanna’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.30-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.30-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Overtime Costs
August 11-15, 2015	Flash Flood	No	Overtime Costs
October 28-29, 2015	High Wind	No	Overtime Costs
November 6, 2015	Thunderstorm Wind	No	Overtime Costs
November 12, 2015	High Wind	No	Overtime Costs
November 18, 2015	High Wind	No	Overtime Costs
January 11, 2017	High Wind	No	Overtime Costs
March 8, 2017	High Wind	No	Overtime Costs
March 13, 2017	Winter Storm	No	Overtime Costs
July 20, 2017	Tornado	No	Although the county was impacted, the city did not report damages
August 4, 2017	Thunderstorm Wind	No	Overtime Costs
December 10-15, 2017	Lake-effect Snow	No	Overtime Costs
December 24-29, 2017	Lake-effect Snow	No	Overtime Costs
January 2, 2018	Blizzard	No	Overtime Costs
October 6, 2018	Lightning	No	Overtime Costs
February 24, 2019	High Wind	No	Overtime Costs
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the city did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable



Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the City of Lackawanna’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Lackawanna. The City of Lackawanna has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the city did not provide feedback on the following risk rankings. The city noted the following:

- There has been a slight increase in the frequency of occurrence of Extreme Temperature and Extreme Wind Events in the city.
- Due to mitigation efforts, there has been a decrease in frequency and impacts of flood events in recent years.

Table 9.30-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).



The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.30-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Bethlehem Steel Station #212	Electric Power Station	X	X	2022-City of Lackawanna-001
Seal Street PS	Wastewater Pump Station	X	X	2022-City of Lackawanna-002
Wastewater Pump Station near Hamburg Turnpike (Unnamed)	Wastewater Pump Station	-	X	2022-City of Lackawanna-003
Wastewater Pump Station near Highway 5 (Unnamed)	Wastewater Pump Station	-	X	2022-City of Lackawanna-004
Wastewater Pump Station near Smoke Creek (Unnamed)	Wastewater Pump Station	X	X	2022-City of Lackawanna-005
Wilmuth Avenue PS	Wastewater Pump Station	-	X	2022-City of Lackawanna-006

Source: FEMA DFIRM



Identified Issues

After review of the City of Lackawanna’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Lackawanna has identified the following vulnerabilities within their community:

- Critical facilities located within the floodplain, wildfire hazard area, hazardous materials hazard area, and are vulnerable to utility failures.
- Several community centers, a communications facility, electric power stations, hazardous material facilities, private schools, and other critical facilities are in the city are in the earthquake hazard area.
- The current City Hall is suspended on steel columns showing signs of structural deterioration. If they further destabilize before replacement, City Hall operations will be disrupted, which will affect ability to coordinate any disaster response.
- Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge.
- There is a beaver dam off of Smoke Creek behind residences on Highview Circle, which results in flooding.
- The city does not have identified temporary or permanent housing locations.
- There are 164 homeowners living within the SFHA.

9.30.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.30-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Eliminate beaver population and break up dams when they are formed in the Cleveland and Electric Ave. area	Flooding	Not Identified	Engineering	Complete			<ol style="list-style-type: none"> Discontinue Completed
	Install stormwater receiver on property in question to prevent the flooding on residential property on Smith Dr.	Flooding	Repetitive Flooding	Engineering	Complete			<ol style="list-style-type: none"> Discontinue National Grid Resolved Problem
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering	Ongoing Capability			<ol style="list-style-type: none"> Discontinue Ongoing capability of the city to use updated FIRMS



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Lackawanna has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Lackawanna participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.30-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X				X			X	X
Cyber Attack	X	X				X			X	X
Earthquake	X	X		X		X	X		X	X
Expansive Soils	X	X				X			X	X
Extreme Temperature	X	X				X			X	X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X	X		X		X	X		X	X
Landslide	X	X				X			X	X
Pandemic	X	X				X			X	X
Severe Storm	X	X				X			X	X
Severe Winter Storm	X	X				X			X	X
Utility Failure	X	X				X			X	X
Wildfire	X	X		X		X	X		X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.30-19 summarizes the comprehensive range of specific mitigation initiatives the City of Lackawanna would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.30-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City of Lackawanna-001	Work with the Bethlehem Steel Station #212 owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	<p>Problem: The Bethlehem Steel Station #212 is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022- City of Lackawanna -002	Protect the Seal Street Pump Station to the 0.2% annual chance flood event	1, 2	Flood	<p>Problem: The Seal Street Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Seal Street Pump Station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the city will carry out the option.</p>	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- City of Lackawanna -003	Assess the flood risk at the Wastewater Pump Station near Hamburg Turnpike (Unnamed)	1, 2	Flood	Problem: The Wastewater Pump Station is in the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
				Solution: The FPA will contact the facility owner and assess the flood risk at the facility.										
2022- City of Lackawanna -004	Assess the flood risk at the Wastewater Pump Station near Highway 5 (Unnamed)	1, 2	Flood	Problem: The Wastewater Pump Station is in the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
				Solution: The FPA will contact the facility owner and assess the flood risk at the facility.										
2022- City of Lackawanna -005	Protect the Wastewater Pump Station near Smoke Creek (Unnamed) to the 0.2% annual chance flood event	1, 2	Flood	Problem: The Wastewater Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. Solution: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater pump station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				identified, the city will carry out the option.										
2022- City of Lackawanna -006	Assess the flood risk at the Wilmuth Avenue Pump Station	1, 2	Flood	<p>Problem: The Wastewater Pump Station is in the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and assess the flood risk at the facility.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022- City of Lackawanna -007	Work with the private building owners in the city to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	<p>Problem: Several community centers, a communications facility, electric power stations, hazardous material facilities, private schools, and other critical facilities are in the city are in the earthquake hazard area.</p> <p>Solution: The city will conduct outreach to facility owners to encourage the assessment of the structures to determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.</p>	Yes	None	Within 6 months for outreach	City of Lackawanna Administration	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	City Budget	High	EAP	PI
2022- City of Lackawanna -008	Work with the Electric Power Station No 713127 owner to protect the facility from wildfires	1, 2, 3	Wildfire	<p>Problem: The Electric Power Station No 713127 is located in the wildfire hazard area.</p> <p>Solution: The city will work with the facility owner to determine the risk from wildfires and identify possible property</p>	Yes	None	Within 6 months for outreach	Administration	<\$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the Electric Power Station from	City Budget	High	EAP	PI



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				maintenance actions that can help protect the facility.						potential wildfire damage				
2022- City of Lackawanna -009	Protect the critical facilities in the City of Lackawanna from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	<p>Problem: All of the critical facilities in the City of Lackawanna may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.</p>	Yes	None	Within 6 months for outreach	City of Lackawanna Public Safety	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	LPR	ES
2022- City of Lackawanna -010	City Hall Building Replacement	1, 2	All Hazards	<p>Problem: The current City Hall is suspended on steel columns showing signs of structural deterioration. If they further destabilize before replacement, City Hall operations will be disrupted, which will affect ability to coordinate any disaster response.</p> <p>Solution: The city will determine the feasibility to replace the City Hall building due to the structural instability of the front pillars. The city will implement cost-effective measures identified. Extreme weather conditions, such as severe snow storms, pose the most</p>	Yes	No	1 year	Engineering	High	High, ensures continuity of operations	Municipal Budget, BRIC	High	SIP	PP



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				common threat to the community and travelers. The new city hall can provide a warming station for stranded travelers or displaced residents.										
2022- City of Lackawanna -011	Bridge Upgrades	1, 2	Flood	<p>Problem: Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge.</p> <p>Solution: The city will seek funding for the following upgrades:</p> <ul style="list-style-type: none"> Warsaw Bridge – replace the bridge and raise the roadway and new bridge above the floodplain. Engineers are currently inspecting and conducting a structural review of sections of the Bridge with NYS DOT to determine level of disrepair and deterioration. The city will seek funding to perform a complete rehabilitation of the bridge. It currently is closed to vehicle traffic until repairs are complete. 	Yes	No	1 year	Engineering	High	High	FEMA BRIC, BRIDGE NY, Municipal Budget	High	SIP	PP



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<ul style="list-style-type: none"> Electric Ave Bridges – repair and replace the bridges crossing Smoke Creek McKinley Bridge – needs to be dismantled 										
2022- City of Lackawanna -012	Highview Circle Beaver Dam	1, 2	Flood	<p>Problem: There is a beaver dam off of Smoke Creek behind residences on Highview Circle, which results in flooding.</p> <p>Solution: The city will work to relocate/eliminate the beaver population in the area and break up dams when they are formed. The city will work with residents in the area to monitor the waterways for new beaver dams.</p>	No	Yes, permit may be necessary	1-2 years	Engineering	Medium	High, reduces flooding to homes	Municipal Budget, NYSDEP	High	NSP	NR
2022- City of Lackawanna -013	Temporary and Permanent Housing	1, 2	All Hazards	<p>Problem: The city does not have identified temporary or permanent housing locations.</p> <p>Solution: The city will work with Erie County to identify and designate locations for temporary and permanent housing, as well as assessing the capacity of the emergency shelter, and increasing this capacity or adding additional shelters as needed.</p>	No	None	6 months	Emergency Management	Low	High	City Budget	High	LPR	ES
2022- City of	RL Property Outreach	1, 2, 3	Flood	<p>Problem: There are 164 homeowners living within the SFHA.</p>	No	None	6 months	Floodplain Administrator	Low	High	City Budget	High	EAP	PI



Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Lackawanna-014				Solution: The city will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the city will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain





Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.30-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City of Lackawanna-001	Work with the Bethlehem Steel Station #212 owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -002	Protect the Seal Street Pump Station to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -003	Assess the flood risk at the Wastewater Pump Station near Hamburg Turnpike (Unnamed)	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -004	Assess the flood risk at the Wastewater Pump Station near Highway 5 (Unnamed)	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -005	Protect the Wastewater Pump Station near Smoke Creek (Unnamed) to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -006	Assess the flood risk at the Wilmuth Avenue Pump Station	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -007	Work with the private building owners in the city to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High



Table 9.30-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	protect them from earthquakes																
2022- City of Lackawanna -008	Work with the Electric Power Station No 713127 owner to protect the facility from wildfires	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -009	Protect the critical facilities in the City of Lackawanna from HazMat incidents	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -010	City Hall Building Replacement	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022- City of Lackawanna -011	Bridge Upgrades	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -012	Highview Circle Beaver Dam	1	1	1	1	1	1	-1	0	1	1	0	1	1	1	10	High
2022- City of Lackawanna -013	Temporary and Permanent Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022- City of Lackawanna -014	RL Property Outreach	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.30.9 Action Worksheets

The following action worksheets have been developed by the City of Lackawanna to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	City Hall Building Replacement		
Project Number:	2022- City of Lackawanna -010		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Current City Hall is suspended on Steel columns showing signs of structural deterioration. If they further destabilize before replacement City Hall operations will be disrupted, which will affect ability to coordinate any disaster response.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will determine the feasibility to replace the City Hall building due to the structural instability of the front pillars.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures continuity of operations
Useful Life:	50 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Municipal Budget, BRIC
Responsible Organization:	Engineering	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Replace steel columns	\$500,000	Possibility to deteriorate in future and problem re-occurs
	Relocate City Hall	N/A	No available land
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	City Hall Building Replacement	
Project Number:	2022- City of Lackawanna -010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevents building collapse
Property Protection	1	Protects critical facility
Cost-Effectiveness	1	
Technical	1	
Political	1	City supports
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Bridge Upgrades		
Project Number:	2022- City of Lackawanna -011		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The city will seek funding for the following upgrades:</p> <ul style="list-style-type: none"> Warsaw Bridge – replace the bridge and raise the roadway and new bridge above the floodplain. Engineers are currently inspecting and conducting a structural review of sections of the Bridge with NYS DOT to determine level of disrepair and deterioration. The city will seek funding to perform a complete rehabilitation of the bridge. It currently is closed to vehicle traffic until repairs are complete. Electric Ave Bridges – repair and replace the bridges crossing Smoke Creek McKinley Bridge – needs to be dismantled 		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	High
Useful Life:	50 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA BRIC, BRIDGE NY, Municipal Budget
Responsible Organization:	Engineering	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	\$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Bridge Upgrades	
Project Number:	2022- City of Lackawanna -011	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Ensures function of essential roadways
Cost-Effectiveness	1	Will seek best solutions based on BCA
Technical	1	DPW can implement
Political	1	City supports
Legal	1	
Fiscal	-1	
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	Flood is main issue
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



9.31 Town of Lancaster

This section presents the jurisdictional annex for the Town of Lancaster. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Lancaster’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.31.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Lancaster’s hazard mitigation plan primary and alternate points of contact. The Town of Lancaster followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Disaster Coordinator, Supervisor, and Code Enforcement Officer. The Disaster Coordinator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.31-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ronald Rozler, Disaster Coordinator Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 684-1232 Email: rozler@lancasterny.gov	Name/Title: Ronald Ruffino Sr, Supervisor Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 683-1610 Email: rruffino@lancasterny.gov
NFIP Floodplain Administrator	
Name/Title: Matt Fischione, Code Enforcement Officer Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 684-4171 Email: mfischione@lancasterny.gov	

9.31.2 Municipal Profile

The Town of Lancaster is in the north central portion of Erie County. The town is bounded by the Town of Clarence to the north, the Town of Elma to the south, the Town of Alden to the east, and the Town of Cheektowaga to the west. The town contains both the Village of Lancaster and the Village of Depew. The town is located approximately 11 miles east of downtown Buffalo and is 37 square miles in size. Cayuga Creek and Ellicott Creek run through the town.

The Town of Lancaster was first settled by members of the Erie Indian tribe and later by the Seneca Indians. In the early 1800s, white settlers displaced the Seneca. The town was originally called Cayuga Creek when it was formed from a part of the original Town of Clarence, the town incorporated in 1833 and then in 1857, the town’s southern half was taken to form the Town of Elma. An important part of Lancaster’s history has included





immigration from different nations. German and Dutch and later eastern Europe and Italy immigrants arrived in waves over the years. Five major railroads were developed in the town during the 19th and 20th centuries. The town's first schoolhouse was constructed in 1868 and the town continued to experience rapid growth. Most residents were farmers and most of the land was cleared for farming. Twelve buildings in the town are on the National Register of Historic Places.

During the Second World War, war materials were produced in the town. By 1950, Lancaster's population reached 18,471; with most development situated in the two Villages of Lancaster and Depew. The 1960 census showed a population of 25,605. In the 1980s, the population growth slowed. For several decades Lancaster has served as a bedroom community of Buffalo. Lancaster High School is Erie County's largest school in both student population and square footage. The New York State Thruway, US Route 20 and NYS 33 and 78 pass through the town. (Town of Lancaster 2020)

According to the U.S. Census, the 2010 population for the Town of Lancaster was 25,865. The estimated 2019 population was 27,625, a 6.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 17.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.31.3 Jurisdictional Capability Assessment and Integration

The Town of Lancaster performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.31.3). The Town of Lancaster's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Lancaster. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.31-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Adopted 7-16-1984 by Local Law Number 1-1984. Chapter 140 – Uniform Construction Code.	Local	Building Department / Code Enforcement Officer
<p>Comment: <i>The following is meant to provide information on the intent of the building permits: The building permits are required for bonfires and burning of rubbish; and storage of underground tanks, explosives, cryogenic liquids.</i></p> <p><i>The Building Inspector may address dangerous or unsafe buildings or structures pursuant to the code and the terms of this article.</i></p> <p><i>Whenever the Fire Inspector finds a building or structure, or part thereof, to be an imminent danger to life and safety of the public as a result of a fire or explosion, the Fire Inspector shall report the same to the Building Inspector, and the Building Inspector may cause it to be demolished and removed or may cause work to be done in and about the building or structure as may be necessary to remove the danger.</i></p>					
Zoning Code	Yes	No	Adopted by the Town Board of the Town of Lancaster 11-16-2020 by Local Law Number 1-2020. Chapter 400, Zoning.	Local	Planning Board
<p>Comment: <i>The purpose and intent of this Zoning Law is to provide for the orderly growth of the Town and to promote and protect to the fullest extent permissible the environment of the Town and the public health, safety, convenience, comfort, prosperity and general welfare of its residents by regulating the use of buildings, other structures and land for residences, open space, public facilities, business, services, industry or other purposes; by regulating and restricting the bulk, height, design, lot coverage and location of structures, by regulating and limiting population density; and, for the aforesaid purposes, to divide the land within the limits of the Town into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan; and to provide procedures for the administration and amendment of said Zoning Law.</i></p> <p><i>The town has an environmental resource protection overlay district (ERPOD). The purpose of this district is to provide special controls for development in significant sensitive environmental areas within the Town of Lancaster, as determined by the Town Board. These regulations are superimposed over general zoning district provisions and should be considered as additional requirements to be met by the applicant or developer prior to project approval. These regulations are in addition to the requirements for floodplain development contained in Town Code, Chapter 182, Flood Damage Prevention, as well as any wetlands regulations and permit requirements promulgated by the federal or state government. There are four ERPODs – wetlands, watercourses, steep slopes, and woodlots. Any proposed development in these districts need to be reviewed by the Planning Board as part of the subdivision or site review process.</i></p>					
Subdivision Ordinance	Yes	No	Chapter 400-38 - Subdivision.	Local	Planning Board
<p>Comment: <i>These regulations for the subdivision of land were enacted to provide for the orderly growth and coordinated development of the Town of Lancaster (the "Town") and its subdivisions, to ensure the comfort, convenience, safety, health, and welfare of Town residents. Any proposed subdivisions must be approved by the Planning Board.</i></p>					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 300 - Stormwater Management and Erosion and Sediment Control.	Local	Stormwater Management Officer
<p>Comment: <i>The purpose of this chapter and Chapter 400, Article XIII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 300-1 hereof. This chapter and Chapter 400, Article XIII, seeks to meet those purposes by achieving the following objectives:</i></p> <p><i>A. Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;</i></p> <p><i>B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;</i></p> <p><i>C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;</i></p> <p><i>D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;</i></p> <p><i>E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</i></p> <p><i>F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.</i></p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: <i>Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	No	-	-	-
<p>Comment:</p>					
Site Plan Review	Yes	Yes	Chapter 400-75 Article XIV Administration and Enforcement.	Local	Planning Board
<p>Comment: <i>The intent of site plan review is to evaluate specified land uses in terms of their suitability to natural site conditions, their compatibility with surrounding land uses and their conformance with overall plans for the community, thus minimizing possible adverse effects on the health, safety and welfare of local residents.</i></p>					
Environmental Protection Ordinance	Yes	Yes	400 -26, Environmental Protection Overlay District.	Local	Planning Board
<p>Comment: <i>The purpose of this section is to provide special controls for development in significant sensitive environmental areas within the Town of Lancaster, as determined by the Town Board. These regulations are superimposed over general zoning district provisions and should be considered as additional requirements to be met by the applicant or developer prior to project approval. These regulations are in addition to the requirements for floodplain development contained in Town Code, Chapter 182, Flood Damage Prevention, as well as any wetlands regulations and permit requirements promulgated by the federal or state government.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 182 – Flood Damage Prevention	Local	Building Inspector
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i> <i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.</i> <i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.</i> <i>C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.</i> <i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages.</i> <i>E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.</i> <i>F. Qualify for and maintain participation in the National Flood Insurance Program.</i></p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 300 Stormwater Management and Erosion and Sediment Control	Local	Stormwater Management Officer
<p>Comment: <i>The purpose of this chapter and Chapter 400, Article XIII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 300-1 hereof. This chapter and Chapter 400, Article XIII, seeks to meet those purposes by achieving the following objectives:</i> <i>A. Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;</i> <i>B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;</i> <i>C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;</i> <i>D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;</i> <i>E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</i> <i>F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	Yes	Yes	Chapter 70 – Alarm Systems. Adopted by the Town Board of the Town of Lancaster 5-6-2013	Local	Town Board
Comment: <i>It is the intent of this chapter to protect and promote the health, safety and general welfare of the residents of the Town of Lancaster by reducing the number of avoidable alarms of fire, intrusion, holdup or other emergencies which contribute to ineffective utilization of police, fire and medical emergency agencies; and which require emergency responses which are susceptible to high accident rates, interfere with genuine emergencies (responses) and produce unnecessary alarm noise to the surrounding community.</i>					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster Comprehensive Plan Adopted February 2018	Local	Planning Board
Comment: <i>The goals and intent of the comprehensive plan include the following: 1) Prioritize a list of critical open spaces to preserve the Town's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements. 2) Allow conservation development in the Town code. 3) The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features. 4) The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities. 5) Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities. 6) Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought. 7) Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters. 8) Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects. 9) The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.</i>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Stormwater Management Plan - May 2018.	Local	Stormwater Management Officer
Comment: <i>The intent of the plan include the following: 1) Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions. 2) Develop a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most current technical standards. 3) Develop a law, ordinance or other regulatory mechanism to require post-construction runoff</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<i>controls from new development and redevelopment projects to the extent allowable under State law that meet the State's most current technical standards.</i>					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No/ NA	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2020 – Town of Lancaster Emergency Management	Local	Town OEM
Comment: <i>The intent and goals of the department and plan include the following:</i> <ul style="list-style-type: none"> • Provide comprehensive guidance on hazard mitigation initiatives within the municipality. • Outline the various roles and intent of the departments during a hazard event. • Provide the community to conduct strategic planning to reduce exposure to hazards and mitigate risk. 					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Lancaster to oversee and track development.

Table 9.31-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department – before any person erects, constructs, alters, moves, demolishes or commences to erect, constructs, alters, moves or demolishes any building or structure in the town or village, a building permit must be applied for and approved by the Building Inspector.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Yes
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town is relatively built out and is suburban in characteristic.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Lancaster and their current responsibilities which contribute to hazard mitigation.



Table 9.31-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Town of Lancaster Planning Board reviews all development projects which take place in the Town and makes recommendations to the Town Board based on its findings. The Planning Board may also generate or review proposed ordinances that may become part of Town law and make the appropriate recommendations to the Town Board. Public Hearings for proposed subdivisions will be held before the Planning Board. The Planning Board is therefore seen as a referral and advisory body.
Zoning Board of Adjustments	Yes	The Town Clerk attends all meetings of the Zoning Board of Appeals and must keep a complete and accurate record of all official actions of the Zoning Board.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Town of Lancaster Highway Department performs year-round maintenance on 154 lane miles of Town roads. The Highway Department is under contract with Erie County for 16 miles of County roads in the Town of Lancaster for snow and ice removal. Listed below are the services provided by the Highway Department.</p> <ul style="list-style-type: none"> • Brush Pick up • Carcass Removal • Ditch Clean Up • Leaf Pick up • Paving and Pot Hole Repair (Town roads only) • Snow Plowing/Snow Removal • Roadside culvert pipe installation • Road Sweeping • Drainage • County/State Road List
Construction/Building/Code Enforcement Department	Yes	The main function of the Building Department is to issue and inspect issued building permits for the Town and Village of Lancaster. The department enforces the IBC, fire codes, local zoning codes, and federal floodplains. The department also receives resident complaints with regard to building and zoning issues.
Emergency Management/Public Safety Department	Yes	<p>The main functions of emergency management include:</p> <ul style="list-style-type: none"> • Support all Emergency Services organizations in the Town. • Provides Public Education to residents – FEMA Emergency Preparedness classes. • Emergency Operations Center used during large incidents and State of Emergency. • Table-top training area available for all departments to run scenarios. • Performs emergency planning for the Town. • Available for mutual aid to surrounding communities.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED - The secure, customized Community Notification Enrollment (CNE) page allows residents and businesses to add or update their contact information to ensure they will be included when a message is sent – unlisted numbers, mobile numbers, TDD/TTY requirements can all be entered.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Fire
Other		-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineering
Planners or engineers with an understanding of natural hazards	Yes	Town Engineering
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector
Surveyor(s)	No	-
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Lancaster.

Table 9.31-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	None



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Lancaster.

Table 9.31-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk
Personnel skilled or trained in website development	Yes	Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	The town uses CodeRED to issue emergency warnings and notifications to residents.
Natural disaster/safety programs in place for schools	No	-
Other	None	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Lancaster.

Table 9.31-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,



future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.31-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong – NA
Cyber Attack	Moderate
Earthquake	Strong – NA
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Strong
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.31.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Matt Fischione, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Lancaster.

Table 9.31-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Lancaster	74	52	\$366,231	10	41

Source: FEMA 2020a, FEMA 2020b
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

There are various areas within the municipality that flood and are addressed in the mitigation actions. Currently there is no inventory of properties damaged by flooding. The town does not have a list of property owners interested in flood mitigation as mitigation is not a topic of interest to residents or business owners outside of avoiding Flood Insurance requirements. There are no RiskMAP projects underway. The town makes substantial damage determinations through visual inspections conducted by the building inspector. Currently there is no inventory of damaged properties from flood events as historically this has not been a significant concern in the municipality. Thus, there are been no property mitigation projects in recent years. The only project that was related to flood mitigation was Stony Road Bridge replacement conducted by Erie County Highway Department. Current flood maps adequately address existing areas of concern in the municipality.



NFIP Compliance

The Town of Lancaster Building Department is responsible for floodplain management and has certified floodplain managers on staff. The department has adequate resources to address flood concern from climate change. The department is currently seeking public outreach and planning board training opportunities regarding floodplain management. The department capabilities include floodplain permit review and enforcement of the NFIP program. Substantial improvement is determined if the property is new construction or substantial value in terms of repair and replacement with consideration to the overall property value. Current property owners and funding is lacking. The most recent Community Assistance Visit (CAV) was on October 6, 2016. The local law number for FDPO is Town Code, Chapter 182 (Flood Damage Prevention) May 6, 2019 and the existing program meets minimum standards. Other programs, ordinances, and plans that support floodplain management includes the Planning Board. The town is not interested in joining the CRS program, though there are preliminary discussions occurring regarding the program.

9.31.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Lancaster has identified the following routes and procedures to evacuate residents prior to and during an event.

- East and West Evacuation: Broadway, Walden Avenue, and Green Street
- North and South: Transit Road, Central Avenue, Bowen Road, Pavement Road, and Town Line Road.

Sheltering

The Town of Lancaster has identified the following designated emergency shelters within the town.

Table 9.31-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	No	Yes	Yes	Immediate Care	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Lancaster has identified the following sites suitable for placing temporary housing units.

Table 9.31-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	Lot	All	Unknown



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Lancaster has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.31-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unknown	Park	All	Will need to work with County/ State to clarify town's needs

9.31.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.31-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.31-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	149	0	106	0	76	0	80	0	82	0	107	0
Multi-Family	19	0	23	0	2	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	5	0	13	0	6	0	8	0	9	0	6	0
Total Permits Issued	173	0	142	0	84	0	88		91	0	114	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Hidden Meadows	Residential	88		Aurora St		SFHA, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area		Half developed				
Pleasant Meadows	Residential	89		Pleasant View Dr		SFHA, Wildland-Urban Intermix Hazard Area		Completed				
Summerfield Farms Ph 6,7 &8	Residential	152		William St		NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area		Final phase completion				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												



Windsor Ridge South	Residential	200	127.01-3-22	1-percent Annual Chance Flood Event Hazard Area, 0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
Windsor Ridge South	Residential	200	127.01-2-21	Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
185 Siebert/CMK	Residential	20	127.01-1-35.1	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
Stutzman Rd. Subdivision	Residential	20	93.10-1-5.2	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Pos Dec/Draft EIS

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.31.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Lancaster’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Lancaster has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.31-1. Town of Lancaster Hazard Area Extent and Location Map 1

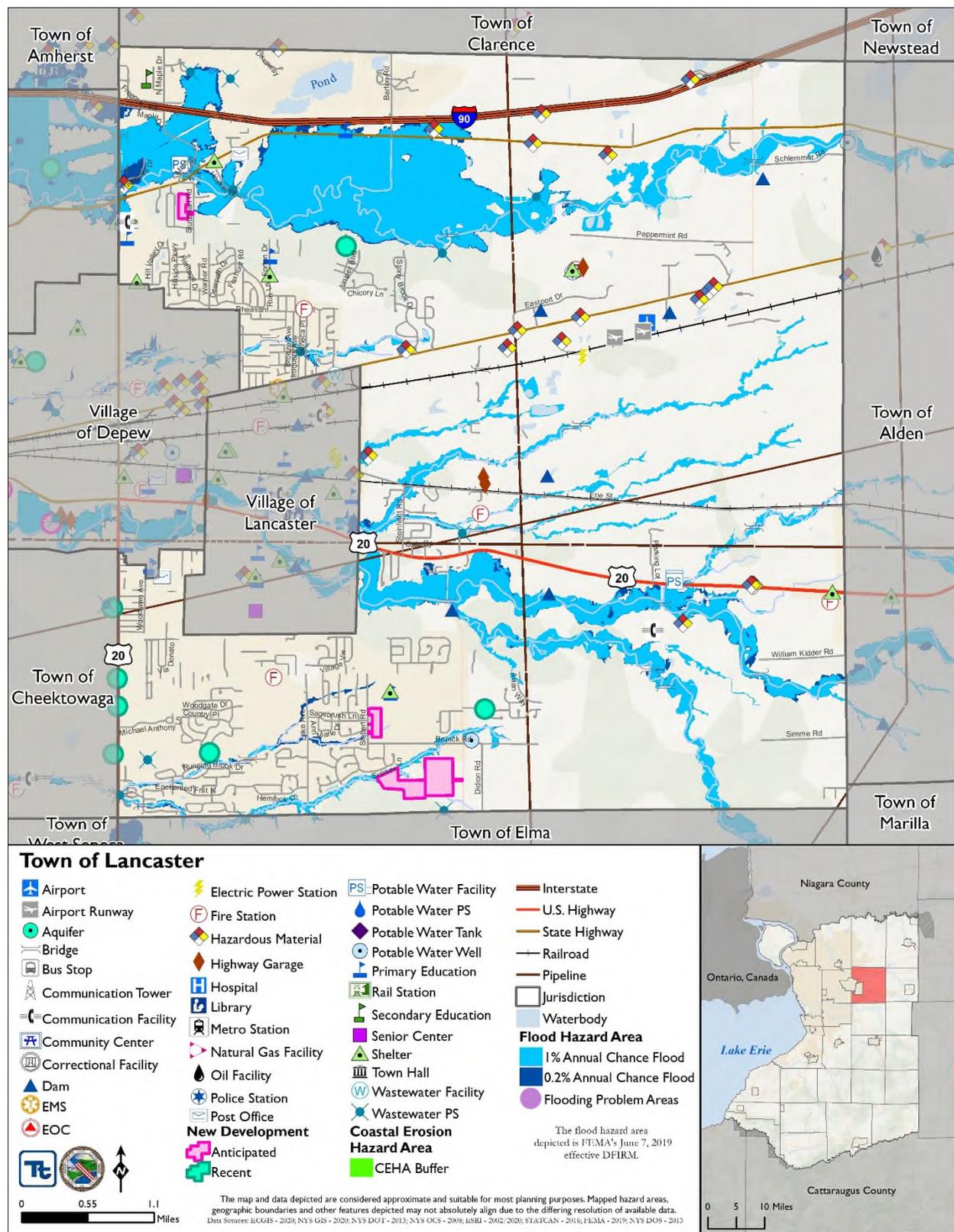




Figure 9.31-2. Town of Lancaster Hazard Area Extent and Location Map 2

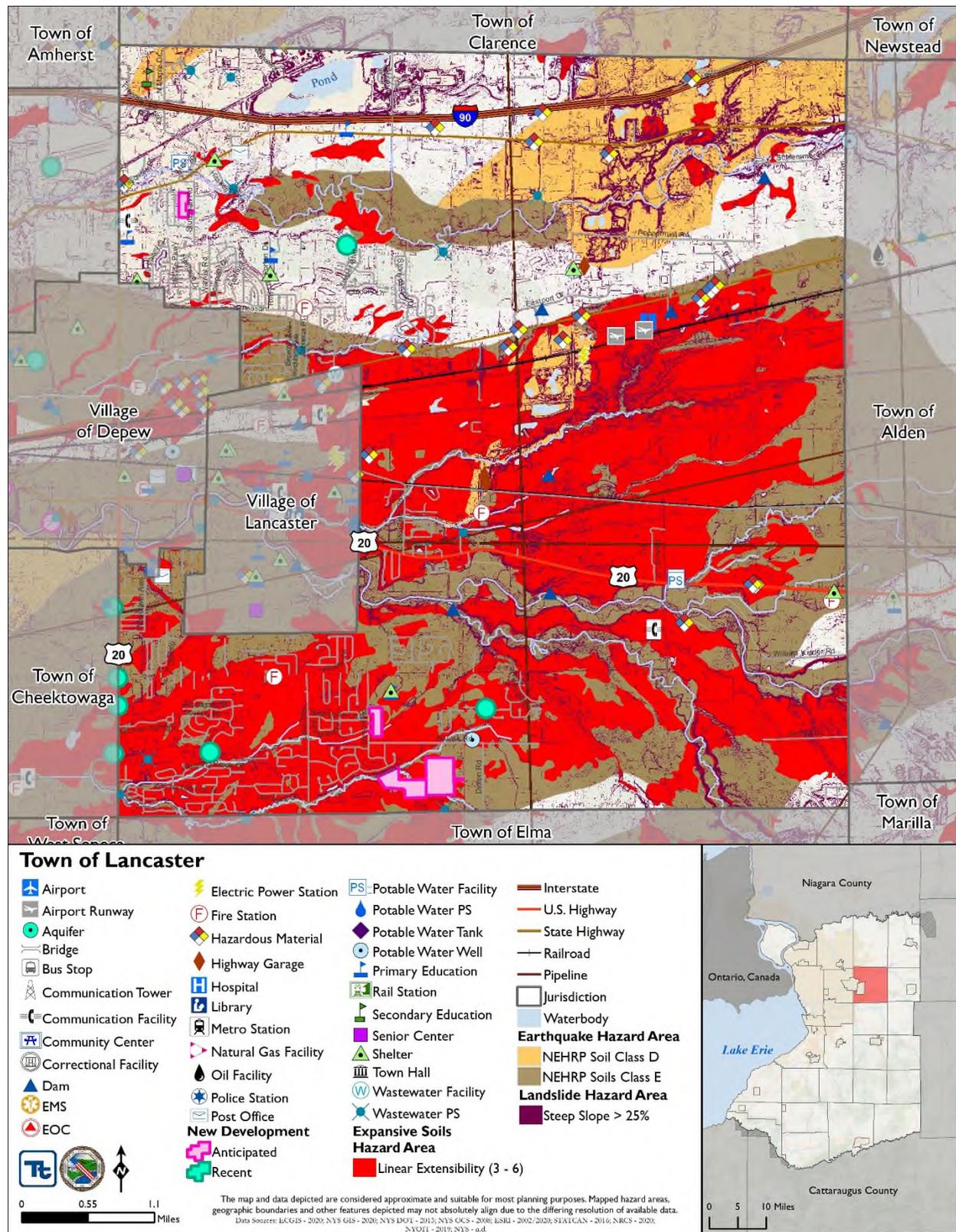
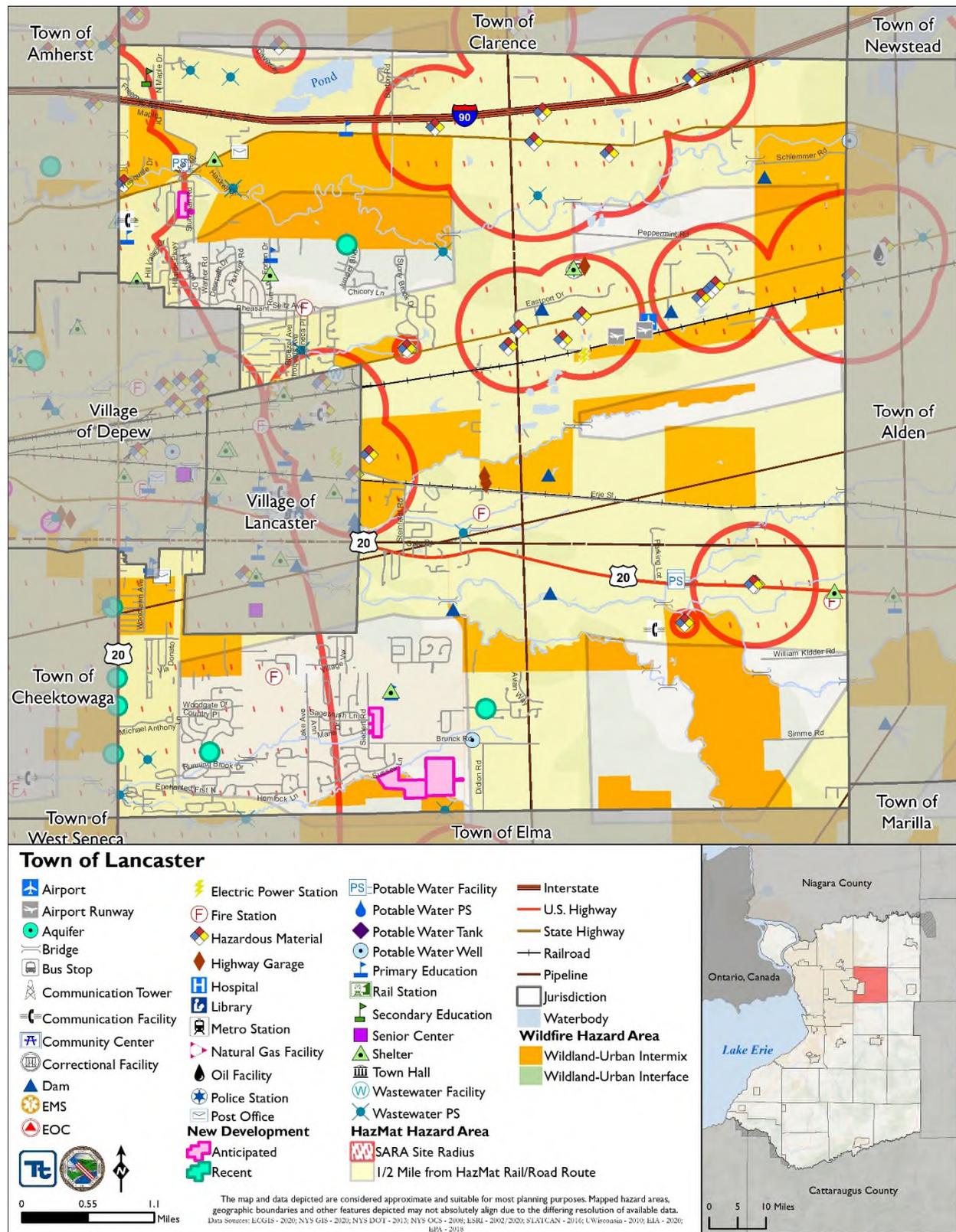




Figure 9.31-3. Town of Lancaster Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Lancaster’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.31-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.31-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	While this event impacted Erie County, the town did not identify losses or damages.
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	While this event impacted Erie County, the town did not identify losses or damages.
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	While this event impacted Erie County, the town did not identify losses or damages.
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	While this event impacted Erie County, the town did not identify losses or damages.
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara	While this event impacted Erie County, the town did not identify losses or damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	While this event impacted Erie County, the town did not identify losses or damages.
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several homes and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	While this event impacted Erie County, the town did not identify losses or damages.
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	While this event impacted Erie County, the town did not identify losses or damages.
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	While this event impacted Erie County, the town did not identify losses or damages.
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	While this event impacted Erie County, the town did not identify losses or damages.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In	While this event impacted Erie County, the town did not identify losses or damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	While this event impacted Erie County, the town did not identify losses or damages.
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	While this event impacted Erie County, the town did not identify losses or damages.
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	While this event impacted Erie County, the town did not identify losses or damages.
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	While this event impacted Erie County, the town did not identify losses or damages.
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	While this event impacted Erie County, the town did not identify losses or damages.
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	While this event impacted Erie County, the town did not identify losses or damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	While this event impacted Erie County, the town did not identify losses or damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	While this event impacted Erie County, the town did not identify losses or damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3–5-hour period in the cold advection behind the cold front.	While this event impacted Erie County, the town did not identify losses or damages.
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	While this event impacted Erie County, the town did not identify losses or damages.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	While this event impacted Erie County, the town did not identify losses or damages.
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Lancaster’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future





climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Lancaster. The Town of Lancaster has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town did not provide any feedback on the following hazard rankings.

- Earthquakes are not a significant hazard in the town and thus will be re-ranked from a high to a medium.
- While expansive soils might be present in the town, the municipality has been working to mitigate this hazard and thus has expanded capacity and will re-ranked this from a high to medium.
- Flooding has caused significant damage to the community and will be re-ranked from a low to high.
- Hazardous material has posed numerous threats to the community with heavy thru traffic and will be re-ranked from low to medium.
- Wildfires have previously posed threat to the community and will be re-ranked from low to medium.

Table 9.31-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	High	Medium
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.31-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Lancaster Country Club Dam	Dam	X	X	2022-Town of Lancaster-001
Bowmansville Fire Station	Fire Station	X	X	2022-Town of Lancaster-002
Main St Potable Water Facility	Potable Water Facility	X	X	2022-Town of Lancaster-003
Bowmansville #3 Pump Station	Wastewater Pump Station	X	X	2022-Town of Lancaster-004

Source: GIS 2020

Identified Issues

After review of the Town of Lancaster’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Lancaster has identified the following vulnerabilities within their community:

- The Lancaster Country Club Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Bowmansville Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Main Street Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Bowmansville #3 Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Lancaster Airport, dams, hazardous material facilities, private schools, and the Trocaire College are located in the earthquake hazard area.
- There are several private critical facilities in the town that are located in the wildfire hazard area.
- Several of the critical facilities in the Town of Lancaster may be at risk of being exposed to hazardous materials incidents.
- Ansel Morris Pond Dam, Dolatowski Pond Dam, Lancaster Country Club Dam, Lynn Wanamaker Pond Dam Tops Markets Distribution Center, and United Silicone Inc are located on steep slopes and at risk of landslides.
- There are several communication facilities, dams, and Hazardous Material facilities located on expansive soils and may be at risk of experiencing damages caused by expansive soils.
- The channel of Ellicott Creek Corridor has been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.
- The channel of Slate Bottom Creek and Plum Bottom Creek have been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.
- The Town of Lancaster has two landfills within the jurisdiction as well as rail lines and major routes like Interstate 90 that often have vehicles that contain/ carry hazardous waste. Naturally, the town is



vulnerable to the potential failure of these various entities due to severe storm, severe winter storm, earthquake/ ground failure, flooding, and other natural hazards. While for most municipalities, these events would only bring minor property damage to the community, for the Town of Lancaster, any of these events that have the ability to cause property damage/ vehicular accidents, could lead to catastrophic scenarios where the entire town would need to evacuate due to hazardous waste spillage facility failure, and thus causing temporary or even permanent contamination and damage to the entire community.

- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.31.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.31-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
1	Road repair/ culvert reconstruction – various locations County-wide	Flooding	Not Identified	Town Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Debris Removal from Creeks & Streams – various locations County-wide	Flooding	Not Identified	Town Highway	Ongoing Capability	Cost	-	1. Discontinue 2. Ongoing 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	NOAA Storm Watcher and Storm Ready Programs	Natural events	Not Identified	Emergency Services	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Tree removal & trimming along various County roads to prevent power outages and road closures.	Severe storms, tornadoes, winter storms, high winds, ice storms	Not Identified	Town Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Replace & upgrade storm drainage system along various County roads to reduce flood risks.	Flooding	Property Damage	Town Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
6	Inter-operable table radio communications improvements to all Town	All Hazards	Not Identified	Emergency Management	Complete	Cost	-	1. Discontinue 2.
						Level of Protection	-	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	agencies and Department radio systems to have the availability to communicate with each other					Damages Avoided; Evidence of Success	-	3. All Fire, EMS & Police have the ability to communicate with each other
7	Reduce damage to roads and private property by cleaning all small streams and creeks; Cleaning of large creeks must start downstream through several jurisdictions to be effective	Flood	Flood damage to roads and private property	Town Engineering	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
8	Buy out homes and effected business in the flood plain resulting in the demolition of homes	Flood	Protect 80-100 families and 50-75 employees from repetitive flooding	Federal Government	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
9	Mitigation of Bowmansville Vol. Fire house by building approx. 700' long x 5' high berm around sides and rear, evacuate and fill-in basement	Flood	Critical facility at 36 Main St, Bowmansville, NY 14026	Bowmansville Vol. Fire Association	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
10	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Building & Code Enforcement	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
11	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building & Code Enforcement	Ongoing Capability	Level of Protection	-	1. Discontinue 2. 3. Ongoing
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Lancaster has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The town continues to maintain and upgrade existing stormwater and road infrastructure to reduce threat to flooding.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Lancaster participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.31-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils				X			X			
Extreme Temperature										
Flood		X	X	X		X	X	X		X
Hazardous Materials		X		X			X			X
Landslide				X			X			
Pandemic										
Severe Storm		X	X					X		X
Severe Winter Storm		X	X					X		X
Utility Failure		X								X
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.31-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Lancaster would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.31-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Lancaster-001	Lancaster Country Club Dam Flood Prevention	1,2	Flood	<p>Problem: The Lancaster Country Club Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of Lancaster-002	Protect the Bowmansville Fire Station to the 0.2% annual chance flood event	1,2	Flood	<p>Problem: The Bowmansville Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Bowmansville Fire Station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMGP	High	EAP	PI
2022-Town of Lancaster-003	Protect the Main Street Potable Water Facility to the 0.2% annual	1,2	Flood	<p>Problem: The Main Street Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p>	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant	High	EAP	PI



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	chance flood event			<p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>							Program, EMPG			
2022-Town of Lancaster-004	Protect the Bowmansville #3 Pump Station to the 0.2% annual chance flood event	1,2	Flood	<p>Problem: The Bowmansville #3 Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what floodproofing measures are needed at the pump station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-Town of	Earthquake Structural Assessment	All	Earthquake	<p>Problem: The Lancaster Airport, dams, hazardous material facilities, private</p>	Yes	None	Within 6 months for outreach	FPA, Engineer, facility manager	<\$100 for outreach, TBD by	The facility owners are aware of	Town Budget	High	EAP	PI



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Lancaster-005				schools, and the Trocaire College are located in the earthquake hazard area. Solution: Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes. Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes					engineering study	options to protect the facilities facility from potential earthquake damage				
2022-Town of Lancaster-006	Work with the private facility owners to protect the facilities from wildfires	All	Wildfire	Problem: There are several private critical facilities in the town that are located in the wildfire hazard area. Solution: Work with facility owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities.	Yes	None	Within 6 months for outreach	FPA, Engineer, facility manager	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Lancaster-007	Protect the critical facilities on the Town of Lancaster from HazMat incidents	All	Hazardous Materials Incidents	Problem: Several of the critical facilities in the Town of Lancaster may be at risk of being exposed to hazardous materials incidents. Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Lancaster-008	Work with private facility owners to protect the facilities from landslides	All	Landslide	<p>Problem: Ansel Morris Pond Dam, Dolatowski Pond Dam, Lancaster Country Club Dam, Lynn Wanamaker Pond Dam Tops Markets Distribution Center, and United Silicone Inc are located on steep slopes and at risk of landslides.</p> <p>Solution: Work with private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI
2022-Town of Lancaster-009	Work with private facility owners to protect the facilities from expansive soils	All	Expansive Soils	<p>Problem: There are several communication facilities, dams, and Hazardous Material facilities located on expansive soils and may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: Work with the facility owners to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.</p>	Yes	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022-Town of Lancaster-010	Ellicott Creek Bank Stabilization	1,2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The channel of Ellicott Creek Corridor has been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation</p>	No	No	3 years	Town Highway	\$1 million	Flood Mitigation	HMGP, BRIC	High	NSP	NR





Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.</p> <p>Solution: The town will conduct a comprehensive assessment of the banks of the creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town will work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.</p>										
2022-Town of Lancaster-011	Slate Bottom and Plum Bottom Creek Bank Stabilization	1,2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The channel of Slate Bottom Creek and Plum Bottom Creek have been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks.</p> <p>Solution: The town will conduct a comprehensive assessment of the banks of the</p>	No	No	3 years	Town Highway	\$1 million	Flood Mitigation	HMGP, BRIC	High	NSP	NR



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town will work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.										
2022-Town of Lancaster-012	HazMat Accident Preparation due to severe storms	1,2,4	Severe Storm, Severe Winter Storm, Flood, Hazardous Waste, Utility Failure	Problem: The Town of Lancaster has two landfills within the jurisdiction as well as rail lines and major routes like Interstate 90 that often have vehicles that contain/carry hazardous waste. Naturally, the town is vulnerable to the potential failure of these various entities due to severe storm, severe winter storm, earthquake/ground failure, flooding, and other natural hazards. While for most municipalities, these events would only bring minor property damage to the community, for the Town of Lancaster, any of these events that have the ability to cause	Yes ♦	Yes	3 years	Town OEM, Highway, and County	High	Mitigation of permanent environmental damage	USDOT Hazardous Material Grant Program (HMEP, ALERT, HMIT, SPST, and CS); NYS Hazardous Materials Emergency Planning Grant (HMEP); HMGP	High	SIP, LPR	ES, PR



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>property damage/ vehicular accidents, could lead to catastrophic scenarios where the entire town would need to evacuate due to hazardous waste spillage facility failure, and thus causing temporary or even permanent contamination and damage to the entire community.</p> <p>Solution: The town will increase the overall capacity of existing emergency services as well as HazMat needs. The town will also consider developing proper emergency evacuation procedures for community members when a hazardous waste accident does occur at these specific routes/sites. And finally, the town would also need to install a warning system that can facilitate the emergency response when a hazardous waste accident does occur during a storm.</p>										
2022-Town of Lancaster-013	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and</p>	No	No	Within 3 years	FPA, Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	EAP	PI



Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood - prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- Town Highway Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain





Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.31-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Lancaster-001	Lancaster Country Club Dam Flood Prevention	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-002	Protect the Bowmansville Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-003	Protect the Main Street Potable Water Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-004	Protect the Bowmansville #3 Pump Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-005	Earthquake Structural Assessment	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-006	Work with the private facility owners to protect the facilities from wildfires	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-007	Protect the critical facilities on the Town of Lancaster from HazMat incidents	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-008	Work with private facility owners to protect the facilities from landslides	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-009	Work with private facility owners to protect the facilities from expansive soils	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-010	Ellicott Creek Bank Stabilization	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Lancaster-011	Slate Bottom and Plum Bottom Creek Bank Stabilization	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High



Table 9.31-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Lancaster-012	HazMat Accident Preparation due to severe storms	1	1	1	0	1	0	-1	1	1	1	1	1	1	1	10	High
2022-Town of Lancaster-013	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.31.9 Action Worksheets

The following action worksheets have been developed by the Town of Lancaster to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Ellicott Creek Bank Stabilization		
Project Number:	2022-Town of Lancaster-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The channel of Ellicott Creek Corridor has previously been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would conduct a comprehensive assessment of the banks of the creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town would work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Flood Mitigation
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$1 Million	Mitigation Action Type:	Natural System Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, BRIC
Responsible Organization:	Town Highway	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Redirect Stream	Extremely Expensive	Nearly impossible
	Riparian Buffer restoration	Expensive	Best solution
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Ellicott Creek Bank Stabilization	
Project Number:	2022-Town of Lancaster-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is most cost effective in the long run
Technical	1	This is technically feasible
Political	1	No political opposition
Legal	1	No legal opposition
Fiscal	-1	Not enough resources
Environmental	1	Positive environmental impact
Social	1	Positive social impact
Administrative	1	No administrative barriers
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	Town Highway
Other Community Objectives	1	Flood Mitigation and nature conservation
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Slate Bottom and Plum Bottom Creek Bank Stabilization		
Project Number:	2022-Town of Lancaster-011		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Channel of Slate Bottom Creek and Plum Bottom Creek have previously been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would conduct a comprehensive assessment of the banks of the two creeks within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town would work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Flood Mitigation
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$1 Million	Mitigation Action Type:	Natural System Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, BRIC
Responsible Organization:	Town Highway	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Redirect Stream	Extremely Expensive	Nearly impossible
	Riparian Buffer restoration	Expensive	Best solution
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Slate Bottom and Plum Bottom Creek Bank Stabilization	
Project Number:	2022-Town of Lancaster-011	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is most cost effective in the long run
Technical	1	This is technically feasible
Political	1	No political opposition
Legal	1	No legal opposition
Fiscal	-1	Not enough resources
Environmental	1	Positive environmental impact
Social	1	Positive social impact
Administrative	1	No administrative barriers
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	Town Highway
Other Community Objectives	1	Flood Mitigation and nature conservation
Total	12	
Priority (High/Med/Low)	High	



9.32 Village of Lancaster

This section presents the jurisdictional annex for the Village of Lancaster. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Lancaster’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.32.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Lancaster’s hazard mitigation plan primary and alternate points of contact. The Village of Lancaster followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Director of Emergency Management, Assistant Disaster Coordinator, Department of Public Works Superintendent. The Director of EM represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.32-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Scott M. Kuhlmeier, Director of Emergency Management Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 861-7933 Email: skuhlmeier@lancastervillage.org	Name/Title: Scott M. Robinson, Assistant Disaster Coordinator Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 430-7530 Email: srobinson@lancastervillage.org
NFIP Floodplain Administrator	
Name/Title: William G. Cansdale/ DPW Superintendent Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 683-1028 Email: wcansdale@lancastervillage.org	

9.32.2 Municipal Profile

The Village of Lancaster is in the western part of the Town of Lancaster and is 2.7 square miles in size. The village is surrounded by the Town of Lancaster on three sides and by the Village of Depew on its west border. The Cayuga Creek flows through the village and US Route 20 is the village’s main road. Bowmansville is a hamlet in the northwest part of town.

The village area was first settled by the Erie Indian and later by the Seneca Indians. After the Revolutionary War, the Holland Land Company sold former Indian reservation lands to immigrants from New England and Europe. The village area at that time was known as Cayuga Creek. The 1825 opening of the Erie Canal spurred more rapid settlement of the village because farmers could ship their crops outside the region. In the 1830s,





large numbers of German immigrants moved into the Lancaster area followed in the 1840s by immigrants from Ireland and Britain who worked on the railroad. The village incorporated in 1849.

Four railroads; Erie RR, Lehigh Valley RR, Delaware, Lackawanna and Western RR, and New York Central Railroads once traversed the village, but today only two remain. Each railroad had a station on Central Ave. (Wikipedia Village of Lancaster, accessed 2020). During succeeding decades, the growing industrial community attracted immigrants from Poland, Italy, Greece and Lithuania. Population growth accelerated during the 1920s but slowed during the Great Depression. The Second World War quickly revived the village’s economy as factories produced war materials. (Town of Lancaster, Village of Lancaster, Village of Depew Comprehensive Plan 2000)

According to the U.S. Census, the 2010 population for the Village of Lancaster was 10,352. The estimated 2019 population was 10,144, a 2.0 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.7 percent of the population is 5 years of age or younger and 16.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.32.3 Jurisdictional Capability Assessment and Integration

The Village of Lancaster performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.32.3). The Village of Lancaster’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Lancaster. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.32-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	VC Chapter 156-7, 1970 BOCA	Local	Village Building Department



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The main purpose of building codes is to protect public health, safety, and general welfare as they relate to the construction and occupancy of buildings and structures.</p>					
Zoning Code	Yes	No	VC Chapter 350 Amended 4-27-1981 by Local Law Number 2-1981 – Zoning	Local	Village Building Department and Zoning Board
<p>Comment: The comprehensive zoning plan set forth in the text and maps which constitute this chapter is adopted in order to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets to secure safety from fire, flood, panic and other dangers; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.</p>					
Subdivision Ordinance	Yes	No	VC Chapter 301, 1976 Adopted by the Board of Trustees of the Village of Lancaster 3-22-1965 – Subdivision of Land	Local	Village Building Department and Zoning Board
<p>Comment: The regulations herein contained are adopted for the purpose of providing for the sound growth and development of the Village and of affording adequate sites and facilities for transportation and for the safety, health and welfare of its population and for providing reasonable and equitable requirements in the interests of developers, investors and homeowners so as to ensure stable property values, all pursuant to § 334 of the Real Property Law and Article 6-A of the Village Law. No subdivision of land shall be made, nor shall any contract be made for the sale of any part thereof and no permit for the erection of a structure in any proposed subdivision shall be granted and no street, sanitary sewer or water main shall be laid out, constructed, opened or dedicated except in accordance with the provisions of these regulations.</p>					
Stormwater Management Ordinance	Yes	Yes – for county	VC Chapter 292, 2019. Stormwater Management	Local	Stormwater Management Officer
<p>Comment: The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in the village. It is hereby determined that:</p> <p>A. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;</p> <p>B. This stormwater runoff contributes to increased quantities of waterborne pollutants, including siltation of aquatic habitats for fish and other desirable species;</p> <p>C. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitats;</p> <p>D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation;</p> <p>E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;</p> <p>F. Substantial economic losses can result from these adverse impacts on the waters of the municipality;</p> <p>G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;</p> <p>H. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety;</p> <p>I. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</p>					
Growth Management	No	No	-	-	-
<p>Comment:</p>					



Section 9.32: Village of Lancaster

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Site Plan Review	Yes	Yes	VC Chapter 350-56 1-9-1978 by Local Law Number 1-1978; amended 1-22-2007 by Local Law Number 4-2007	Local	Village Planning Commission/ Town Building Department
Comment: The village planning board reviews the new site in order to improve the functionality or mitigate any potential adverse impacts of the proposed development on neighboring properties. The end result of the process is for the applicant to obtain a special use permit.					
Environmental Protection Ordinance	Yes	Yes	LL6-1979. Adopted by the Board of Trustees of the Village of Lancaster 6-25-1979 by Local Number 6-1979; amended 1-22-2007 by Local Law Number 4-2007 – Environmental Quality Review	Local	Planning
Comment: The village to implement SEQR and NYCRR 618. The purpose of this chapter is to implement for the Village of Lancaster SEQR and Part 617.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 160 (Flood Damage Prevention); amended 4/22/2019	Local	DPW Superintendent
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <p>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</p> <p>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</p> <p>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;</p> <p>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</p> <p>E. Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and</p> <p>F. Qualify and maintain for participation in the National Flood Insurance Program.</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 292 (Stormwater Management); adopted 11/26/2006	Local	Village Dept. Public Works
<p>Comment: The purpose is to provide for the health, safety, and general welfare of the citizens of the Village of Lancaster through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This Part 2 establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this Part 2 are:</p> <p>A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, as amended or revised;</p> <p>B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;</p> <p>C. To prohibit illicit connections, activities and discharges to the MS4;</p> <p>D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Part 2; and</p> <p>E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.</p>					
Emergency Management Ordinance	Yes	Yes	Emergency Regulations – Various sections of Chapter 160 and 325.	Local	Village OEM
Comment: It is hereby found and declared to be in the best interest and welfare of the general public to expedite the removal of snow, reduce driving hazards and to ensure open roads for the movement of emergency vehicles during snowstorms, flood, serious fire or other extreme public emergency.					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster, Village of Lancaster, Village of Depew Joint Comprehensive Plan, 5/21/18	Local	Village Planning
<p>Comment: 1) Prioritize a list of critical open spaces to preserve the Town's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements. 2) Allow conservation development in the Town code. 3) The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features. 4) The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities. 5) Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities. 6) Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought. 7) Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters. 8) Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects. 9) The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.</p>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	No	Yes for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2020 Village CEMP	Local	Emergency Management
Comment: <i>The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Lancaster to oversee and track development.

Table 9.32-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	This is done by the Town of Lancaster’s Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	NA	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Lancaster and their current responsibilities which contribute to hazard mitigation.

Table 9.32-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Commission
Zoning Board of Adjustments	Yes	Zoning Board of Appeals
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Village Department of Public Works - Sewer Inspections, Snow Plow Permits, Curb Cut Permits, Leaf Pick Up, Banner and sign reservations, and other services.
Construction/Building/Code Enforcement Department	Yes	Lancaster (Town) Building Dept.-Administer/Enforce State and Local Code
Emergency Management/Public Safety Department	Yes	The Village of Lancaster Office of Emergency Management is actively involved in preparedness activities such as community hazard assessments, multi-jurisdictional hazard mitigation planning, maintaining National Incident Management System NIMS training compliance, maintenance of a special needs registry, drills/exercises, public/private outreach, and emergency planning for events in the Village of Lancaster Special Events Series.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<p>The Village of Lancaster OEM operates out of the Lancaster Municipal Building located at 5423 Broadway in Lancaster. This building also serves as the Emergency Operations Center (EOC) for use during emergencies. The OEM office is equipped with backup generator power and essential equipment and resources necessary for operations.</p> <p>The Village of Lancaster OEM automatically responds to major incidents and alarms involving at-risk facilities and is capable of deploying mobile resources to assist with emergency operations. Emergencies requiring assets beyond the scope of our agency are supplemented through mutual aid agreement, including neighboring towns and villages, Erie County Emergency Services, and public/private partnership.</p>
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW
Mutual aid agreements	Yes	Fire and DPW
Other	NA	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Lancaster Building Dept. NYS CEDAR Program
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	William G. Cansdale/ DPW Superintendent
Surveyor(s)	No	-
Emergency Manager	Yes	Scott M. Kuhlmeiy, Director of Emergency
Grant writer(s)	Yes	Sarah Meredith
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Lancaster.



Table 9.32-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes – for sewer rents only
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Lancaster.

Table 9.32-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk’s Office manages website and social media
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	https://www.lancasteroem.org/
Social media for hazard mitigation education and outreach	Yes	Facebook/ Twitter
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Education Outreach events to community and children.
Warning systems for hazard events	Yes	Code RED
Natural disaster/safety programs in place for schools	Yes	Each school has its own under guidance of OEM.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Lancaster.

Table 9.32-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-





Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	-
NYSDEC Climate Smart Community	Yes	Registered	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

The Village of Lancaster would like the impacts of climate change to be considered in the 2022 update of the Erie County Hazard Mitigation Plan. Climate change may affect a community’s vulnerability to flooding, wildfire, drought, and extreme temperatures. Impacts such as power outages during summer heat waves; increased home, street, and sewer flooding due to heavy precipitation and increased structural damage and impaired operations of critical infrastructure are possible. The Village of Lancaster encourages identification of mitigation actions that reduce these risks and vulnerabilities.

Table 9.32-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong – NA
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.32.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.



NFIP Floodplain Administrator (FPA)

William G. Cansdale/ DPW Superintendent

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Lancaster.

Table 9.32-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Lancaster	16	5	\$4,698	0	5

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village does not maintain a list of flood damaged properties. Existing levees have been built in the late 1930s and are prone to flooding. A steering committee has been formed by the town to work with FEMA, USACE, and DEC to coordinate floodplain mapping updates. There are no risk maps underway nor are there any methods to determine substantial damage determinations. No properties have been mitigated. The flood maps adequately address existing floodplains.

NFIP Compliance

The village DPW deals with floodplain management but there are no certified floodplain managers working for the municipality. The municipality believes they have adequate resources to determine and address flooding issues due to climate change. The village would like assistance with floodplain management certification. No administrative services are provided by the village NFIP program. The Town of Lancaster’s Building Department determines substantial damage determination. The village determined that cost is a substantial barrier to running an adequate NFIP program. The most recent Community Assistance Visit (CAV) was on October 6, 2016. The NFIP flood damage prevention ordinance law number is in Chapter 160, Amended in April 2019. The program meets basic requirements. The village site plan review process does account for flood vulnerability. The municipality does not wish to participate in CRS.

9.32.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Evacuations involve several factors, including characteristics of the hazard or threat itself, the magnitude, intensity, speed of onset, duration, and impact on the Village of Lancaster.

These factors will determine the number of people to be evacuated, time available in which to effect the evacuation, and the time and distance of travel necessary to ensure safety. Evacuees are moved from their homes to a designated area within the Village or a neighboring jurisdiction not impacted by the hazard that caused the evacuation.



Sheltering

The Village of Lancaster has identified the following designated emergency shelters within the village.

Table 9.32-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Village of Lancaster Municipal Building	5423 Broadway, Lancaster, New York 14086	Unsure	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Lancaster has identified the following sites suitable for placing temporary housing units.

Table 9.32-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unsure	Park	Water	Electricity

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Lancaster has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.32-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unknown	Park	All	Will need to work with County/ State to clarify town's needs

9.32.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern.



Table 9.32-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.32-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	1	0	2	0	0	0	6	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	2	0	0	0	1	1
Total Permits Issued	0	0	0	0	1	0	4	0	0	0	7	1
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Lancaster Village Center	Mixed Use	3 Bldgs.		11 W. Main St. SBL#104.74-4-1.21		Zone AE		Site Plan approved				

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.32.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Lancaster’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Lancaster has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.32-1. Village of Lancaster Hazard Area Extent and Location Map 1

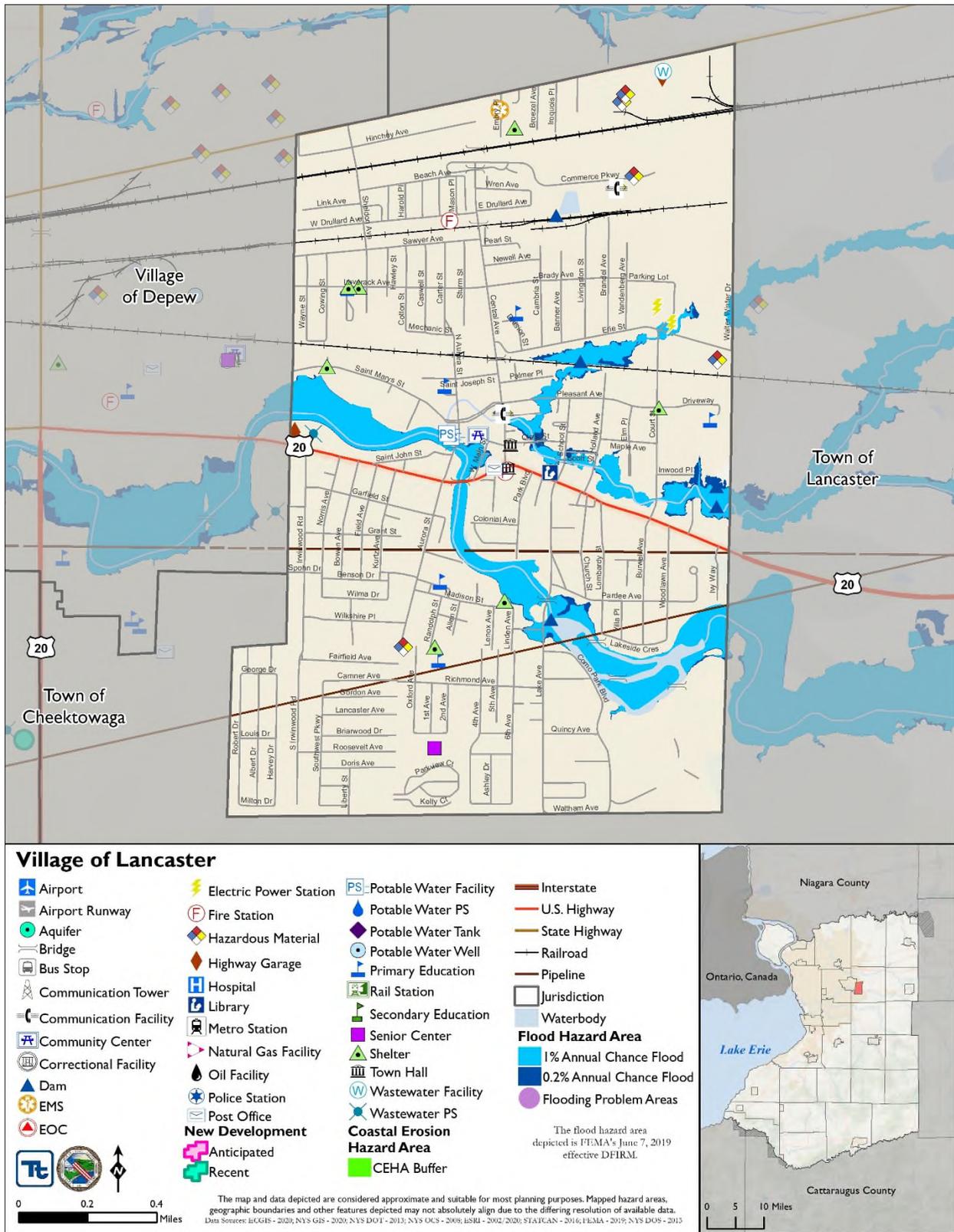




Figure 9.32-2. Village of Lancaster Hazard Area Extent and Location Map 2

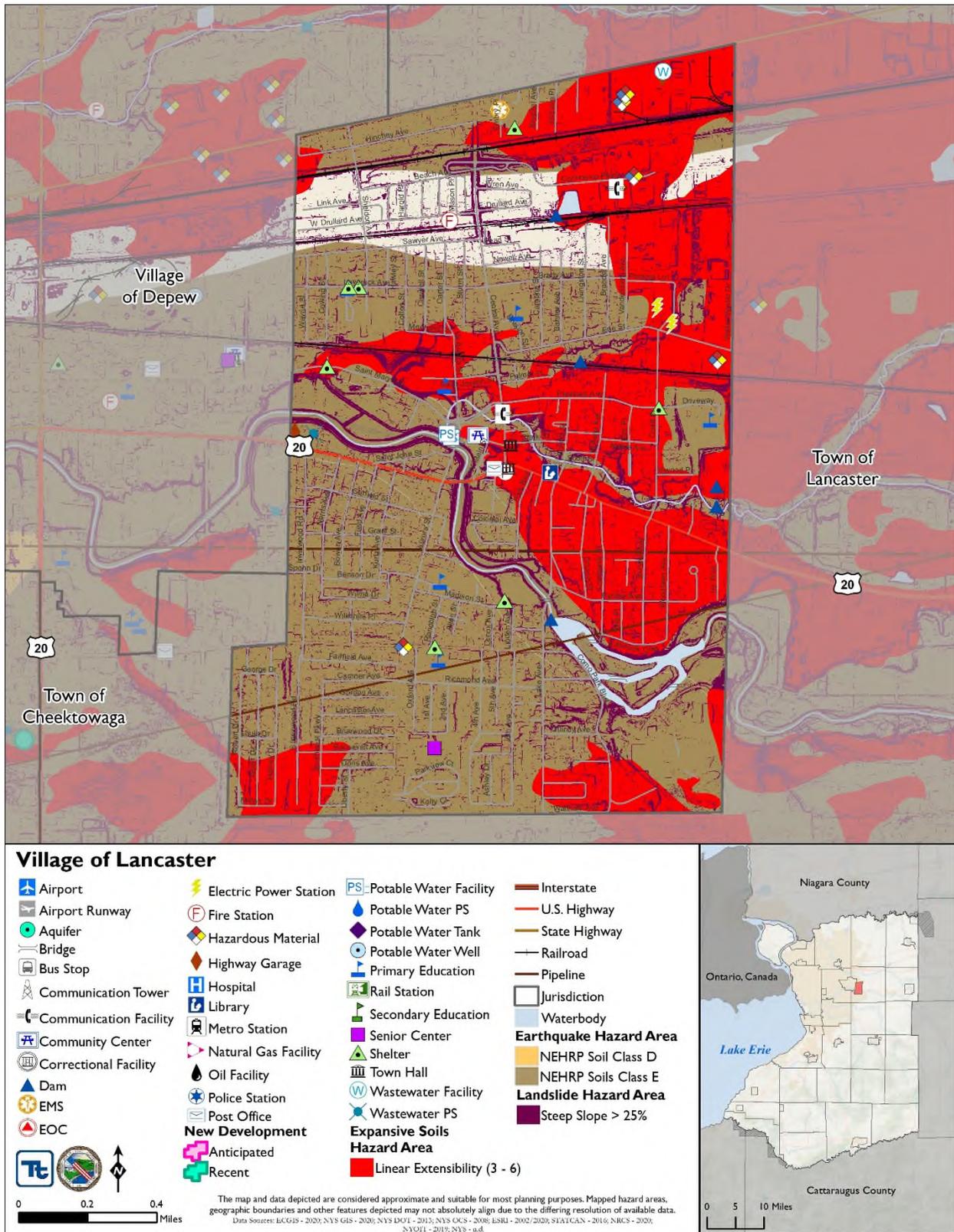
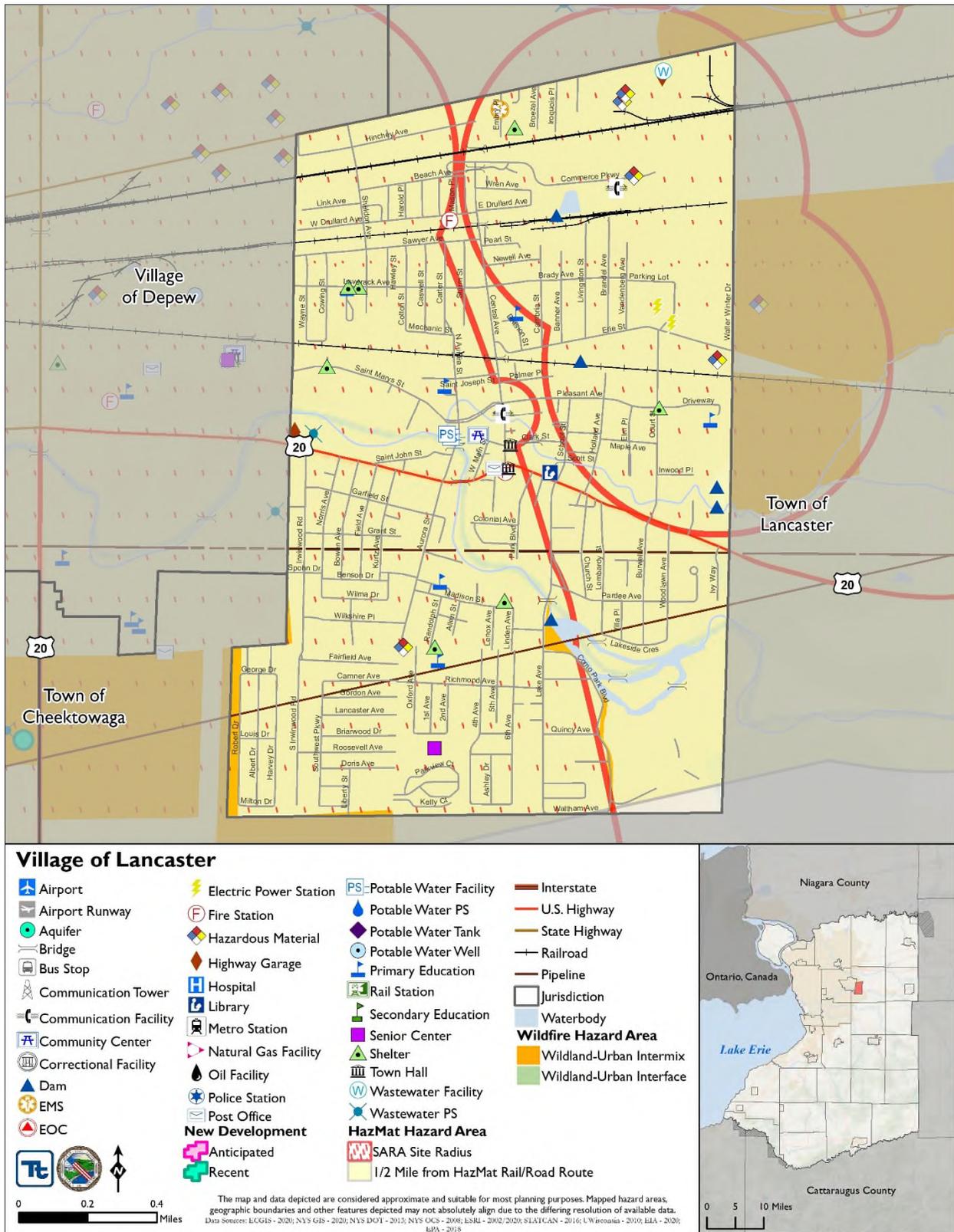




Figure 9.32-3. Village of Lancaster Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Lancaster’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.32-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.32-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning	While this event impacted portions of Erie County, the village did not



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			<p>hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.</p>	<p>identify any losses or damages associated with this event.</p>
November 12, 2015	High Wind	No	<p>A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.</p>	<p>While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.</p>
November 18, 2015	High Wind	No	<p>Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.</p>	<p>While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.</p>
January 11, 2017	High Wind	No	<p>Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.</p>	<p>While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.</p>



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Village of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Lancaster’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Lancaster. The Village of Lancaster has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The Village has significant risk to flooding and thus would like to re rank Flood from low to high.
- Hazardous materials pose a significant threat due to hazardous material being transported through the village and would like to re rank the hazard from low to high.
- Utility failure is an issue, but the town has capabilities to address this so will re rank from high to medium.

Table 9.32-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Medium	Medium	High	High
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	Medium	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.32-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Erie County Park Commission Dam	Dam	X	X	001
Mook Dam	Dam		X	No
Palmers Dam	Dam	X	X	003
Soemans Dam	Dam	X	X	004

Source: GIS 2020

Identified Issues

After review of the Village of Lancaster’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Lancaster has identified the following vulnerabilities within their community:

- The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.
- The Mook Dam is in the 0.2% annual chance flood event.
- The Palmers Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Soemans Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- Verizon, YMCA, several dams, electric power stations, hazardous material facilities, Lancaster post office, and private schools in the village are in the earthquake hazard area.
- All of the critical facilities in the Village of Lancaster may be at risk of being exposed to hazardous materials incidents.
- Several private facilities are located on steep slopes and at risk of landslides
- Communications facilities, YMCA, dams, electric power stations, post office, hazardous materials facilities, and private schools may be at risk of experiencing damages caused by expansive soils.



- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.32.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.32-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost		
1	Stream channel enhancement/mitigation of Plumb Bottom Creek for flood hazard reduction through measures such as sediment removal, debris clearance, and bank stabilization.	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Stream channel enhancement/mitigation of Spring Creek for flood hazard reduction through measures such as sediment removal, debris clearance, and bank stabilization.	Flooding	Not Identified	DPW	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Ongoing inspections of the Village of Lancaster Flood Control Project, as completed by the US Army Corps of Engineers in 1948, with repairs/improvements/mitigation undertaken as needed to ensure system functionality and continued flood protection in the Village.	Flooding	Not Identified	DPW	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Code Enforcement	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Update/revise floodplain management ordinances	Flood	Not Identified	Code Enforcement	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	to be consistent with potential future new FIRMs					Level of Protection	-	<ol style="list-style-type: none"> This needs to be an on-going review and dialogue to maintain a level of protection.
						Damages Avoided; Evidence of Success	-	
6	Join the Community Rating System (CRS)	Flood	Not Identified	Village Board	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue Noe enough community support
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Lancaster has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Lancaster participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.32-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils				X			X			
Extreme Temperature										
Flood		X		X		X	X		X	
Hazardous Materials				X			X			
Landslide				X			X			
Pandemic										
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.32-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Lancaster would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.32-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.32-19. Proposed Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Lancaster - 001	Erie County Park Commission Dam Flood Mitigation Outreach	1,3,4	Flood	<p>Problem: The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI
2022-Village of Lancaster - 002	Assess the flood risk at the Mook Dam	1,3,4	Flood	<p>Problem: The Mook Dam is in the 0.2% annual chance flood event.</p> <p>Solution: The FPA will conduct outreach and contact the facility owner and assess the flood risk at the facility.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Village Budget	High	EAP	PI
2022-Village of Lancaster - 003	Palmers Dam Flood Mitigation	1,3,4	Flood	<p>Problem: The Palmers Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will conduct outreach and contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Lancaster-004	Soemans Dam Flood Mitigation	1,3,4	Flood	<p>Problem: The Soemans Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will conduct outreach and contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes ●	None	Within 6 months for outreach	FPA	<\$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI
2022-Village of Lancaster-005	Earthquake Hazard Mitigation	1,3,4	Earthquake	<p>Problem: Verizon, YMCA, several dams, electric power stations, hazardous material facilities, Lancaster post office, and private schools in the village are in the earthquake hazard area.</p> <p>Solution: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes. Work with the private building owners in the village to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes</p>	Yes	None	Within 6 months for outreach	Village of Lancaster	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Village Budget	High	EAP	PI
2022-Village of Lancaster-006	Hazmat Mitigation	1,3,4	Hazardous Materials Incidents	<p>Problem: All of the critical facilities in the Village of Lancaster may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can</p>	Yes	None	Within 6 months for outreach	Village of Lancaster	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Village Budget	High	EAP	PI



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.										
2022-Village of Lancaster-007	Landslide Mitigation	1,3,4	Landslide	<p>Problem: Several private facilities are located on steep slopes and at risk of landslides.</p> <p>Solution: Work with private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.</p>	Yes	None	Within 6 months for outreach	Village of Lancaster	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Village Budget	High	EAP	PI
2022-Village of Lancaster-008	Expansive Soil Mitigation	1,3,4	Expansive Soils	<p>Problem: Communications facilities, YMCA, dams, electric power stations, post office, hazardous materials facilities, and private schools may be at risk of experiencing damages caused by expansive soils.</p> <p>Solution: Work with the facility owners to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.</p>	Yes	None	Within 6 months for outreach	Village of Lancaster	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the post office from expansive soils	Village Budget	High	EAP	PI
2022-Village of Lancaster-009	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-</p>	No	No	Within 3 years	Village FMA	TBD per cost and number of properties to be mitigated.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ♦ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.32-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Lancaster -001	Erie County Park Commission Dam Flood Mitigation Outreach	1	1	1	0	1	0	-1	1	1	1	0	1	1	1	9	High
2022-Village of Lancaster-002	Assess the flood risk at the Mook Dam	1	1	1	0	1	1	1	1	1	1	0	1	1	1	12	High
2022-Village of Lancaster-003	Palmers Dam Flood Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-004	Soemans Dam Flood Mitigation	1	1	1	1	1	0	0	1	1	1	0	1	1	1	11	High
2022-Village of Lancaster-005	Earthquake Hazard Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-006	Hazmat Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-007	Landslide Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-008	Expansive Soil Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Lancaster-009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.32.9 Action Worksheets

The following action worksheets have been developed by the Village of Lancaster to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Erie County Park Commission Dam Flood Mitigation Outreach		
Project Number:	2022-Village of Lancaster -001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event. Once the needs have been identified, the village shall work with the owner to determine the adequate funds needed to retrofit the existing facility. The actions will be implemented as identified over the course of 2 years.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 years storm	Estimated Benefits (losses avoided):	Flood Mitigation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$100,000-\$500,000	Mitigation Action Type:	Structural and Infrastructure Project, Education and Awareness Program
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, Climate Smart Communities Grant Funding, Municipal Budget
Responsible Organization:	FPO and Village	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Divert water from dam	High	Very costly and difficult
	Facility upgrade	High	Less costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Erie County Park Commission Dam Flood Mitigation Outreach	
Project Number:	2022-Village of Lancaster -001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	0	The technical issues have not yet been identified
Political	1	No political issues
Legal	0	Legal issues have not been identified
Fiscal	-1	Inadequate resources
Environmental	1	Positive impact
Social	1	Positive impact
Administrative	1	Have administrative capabilities
Multi-Hazard	0	Addresses flooding
Timeline	1	Feasible timeline
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Residential Property Flood Mitigation.		
Project Number:	2022-Village of Lancaster-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	100-year flood	Estimated Benefits (losses avoided):	Remove residents and homes from the flood threatened homes
Useful Life:	To be determined	Goals Met:	1
Estimated Cost:	TBD per cost and number of properties to be mitigated	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	BRIC, HMGP, FMA, cost share by homeowners
Responsible Organization:	Village FMA	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Enhance overall outreach program	\$1,000	Does not reach a specific area vulnerable to flooding
	Residential property flood mitigation outreach	Staff Time	Selected project
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Residential Property Flood Mitigation.	
Project Number:	2022-Village of Lancaster-009	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	1	
Political	1	
Legal	1	
Fiscal	1	Have fiscal resources to conduct outreach
Environmental	1	
Social	1	
Administrative	1	Have administrative capabilities
Multi-Hazard	0	Addresses flooding
Timeline	1	To be completed within 3 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



9.33 Town of Marilla

This section presents the jurisdictional annex for the Town of Marilla. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Marilla’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.33.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Marilla’s hazard mitigation plan primary and alternate points of contact. The Town of Marilla followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager and Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.33-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Brian Nolan, Emergency Manager Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 857-0103 Email: bnolan@townofmarilla.com	Name/Title: Earl Gingerich, Jr, Supervisor Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 310-7907 Email: egingerich@townofmarilla.com
NFIP Floodplain Administrator	
Name/Title: Scott Rider, CEO Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 857-0103 Email: srider@townofmarilla.com	

9.33.2 Municipal Profile

The Town of Marilla is 27.5 square miles in size and the town is located on Erie County’s east and central portion. The Town of Alden forms the north boundary while on the west is the Town of Elma and the Town of Wales borders to the south.

Marilla was first settled by Europeans in 1827 and was originally part of the Buffalo Creek Indian Reservation. The land was opened to general settlement shortly after the Treaty of Buffalo Creek was finalized in 1842. (Town of Marilla 2020) White settlers began arriving to the area in 1832, particularly in the Porterville hamlet area. The town was organized in 1853 from portions of the towns of Alden and Wales and incorporated in 1854. The town’s name town is derived from Marilla Rogers, an early schoolteacher. (Town of Marilla 1998) Excellent soils supported widespread agricultural development. In 1937, the Town experienced the worst flooding on



record, which did considerable damage to crops In the latter half of the century, more people began moving out of Buffalo and Marilla now serves as a bedroom community to Buffalo.

According to the U.S. Census, the 2010 population for the Town of Marilla was 5,327. The estimated 2019 population was 5,378, a one percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.1 percent of the population is 5 years of age or younger and 21.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.33.3 Jurisdictional Capability Assessment and Integration

The Town of Marilla performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.33.3). The Town of Marilla’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Marilla. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.33-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 209 (Uniform Construction Codes)	Local	Building Department and Code Enforcement
Comment: <i>This article provides for the administration and enforcement of the International Codes (the Uniform Code), the State Energy Conservation Construction Code (the Energy Code) and the Code of the Town of Marilla (the Code) in this Town. This article is adopted pursuant to Section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this article. The Code Enforcement Officer administers and enforces the provisions of Chapter 209.</i>					
Zoning Code	Yes	No	Local Law Number 1-1999 – Zoning, Chapter 700.	Local	Code Enforcement Officer
Comment: <i>For the purpose of promoting the health, safety and general welfare of the people of the Town of Marilla, this chapter is adopted pursuant to Article 16 of the Town Law of the State of New York. Its purpose is to regulate and restrict the height, number of stories and size of buildings and other structures; the percentage of lot that may be occupied; the size of yards, courts and other open space; the density of</i>					



	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>population and the location and use of buildings, structures and land for business, industry, agriculture, residence or other purposes. This chapter and the Zoning Map, which is a part of this chapter, are designed to lessen congestion in the streets; to secure safety from fire and other dangers; to provide adequate light and air; to provide for solar access and the implementation of solar energy systems; to prevent the overcrowding of land and to avoid undue concentration of population; to facilitate the efficient and adequate provision of public facilities and services; and to provide the maximum protection to residential areas from the encroachment of adverse environmental influences. This chapter and the Zoning Map were made after reasonable consideration, among other things, as to the character of the Town and its peculiar suitability for particular uses and with a view to conserving property values and natural resources and encouraging the most appropriate use of land throughout the Town.</p>					
Subdivision Ordinance	Yes	No	Local Law Number 1-1997 Chapter 644 Town of Marilla Subdivision Law	Local	Code Enforcement Officer
<p>Comment: The purpose of the town's subdivision is to amend the Code of the Town of Marilla to add a new provision governing the subdivision of land within the Town of Marilla and to protect the public health, safety and general welfare while allowing for cost-saving efficiencies.</p>					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
<p>Comment:</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</p>					
Growth Management	No	No	-	-	-
<p>Comment:</p>					
Site Plan Review	No	Yes	-	-	-
<p>Comment:</p>					
Environmental Protection Ordinance	No	Yes	-	-	-
<p>Comment:</p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 559 (Flood Damage Prevention); adopted 4/11/2019	Local	Code Enforcement Officer
<p>Comment: It is the purpose of this chapter for the Code Enforcement Officer to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify for and maintain participation in the National Flood Insurance Program. 					



	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>An enclosed area beneath the lowest elevated floor, 18 inches or more in height, which is used to service the underside of the lowest elevated floor. The elevation of the floor of this enclosed area, which may be of soil, gravel, concrete or other material, must be equal to or above the lowest adjacent exterior grade. The enclosed crawl space area shall be properly vented to allow for the equalization of hydrostatic forces which would be experienced during periods of flooding.</i></p>					
Municipal Separate Storm Sewer System (MS4)	No – not within MS4.	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	Adopted by the Town Board of the Town of Marilla 10-9-2008 by L.L. No. 4-2008. Alarm Devices.	Local	Town Supervisor
<p><i>Comment: The purpose of this chapter is to protect and promote the health, safety and general welfare of the residents of the Town of Marilla by reducing the number of avoidable alarms of fire, intrusion, holdup or other emergencies which contribute to ineffective utilization of police and fire emergency agencies, require emergency responses which are susceptible to high accident rates, interfere with genuine emergencies (responses) and produce unnecessary alarm noise to the surrounding community.</i></p>					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan Town of Marilla Erie County, New York - 1998. Updated 2018	Local	Town Planning
<p><i>Comment: The Town prepared the original Comprehensive Plan in 1982, which was updated in 1998 and 2018. Since that time, the Town has maintained its rural and agricultural character and current views and policies for future land use planning and management have necessitated this update of the Comprehensive Plan. Goals and projects within the comprehensive plan include the following: 1) Coordinate drainage planning efforts with neighboring towns that share drainage basins. Carefully evaluate the effects on drainage of all proposals for development. 2) Require developers to dedicate easements along creeks and other major drainage was to allow for their maintenance and to reduce the risk of flood damages. 3) Prohibit drainage, filling, and development in wetland areas.</i></p>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-



	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No -NA	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	Yes	No	Town of Marilla Agricultural and Farmland Protection Plan - 2013	Town	Town Board
Comment: <i>The intent of the plan includes the protection of existing farmland and the overarching goal to create a healthy and safe community through conservation and land protection to mitigate the effects of climate change, development, and other factors that threaten the community.</i>					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County Comprehensive Emergency Management Plan Date Unknown	County	County Emergency Management and Town of Marilla Supervisor.
Comment: <i>The intent of the comprehensive emergency management plan (especially the evacuation annex) is meant to provide municipalities and community members the necessary means to prepare for and coordinate during hazard events and minimize avoidable damage.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					



	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Marilla to oversee and track development.

Table 9.33-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement Officer
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	No – the town is relatively rural and sparsely populated and would like to keep it that way.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Marilla and their current responsibilities which contribute to hazard mitigation.

Table 9.33-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The ultimate goal of this planning board is to ensure that the long-range planning and land use objectives of the community can be achieved.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals as per Chapter 704 of the municipal code
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Board was established to preserve and improve the quality of the natural and manmade environment within the town. The board



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<p>consists of seven regular members and three alternates. The powers and duties of the board include:</p> <ul style="list-style-type: none"> A. Advise the Town Board on matters affecting the preservation, development and use of the natural and man-made features and conditions of the Town insofar as beauty, quality, biologic integrity and other environmental factors are concerned and, in the case of man's activities and developments, with regard to any major threats posed to environmental quality, so as to enhance the long-range value of the environment to the people of the Town. B. Develop and, after receiving general approval by resolution of the Town Board, conduct a program of public information in the community which shall be designed to foster increased understanding of the nature of environmental problems and issues and support for their solutions. C. Conduct studies, surveys and inventories of the natural and man-made features within the Town of Marilla and such other studies and surveys as may be necessary to carry out the general purposes of this chapter and submit copies of the same to the Town Board. D. Maintain an up-to-date inventory or index of all open spaces in public or private ownership within the Town of Marilla, including, but not limited to, natural landmarks, glacial and other geomorphic or physiographic features; streams and their floodplains, swamps, marshlands and other wetlands; unique biotic communities; scenic and other open areas of natural or ecological value and of the ownership, present use and proposed use of such open areas, so as to provide a base of information for recommendations by the Board for their preservation and/or use and submit copies of the same to the Town Board. E. Seek to coordinate, assist and unify the efforts of private groups, institutions and individuals within the Town of Marilla in accordance with the purpose of this chapter. F. Maintain liaison with public and private agencies and organizations of local, state and national scope whose programs and activities have an impact on the quality of the environment or who can be of assistance to the Board. G. Working in cooperation with the Town Planning Board, recommending from time to time to the Town Board features, plans and programs relating to environmental improvement for inclusion in the Master Plan of the Town of Marilla and, similarly, recommend to the Town Board appropriate and desirable changes in local laws and ordinances relating to environmental control. H. Carry out such other duties as may be assigned from time to time by the Town Board or as set forth under § 239-x of the General Municipal Law.
Open Space Board/Committee	Yes	See above for description of the Conservation Advisory Board
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Marilla Highway Department is responsible for 13.61 miles of town roads. This includes sweeping, mowing, snow plowing, and any maintenance of these roads. The department also snow plows 47.96 lane miles of Erie County Roads. The Highway Superintendent oversees the Sanitation Department, the Town Park, and all Town Buildings. The department currently employs six full-time employees and several seasonal, part-time employees. The town currently has in use two sanitation trucks for garbage collection and three trucks for snow removal on town and county roads.</p>
Construction/Building/Code Enforcement Department	Yes	<p>The Building Inspector issues building permits. The Code Enforcement Officer supports the compliance with Town Of Marilla ordinances and building codes. The Building Inspector must issue a Certificate of Occupancy before residents can move into new homes.</p>
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department - sweeping, mowing, snow plowing, and maintenance of town-owned roadways
Mutual aid agreements	Yes	Local Fire Company/Towns/County/State
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer Firm
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Marilla.

Table 9.33-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Town Board
Capital improvements project funding	Yes, Town Board
Authority to levy taxes for specific purposes	Yes, Town Board
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	Yes, Town Board
Stormwater utility fee	Yes, Town Board
Incur debt through general obligation bonds	Yes, Town Board
Incur debt through special tax bonds	Yes, Town Board
Incur debt through private activity bonds	Yes, Town Board
Withhold public expenditures in hazard-prone areas	Yes, Town Board
Other federal or state Funding Programs	Yes, Town Board
Open Space Acquisition funding programs	Yes, Town Board
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Marilla.





Table 9.33-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor, Director Coordinator, Fire Company
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	The town maintains a website that contains information on the local government, departments, businesses, residents, and events. The website also has a community billboard where they post emergency notifications
Social media for hazard mitigation education and outreach	Yes	The town has a website and Facebook page that can be used to inform residents of hazards and mitigation efforts.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Town-wide newsletter Code Red/Website
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	ICS is in charge of this program
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Marilla.

Table 9.33-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.33-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	NA
Extreme Temperature	Moderate
Flood	Strong
Hazardous Materials	Moderate
Landslide	NA
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Utility Failure	Moderate
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.33.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Scott Rider, CEO

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Marilla.

Table 9.33-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Marilla	2	1	\$15,190	0	0

Source: FEMA 2020a, FEMA 2020b

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town did not identify any barriers to running an effective NFIP program in the community. The town does not have any outstanding NFIP compliance violations. The local law number of the flood damage prevention ordinance is 559.1 Marilla Town Code; Chapter 559. The flood management program meets the minimum requirements. There are other local ordinances and plans that support the floodplain management program.

The town does not maintain a list of properties that have been damaged by flooding and they do not maintain a list of property owners interested in flood mitigation. No RiskMAP projects are currently underway. The town identified they do not make Substantial Damage determinations. No properties have been mitigated in the town. The town's flood hazard maps adequately address the flood risk.



NFIP Compliance

The Code Enforcement and Town Engineer are responsible for floodplain management and the Town Engineer Firm has certified floodplain managers. The Town of Marilla has access to resources to determine possible future flooding conditions from climate change. The town’s floodplain management staff does not need assistance or training to support the floodplain management program. The last Community Assistance Visit was April 9, 2010.

9.33.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Marilla has identified the following routes and procedures to evacuate residents prior to and during an event.

- Two Rod Road (North/South)
- Bullis Road (East/West)

Sheltering

The Town of Marilla has identified the following designated emergency shelters within the town.

Table 9.33-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Marilla Fire Co.	1950 West Ave, Marilla, NY 14102	100	Yes	Yes	Yes	First Aid	Kitchen
Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	500	Yes	Yes	Yes	First Aid	Kitchen
Community Center	1810 Two Rod Road	100	Yes	Yes	Yes	First Aid	Kitchen

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Marilla has identified the following sites suitable for placing temporary housing units.

Table 9.33-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	25-30	Lot	All	None
Fireman’s Grounds	West Ave.	30-35	Lot	All	None



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Marilla has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.33-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – mitigation action number 005					

9.33.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.33-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.33-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	11	0	13	0	10	0	13	0	6	0	13	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	12	0	13	0	10	0	13	0	6	0	14	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None completed												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.33.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Marilla’s risk assessment results and data used to determine the hazard ranking discussed later in this section.



Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Marilla has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.33-1. Town of Marilla Hazard Area Extent and Location Map 1

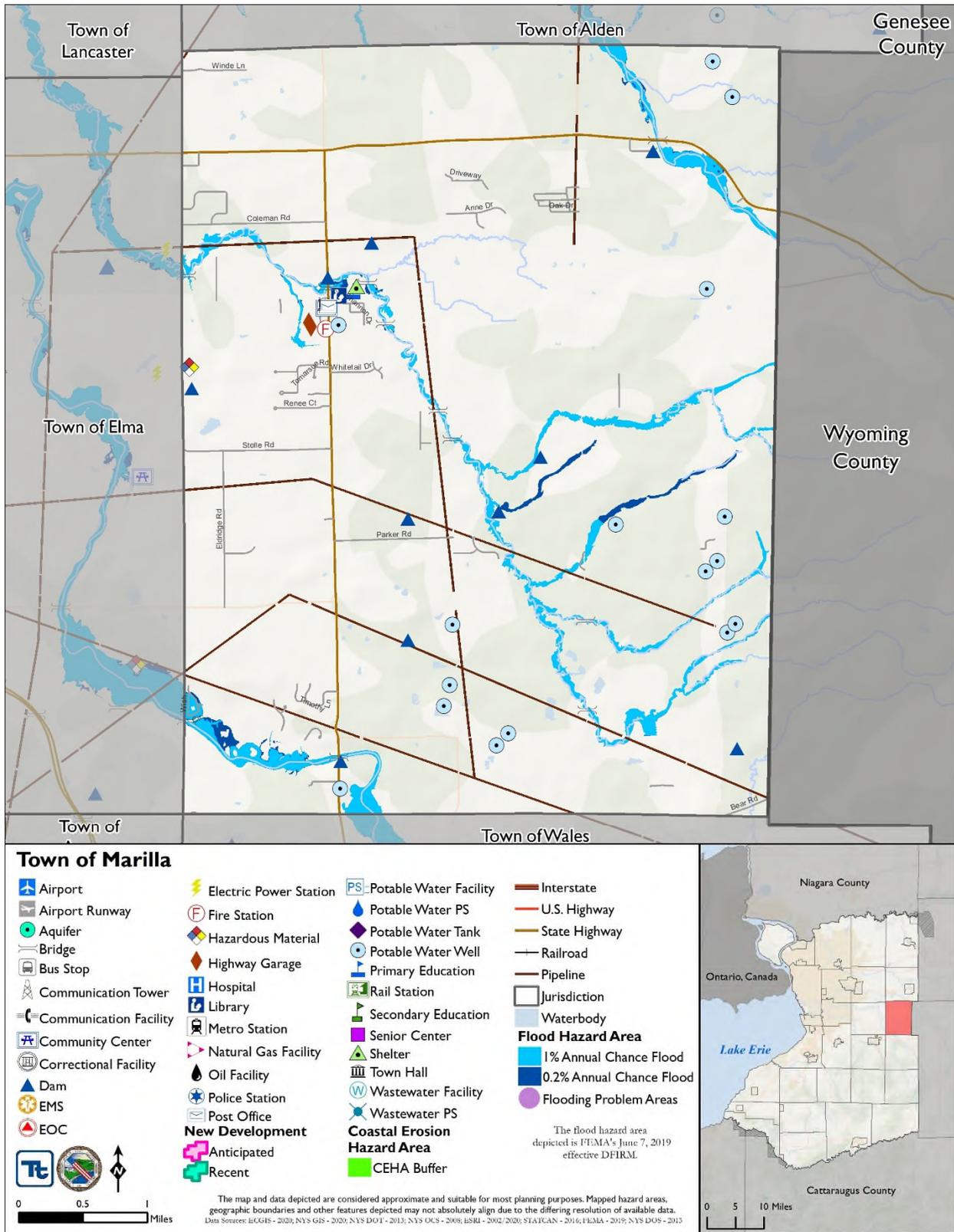




Figure 9.33-2. Town of Marilla Hazard Area Extent and Location Map 2

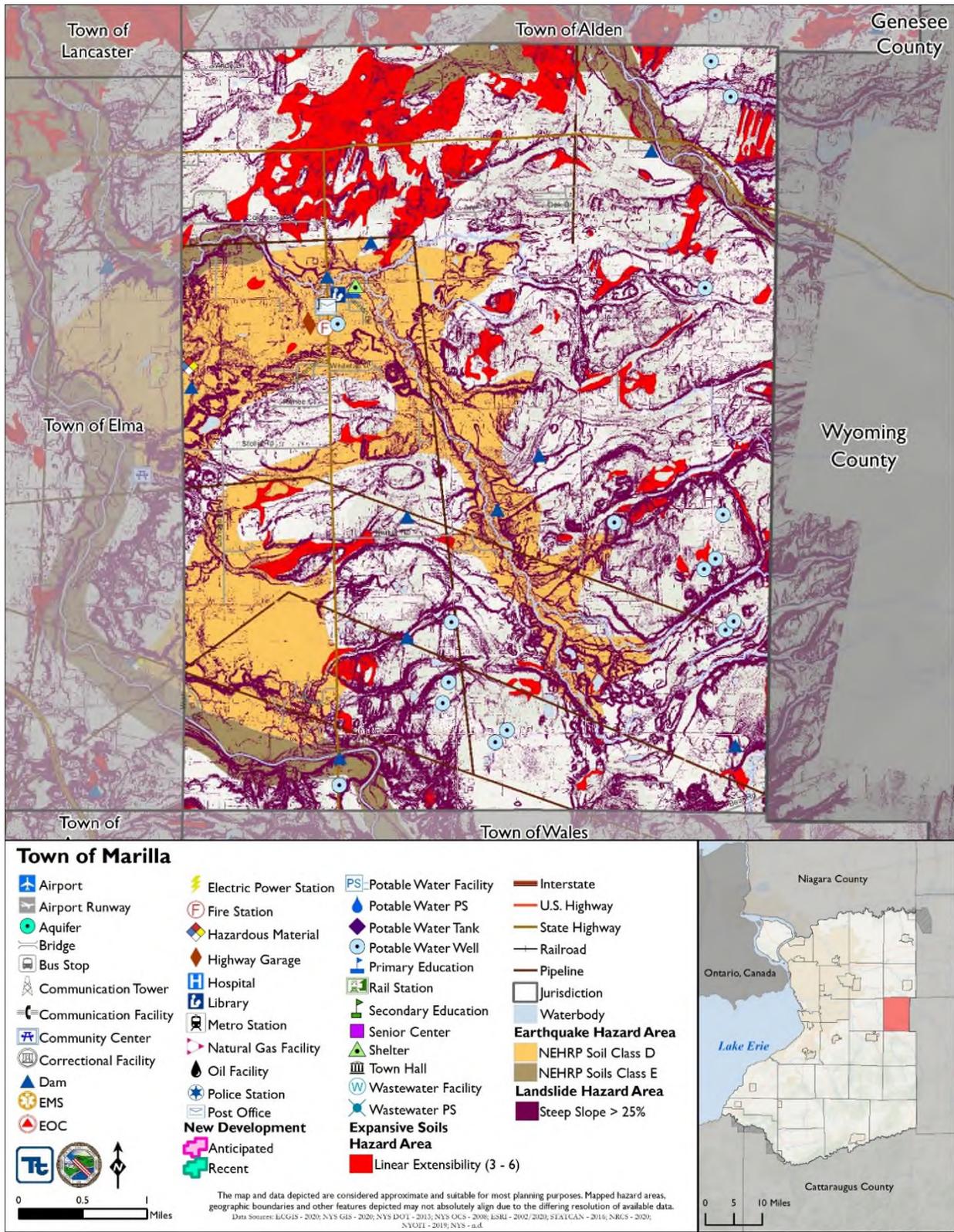
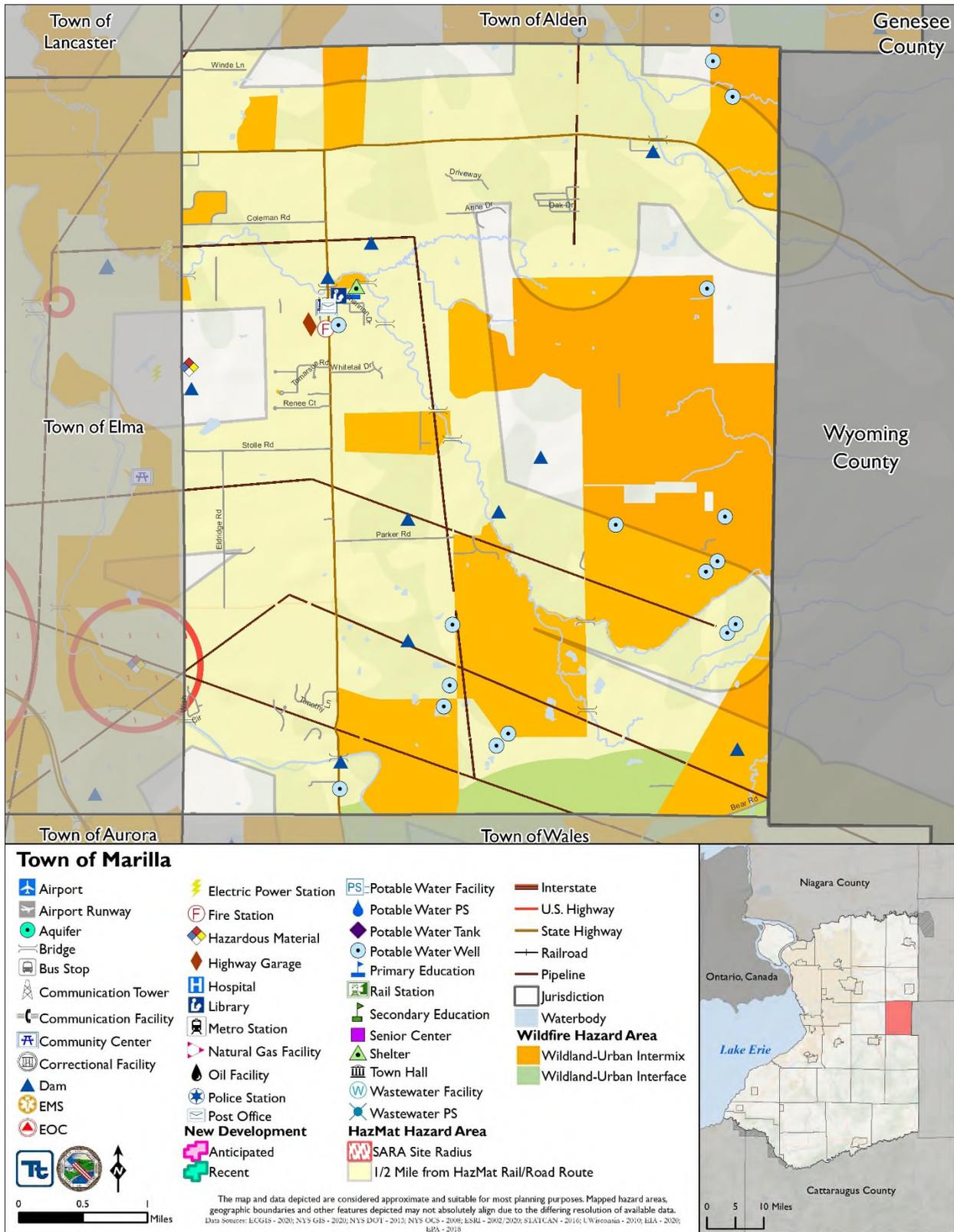




Figure 9.33-3. Town of Marilla Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Marilla’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.33-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.33-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	The Town of Marilla did not report any damages.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	The Town of Marilla did not report any damages.
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency





DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Marilla’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Marilla. The Town of Marilla has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town changed the coastal erosion hazard ranking from low to not applicable since they are not on the coast
- The town changed the cyber-attack hazard ranking from medium to low given this has never happened before.
- The earthquake hazard ranking was changed from high to medium due to lack of such events.
- Severe storm and severe winter storm were changed from high to medium due higher community resilience.
- Wildfire was changed from high to low given the low frequencies of the event.

Table 9.33-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Low	Medium	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	Medium	Medium	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood





Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.33-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
No critical facilities located in the floodplain				

Source: GIS 2021

Identified Issues

After review of the Town of Marilla’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Marilla identified the following issues in the community:

- The Marilla Community Center, Handy Bros Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and the NYSEG - Stolle Road Substation are in the earthquake hazard area.
- The Mark Andol Dam is located in the wildfire hazard area.
- Clayton Hopper Marsh Dam, Cornelius Eiss Farm Pond Dam, Haungs Dam, Mark Andol Pond Dam, Pierce Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and Marilla Post Office may be at risk of being exposed to hazardous materials incidents. Pierce Pond Dam, Porterville Aurora Milling Co Dam, and the Wood Spring Farm Pond Dam are located on steep slopes and at risk of landslides.
- The town of Marilla currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort.
- The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses a threat to private property and can cause interruption to traffic and other services.
- The Fireman’s Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.
- The Fireman’s Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, the grounds does not have a temporary backup water system for temporary housing location. Without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.33.8 Mitigation Strategy and Prioritization





This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.33-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Flood and erosion control through upgrades/ improvements to culverts and ditches on Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr	Flood, Erosion	Not Identified	Marilla Highway Dept.	No Progress	-	-	<ol style="list-style-type: none"> Include in the 2022 HMP 2022- Town of Marilla-006
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Town Board	Complete	Low	Moderate	<ol style="list-style-type: none"> Discontinue Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Town Board	Complete	Low	Moderate	<ol style="list-style-type: none"> Discontinue Complete
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Town Board	No Progress	-	-	<ol style="list-style-type: none"> Discontinue Town Opposition



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Marilla has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Marilla participated in a mitigation action workshop in June 2021, and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.33-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X		X			X		X	
Expansive Soils		X							X	
Extreme Temperature		X							X	
Flood		X	X			X		X	X	
Hazardous Materials		X		X			X		X	
Landslide		X		X			X		X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X		X			X		X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.33-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Marilla would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.33-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Marilla -001	Earthquake Hazard Mitigation	All	Earthquake	<p>Problem: The Marilla Community Center, Handy Bros Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and the NYSEG - Stolle Road Substation are in the earthquake hazard area.</p> <p>Solution: Conduct necessary outreach to property owners and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes</p>	Yes	None	Within 6 months for outreach	Town of Marilla	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of Marilla -002	Wildfire Mitigation	All	Wildfire	<p>Problem: The Mark Andol Dam is located in the wildfire hazard area.</p> <p>Solution: Conduct outreach and work with facility owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the dam.</p>	Yes	None	Within 6 months for outreach	Town Budget	<\$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the facility from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Marilla -003	HazMat Incident Mitigation	All	Hazardous Materials Incidents	<p>Problem: Clayton Hopper Marsh Dam, Cornelius Eiss Farm Pond Dam, Haungs Dam, Mark Andol Pond Dam, Pierce Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and Marilla Post Office may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.</p>	Yes	None	Within 6 months for outreach	Town of Marilla	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI
2022-Town of	Landslide Mitigation	1,3,4	Landslide	<p>Problem: Pierce Pond Dam, Porterville Aurora Milling Co Dam, and the Wood</p>	Yes	None	Within 6 months	Town of Marilla	<\$100 for outreach, TBD	Continuity of	Town Budget	High	EAP	PI





Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Marilla -004				<p>Spring Farm Pond Dam are located on steep slopes and at risk of landslides.</p> <p>Solution: Conduct outreach and work with the dam owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.</p>			for outreach		by engineering study	operations in place				
2022-Town of Marilla -005	Permanent Housing Location	1,2	All	<p>Problem: The town of Marilla currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort.</p> <p>Solution: The town will conduct an assessment of existing sites across the town that are best suited for permanent housing relocation. These sites should have access to all utilities. The town would then need to work with the land owner to acquire the property, if not yet owned by the town. The town would then apply for FEMA funding to acquire the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the town board and town DPW/ OEM.</p>	No	Yes	5 years	Town of Marilla OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP, ES
2022-Town of Marilla -006	Flood Erosion Control	1,2	Flood	<p>Problem: The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses a threat to private property and can cause interruption to traffic and other services.</p> <p>Solution: Working with Erie County and the town DPW, a feasibility study will be</p>	No	No	3 years	Town DPW	\$100,000	Flood Mitigation	HMGP, BRIC	High	NSP, SIP	PP, NR, ES





Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				done to understand the existing stormwater flooding issues. As part of the study, the town will determine culverts that need to be upgraded and those that need to be repaired. In the event the study determines that the stormwater infrastructure needs to be expanded, the town will hire external design expertise to identify the needs of the system. This may include installing/ building a retention basin and installation of green infrastructure across the town stormwater system.										
2022-Town of Marilla -007	Temporary Housing Generator	1,2	All	<p>Problem: The Fireman’s Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.</p> <p>Solution: The town will install backup generators on this site. Given this is located on the fireman’s grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what energy demands are needed for temporary housing. Once the proper size generator and fuel source is identified, the town will apply for grant funding on behalf of the fire department to purchase and install.</p>	Yes	No	1 year	OEM	\$100,000	Adequate backup power	HMGP	High	SIP	SP
2022-Town of Marilla -008	Temporary Housing Potable Water	1,2	All	<p>Problem: The Fireman’s Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, the grounds does not have a temporary backup water system for temporary housing location.</p>	Yes	No	1 year	OEM	\$100,000	Adequate water supply	HMGP	High	SIP	SP



Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>Without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.</p> <p>Solution: The town would like to install potable water tank facility on this site. Given this is located on the fireman’s grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what water demands are needed for temporary housing. The town would then use HMGP funding to secure these assets and install on site.</p>										
2022-Town of Marilla -009	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Town Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:





CAV	Community Assistance Visit	FMA	Flood Mitigation Assistance Grant Program
CRS	Community Rating System	HMGF	Hazard Mitigation Grant Program
DPW	Department of Public Works	BRIC	Building Resilient Infrastructure and Communities Program
EHP	Environmental Planning and Historic Preservation		
FEMA	Federal Emergency Management Agency		
FPA	Floodplain Administrator		
HMA	Hazard Mitigation Assistance		
N/A	Not applicable		
NFIP	National Flood Insurance Program		
OEM	Office of Emergency Management		

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.33-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022- Town of Marilla -001	Earthquake Hazard Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -002	Wildfire Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -003	HazMat Incident Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -004	Landslide Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -005	Permanent Housing Location	1	1	1	1	1	0	-1	1	1	0	1	1	1	1	10	High
2022- Town of Marilla -006	Flood Erosion Control	1	1	1	1	1	0	-1	1	1	0	0	1	1	1	9	High
2022- Town of Marilla -007	Temporary Housing Generator	1	1	1	1	1	0	-1	1	1	1	1	1	1	1	11	High
2022- Town of Marilla -008	Temporary Housing Potable Water	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022- Town of Marilla -009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.33.9 Action Worksheets

The following action worksheets have been developed by the Town of Marilla to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Temporary Housing Generator		
Project Number:	2022- Town of Marilla -007		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	Fireman's grounds does not currently have backup power for temporary housing location. The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install backup generators on this site. Given this is located on the fireman's grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what energy demands are needed for temporary housing. The town would them use HMGP funding to secure these assets and install on site.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	Estimated Benefits (losses avoided):	Stable Electric Supply
Useful Life:	50 years	Goals Met:	1,2
Estimated Cost:	\$100,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP
Responsible Organization:	Town Board/ OEM	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation and Preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Weather Dependent
	Install Generator	Moderate	Best Option
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Temporary Housing Generator	
Project Number:	2022- Town of Marilla -007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This protects property
Cost-Effectiveness	1	This is cost effective
Technical	1	This is technically feasible
Political	1	There are no political issues
Legal	0	There are no legal issues identified at this time
Fiscal	-1	This project requires external funding
Environmental	1	No issues
Social	1	No issues
Administrative	0	Not identified
Multi-Hazard	1	Multiple hazards
Timeline	1	Feasible given timeline
Agency Champion	1	Town OEM
Other Community Objectives	1	Mitigation
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Flood Erosion Control		
Project Number:	2022- Town of Marilla -006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses threat to private property and can cause interruption to traffic and other services.		
Action or Project Intended for Implementation			
Description of the Solution:	The town needs to work with the DPW and county to address existing stormwater flooding issues. The first step would be for the town to determine specific culverts that need upgrading and those that need to be repaired. Additionally, the stormwater infrastructure might also need to be expanded for capacity. This includes installing/ building a retention basin and installation of green infrastructure across the town stormwater system. Such projects might require external design expertise which would be contracted out as needed.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500- year storm	Estimated Benefits (losses avoided):	Flood Reduction
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	High	Mitigation Action Type:	Natural System Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, BRIC
Responsible Organization:	Town DPW	Local Planning Mechanisms to be Used in Implementation if any:	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Close all roads	Low	Long term expenses are high
	Stormwater reconstruction	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Flood Erosion Control	
Project Number:	2022- Town of Marilla -006	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This protects property
Cost-Effectiveness	1	This is cost effective
Technical	1	This is technically feasible
Political	1	There are no political issues
Legal	0	There are no legal issues identified at this time
Fiscal	-1	This project requires external funding
Environmental	1	No issues
Social	1	No issues
Administrative	1	The town has administrative support to implement this project
Multi-Hazard	0	Flood
Timeline	1	Feasible given timeline
Agency Champion	1	Town DPW
Other Community Objectives	1	Mitigation
Total	9	
Priority (High/Med/Low)	High	



9.34 Town of Newstead

This section presents the jurisdictional annex for the Town of Newstead. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Newstead’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.34.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Newstead’s hazard mitigation plan primary and alternate points of contact. The Town of Newstead followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Clerk’s office and the Supervisor’s office. The Supervisor and Town Clerk represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.34-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Cummings, Supervisor Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 Email: dcummings@townofnewstead.com	Name/Title: Dawn D Izydorczak, Town Clerk Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 #2 Email: dizydorczak@townofnewstead.com
NFIP Floodplain Administrator	
Name/Title: David Miller, CEO Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 #4 Email: dmiller@townofnewstead.com	

9.34.2 Municipal Profile

The Town of Newstead is in Erie County’s northeast corner and is 51 square miles in size. The town's borders are Genesee County to the east, Niagara County (to the north, the Town of Clarence to the west and Town of Alden to the south. The Village of Akron is located near the geographic center of the town. The central business district and town government offices are situated in the Village of Akron. A portion of the Tonawanda Indian Reservation is in the town’s northeast corner.

The town was first settled around 1801. The town of Newstead was established in 1823 as the "Town of Erie" and was formed from the large original Town of Clarence. The town name was changed later in the 1800s and is reportedly derived from Newstead Abbey in England. Historically, the Town of Newstead has been an agricultural community. Approximately 40 percent of the town’s land is still used for agriculture, however



several farms are now fallow or have been developed to low-density dwelling units. Interstate 90, and NYS Routes 5 and 93 traverse the town (Town of Newstead and Village of Akron Comprehensive Plan, 2001).

According to the U.S. Census, the 2010 population for the Town of Newstead was 5,726. The estimated 2019 population was 5,804, a 1.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.5 percent of the population is 5 years of age or younger and 18.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.34.3 Jurisdictional Capability Assessment and Integration

The Town of Newstead performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.34.3). The Town of Newstead’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Newstead. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.34-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 150, Construction Codes, Uniform	Local	CEO/Building Department
Comment: This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code), the State Energy Conservation Construction Code (the Energy Code) and the Code of the Town of Newstead (the Code) in this Town. High quality construction will be resistant to hazard impacts.					
Zoning Code	Yes	No	LL2-1988, Chapter 450, Zoning	Local	CEO/Building Department
Comment: The purpose of this Zoning Law is to promote and protect, to the fullest extent permissible, the environment of Newstead and its public health, safety, convenience, comfort, prosperity and general welfare by regulating the use of buildings, other structures and land: by regulating and restricting the bulk, height, design, lot coverage and location of structures; and by regulating and limiting population density and, for the aforesaid purposes, to divide the land within the limits of Newstead into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan and to provide procedures for the administration and amendment of said Zoning Law.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Individual lots shall be graded in a manner which will avoid surface water runoff on adjacent lots, and which will divert water away from buildings, prevent standing water and soil saturation detrimental to structures and lot use.					
Subdivision Ordinance	Yes	Yes	Chapter 360, Subdivision	Local	CEO/Building Department
Comment: The purpose of this chapter is to amend the Code of the Town of Newstead to add a new provision governing the subdivision of land within the Town of Newstead outside of the village and to protect the public health, safety and general welfare while allowing for cost-saving efficiencies. Subdivided land shall be safe from flood or other menace; drainage and other needed improvements will be provided. The development shall be laid out to avoid adversely affecting groundwater and aquifer recharge; to reduce cut and fill; to avoid unnecessary impervious cover; to prevent flooding; to provide adequate access to lots and sites; and to mitigate adverse effects of shadow, noise, odor, traffic, drainage, and utilities on neighboring properties. Land subject to flooding and land deemed to be uninhabitable for other reasons shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life or property or aggravate a flood hazard.					
Stormwater Management Ordinance	Yes	No	LL2-1996, Chapter 349, Stormwater Management and Erosion Control	Local	Highway Department
Comment: In order to protect, maintain and enhance both the immediate and the long-term health, safety, and general welfare of the citizens on the town, this chapter has the following objectives: A. To prevent decreases in groundwater recharge and stream base flow to maintain aquatic life, assimilative capacity, and potential water supplies. B. To maintain the integrity of stream geometry to sustain the hydrologic functions of streams. C. To facilitate the removal of pollutants in stormwater runoff to perpetuate the natural biological functions of streams. The granting of a variance will not: increase or decrease the rate or volume of surface water runoff; have an adverse impact on a wetland, watercourse, or water body; contribute to the degradation of water quality.					
Post-Disaster Recovery Ordinance	No	Yes	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	No	Town of Newstead Comprehensive Plan, 2003	Local	Town Board and Planning Board
Comment: Comprehensive Plan contains guidance on achieving growth management that considers to risks of hazard exposure.					
Site Plan Review	Yes	No	Chapter 450 Zoning, Article XII Site Plan Review	Local	CEO and Building Department
Comment: The intent of this article is to set forth additional general standards applying to certain land uses and activities. The nature of these uses and activities requires special consideration of their impacts upon surrounding properties, the environment, community character and the ability of the Town of Newstead to accommodate development consistent with the objectives of the Comprehensive Plan and with this chapter. Site plan review of proposed development includes assessment of hazard exposure risks.					
Environmental Protection Ordinance	Yes	Yes	State SEQRA laws	State	Planning Board
Comment: The town includes SEQR review in its land use development processes.					
Flood Damage Prevention Ordinance	Yes	Yes	LL1-2019, Chapter 202, Flood Damage Prevention Ordinance	Local	Floodplain Administrator
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages;					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
E. Regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Newstead and Village of Akron Joint Comprehensive Plan Update	Local	Town Board
Comment: The Comprehensive Plan sets objectives to 1) Establish a program to identify, prioritize and protect or preserve the locally and regionally important scenic and natural resources of the community. 2) Promote a regional focus on the communities' resources, such as the different watersheds that transect the communities. 3) Continue to employ erosion and sediment control ordinances.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Erie County Agriculture and Farmland Protection Plan, 2012. Erie County Agricultural Districts	County	County Department of Environment and Planning
Comment: The Agriculture and Farmland Protection Plan address storage of manure and other hazmat on farms. The Plan also provides guidance on land preservation and open space protection which mitigate against flood risks. Agricultural Districts are renewed on a ten-year cycle.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Erie County Comprehensive Plan, 1995	County	County Department of Environment and Planning
Comment: Erie County Comprehensive Plan provides a strategy for economic development, including infrastructure and hazard mitigation.					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Erie County Post Disaster Recovery Plan	Local	County OEM
Comment: The Plan guides emergency response throughout the county with guidance specific to the Town of Newstead.					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Newstead to oversee and track development.

Table 9.34-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Floodplain development permits issued by the Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	82% buildout currently

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Newstead and their current responsibilities which contribute to hazard mitigation.

Table 9.34-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven Planning Board members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Five members and two alternates of Zoning Board of Appeals. Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Two staff members focus upon planning work, including supporting the Planning Board.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Council is a seven-person board charged with assisting the town in any matter that involves conservation and environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department. Eight staff at the Department. Department staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Building Department. Two staff members. Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Emergency Services. Three members. The Emergency Management/Disaster Coordinators handle the coordination of services in the event of an emergency in the Akron-Newstead area. They work closely with local officials and County, State and Federal officials to set up any necessary command centers and shelters. The coordinators are highly trained local volunteer firemen who are cross trained in incident command management.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Emergency Broadcast System, Cooperative with Akron Central School System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Highway Department and FPA
Mutual aid agreements	Yes	Between village/town/county and state
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Consulting planners, Wendel Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Consulting planners, Wendel Engineers
Planners or engineers with an understanding of natural hazards	Yes	Contract planners/engineers, Wendel Engineers
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Contract with Wendel Engineers and three in-house staff
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Daniel Kowalik, Emergency Services Coordinator
Grant writer(s)	Yes	Contract with Rotella Grant Management
Resilience Officer	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Newstead.

Table 9.34-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Newstead.

Table 9.34-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk and Emergency Management Coordinator
Personnel skilled or trained in website development	Yes	Town Clerk and Assessor's Clerk
Hazard mitigation information available on your website	Yes	Town website includes a link to the countywide Hazard Mitigation Plan process https://www2.erie.gov/exec/index.php?q=press/erie-county-continuing-update-hazard-mitigation-plan
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Emergency Management and Conservation Advisory Committee
Other programs already in place that could be used to	Yes	Emergency Management



Outreach Resources	Available? (Yes/No)	Comment:
communicate hazard-related information		
Warning systems for hazard events	Yes	Cooperative with Akron Central School System
Natural disaster/safety programs in place for schools	Yes	Akron Central School System
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Newstead.

Table 9.34-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4 commercial and 4 residential	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	5	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.34-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Wildfire	Strong

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.34.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Miller, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Newstead.

Table 9.34-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Newstead	11	8	\$26,190	2	6

Source: FEMA 2020a and 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town did not identify areas that are prone to flooding. The town does not maintain a list of properties that have been damaged by flooding. The town does not maintain a list of property owners interested in flood mitigation. There are not any Risk MAP projects currently underway in the town. The town stated that no properties have been mitigated. The town’s flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

Town Code Enforcement staff are responsible for floodplain administration however, there are not any certified floodplain managers on staff. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that floodplain management staff would benefit from assistance or training to support its floodplain management program. The town provides a comprehensive permit review process that involves both the Building Department and the Town Engineer. The town has localized GIS capabilities specific to the municipality to help with inspections of any project within the Town of Newstead. The town refers to state and federal authorities for their NFIP administration services as well as how to determine if proposed development on an existing structure would qualify as a substantial improvement. The town’s floodplain management program meets minimum requirements. Site plan review by the Town Engineer is required of all substantial development associated with a floodplain development permit. The Zoning Board of Appeals reviews variance applications for floodplain development. Grading and drainage plans are reviewed by the Town Engineer and the Planning Board when applicable. The town does not participate and is not interested in participating in the Community Renewal System.



The Town of Newstead does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in May 2010.

9.34.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Newstead has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 93 starting at Route 5 going north through the town and village up to the Niagara County line. This is a north/south route which is owned and plowed by NYSDOT
- Hunts Corner Road starting at Route 93 going west to the Town of Clarence line close to Salt Road. This is an east/west route. owned by Erie County & plowed by the Town of Newstead Highway Department.
- Route 5 from Genesee County line going east to the Town of Clarence line at Davison Road. This is an east/west route which is owned and plowed by the NYSDOT.
- North Millgrove Road from Route 5 going south to Route 33 in the Town of Alden. This is a north/south Route which is owned and plowed by the Erie County Highway Department.

Notification will be given to residents through local media, radio, & TV stations and/or a message through the public-school Emergency Broadcast System. The system will inform residents which evacuation routes to use.

Sheltering

The Town of Newstead has identified the following designated emergency shelters within the town.

Table 9.34-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Newstead Senior Center	5691 Cummings Road Akron, NY 14001	48	Yes	Yes	Yes	Basic First Aid	Food, heat, A.C., sleeping area
Newstead Fire Hall Station #1	5691 Cummings Road Akron, NY 14001	250	Yes	Yes	Yes	Paramedic services by Twin City Ambulance	Food, Heat, AC, Sleeping Area
Newstead Fire Hall Sta. #2	12012 Rapids Road, Akron, NY 14001	25	Yes	No	No	Basic First Aid	Warming Shelter



Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Newstead has identified the following sites suitable for placing temporary housing units.

Table 9.34-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Veteran’s Park	5929 Buell Street/Route 93 Akron, NY 14001	100 trailers	Open mowed field with a stone roadway	Water, electric	Permits and inspection
Newstead Sports complex	44 Skyline Drive Akron, NY 14001	100 trailers	Open mowed field with stone roadway	Water, electric	Permits and inspection
Town property	5750 Crittenden Road Akron, NY 14001	100 trailers	Open field mowed. No road	Water and electric available at the road	Permits and inspection

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Newstead did not identify any sites suitable for relocating homes outside of the floodplain.

Table 9.34-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with county staff to identify permanent housing locations, as specified in Proposed Action #2022-Town of Newstead-011					

9.34.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.34-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.34-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	12	0	12	0	22	0	7	0	23	0	15	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	4	0	4	0	11	0	1	0	8	0	4	0
Total Permits Issued	16	0	16	0	33	0	8	0	31	0	19	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*		Description / Status of Development					
Recent Major Development and Infrastructure from 2015 to Present												
None identified by the town												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
MGA Research	Commercial	1		13311 Main Street, 651.00-4-49.111	None		Planning submission					
Bedford Greenhouses	Commercial	Multiple		5675 Buell Road, 61.00-2-4.1	None		In Phase 1 of development					
Arrowhead Motel	Commercial	35		12292 Clarence Center Road, 46.00-4-49.1	½ Mile Buffer from HazMat Pipelines		Planning submission					

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.34.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Newstead’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Newstead has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.34-1. Town of Newstead Hazard Area Extent and Location Map 1

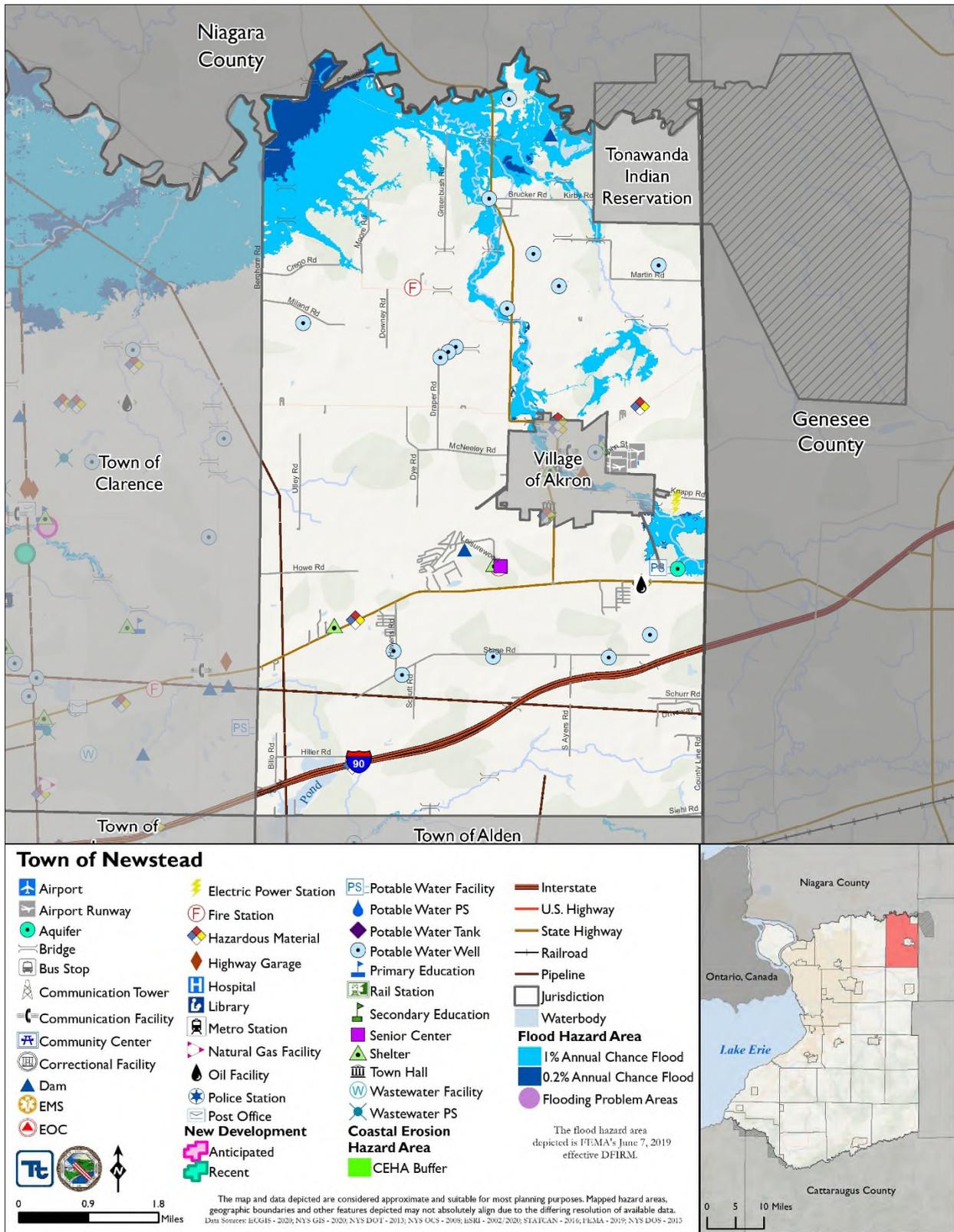




Figure 9.34-2. Town of Newstead Hazard Area Extent and Location Map 2

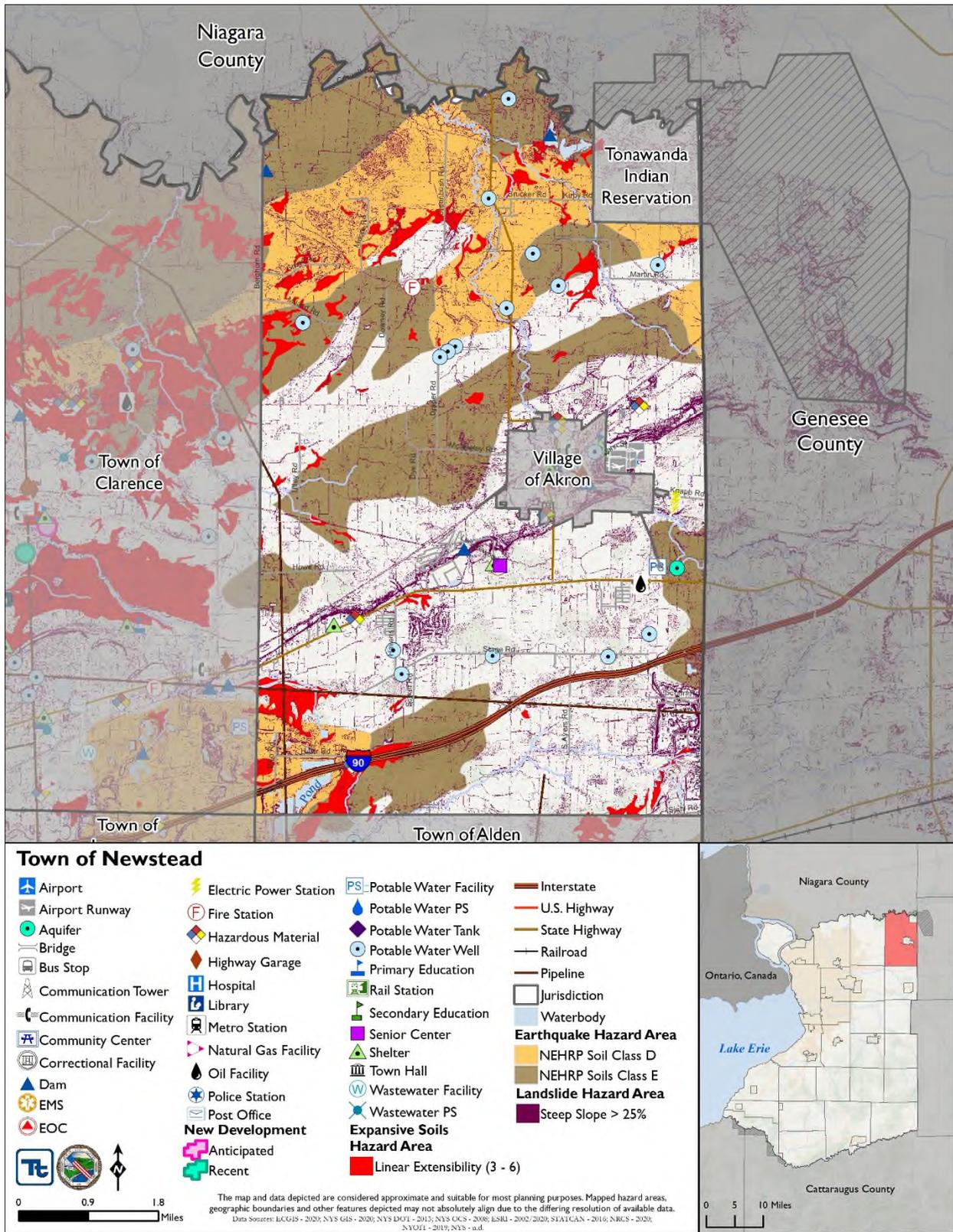
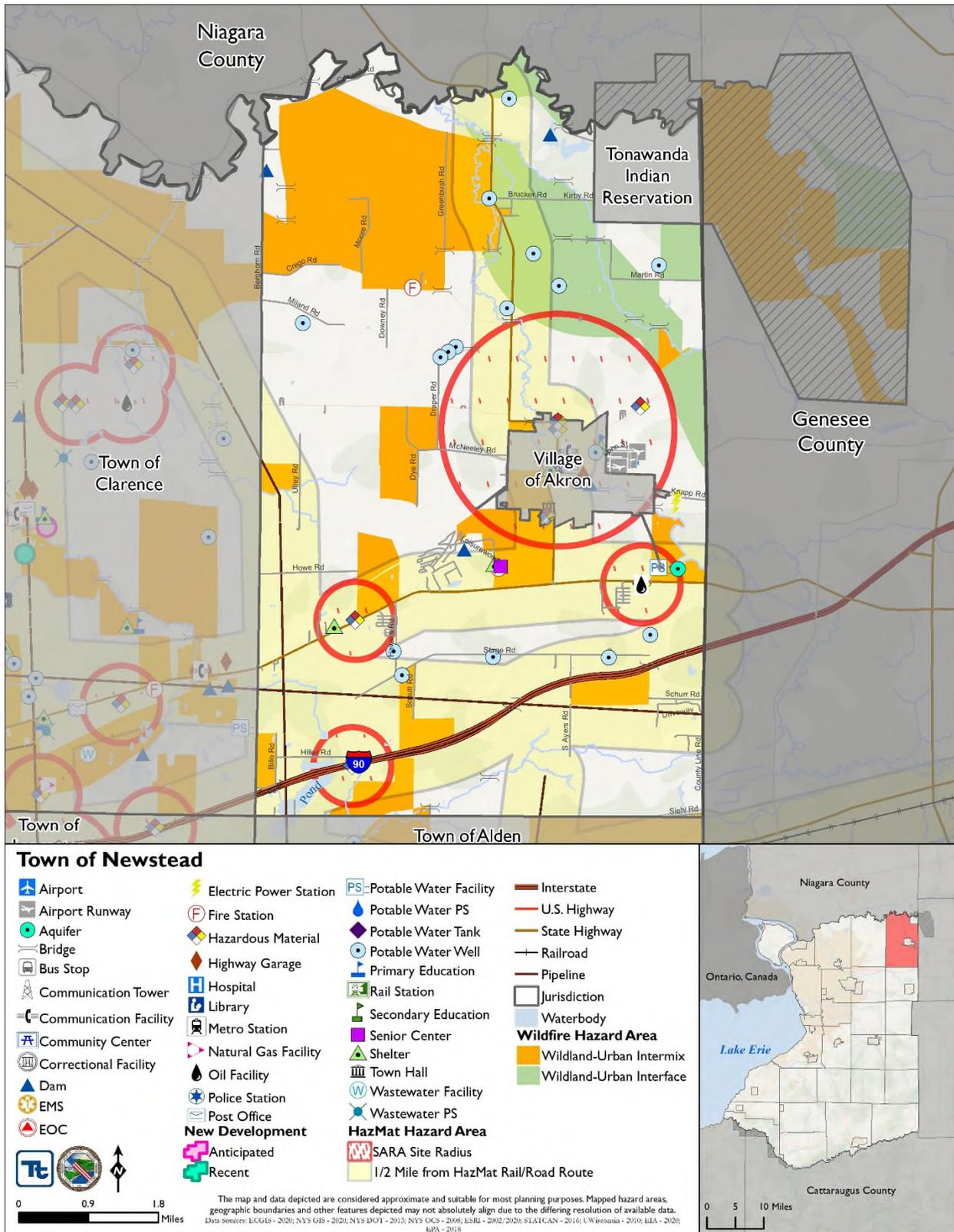




Figure 9.34-3. Town of Newstead Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Newstead’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.34-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.34-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county was impacted by this event, the town did not report any damage
October 28-29, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted by this event, the town did not report any damage
November 12, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
November 18, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
January 11, 2017	High Wind	No	Although the county was impacted by this event, the town did not report any damage
March 8, 2017	High Wind	No	Although the county was impacted by this event, the town did not report any damage
March 13, 2017	Winter Storm	No	Although the county was impacted by this event, the town did not report any damage
July 20, 2017	Tornado	No	Although the county was impacted by this event, the town did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted by this event, the town did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
January 2, 2018	Blizzard	No	Although the county was impacted by this event, the town did not report any damage
October 6, 2018	Lightning	No	Although the county was impacted by this event, the town did not report any damage
February 24, 2019	High Wind	No	Although the county was impacted by this event, the town did not report any damage
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted by this event, the town did not report any damage
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted by this event, the town did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Newstead’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Newstead. The Town of Newstead has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the Flood hazard risk ranking should be increased from Low to Medium.

Table 9.34-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Medium	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction



Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.34-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified.						

Source: FEMA 2021



Identified Issues

After review of the Town of Newstead’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Newstead has identified the following vulnerabilities within their community:

- Spring / Fall flooding is regular in area of Cedar Street and Koepsel Road located in Zone A. and Burdick Road, Fletcher Road, Tonawanda Creek Road, and Kelkenberg Road in Zone B.
- Culverts and storm water channels become blocked with debris and contribute to flooding.
- The Tonawanda Creek is eroding the roadway at Bruning Road which results in need for regular repair.
- The Pohl Road Bridge has sustained damage from storm debris impacts.
- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The Montgomery Marsh Dam is in the 0.2 percent floodplain.
- The town lacks a stockpile of sand piles, sandbags, dyke and plug material.
- Certain residential properties have flooded multiple times.
- Floodplain Management ordinances may not be consistent with FIRMs.
- Use of Geographic Information Systems could benefit the town’s flood management efforts.
- The town was unable to identify permanent housing locations.

9.34.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.34-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Installation of backup generator at town of Newstead/Village of Akron joint DPW facility. (joint project between town and village - Town of Newstead to be lead agency)	Power Outage/ Storms	Will mitigate impact of severe storms and Disaster-related power outages by allowing Continuity of operations for DPW services and Response in town of Newstead/Village of Akron	Town Board	Complete			<ol style="list-style-type: none"> Discontinue Generator is in place and functional, just minor security and landscaping items remain to be finished.
	Open storm water channels and culverts and remove debris from key drainage waterways to accommodate storm water/flooding	Flooding	Will mitigate the effects of flooding and high-water events	Town Hwy Dept	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Erosion mitigation Tonawanda Creek at Bruning Rd. - take action to stop	Flooding	Encroachment of creek to roadway; mitigate Eroding soils and undermining of road bed and threat to roadway	Town Board	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Pohl Rd Bridge improvements. Abutment strengthening, improve drainage capacity, mitigate bridge damage from debris	Flooding	Not Identified	Town Board	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	GIS system expansion - additional data layers and increased training to FD's. Increase training efforts to fire depts to allow maximum use of	HAZMAT/ Multi-Hazard	Will help to improve operational efficiency during disaster events and thus mitigate effects of disaster	GIS Dept	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	system for emergency planning					Evidence of Success		
	Develop modest stockpile/easy access to sand piles, sandbags, dyke/plug materials at joint DPW facility; joint project with Village of Akron, Town Newstead to be lead	HAZMAT/ Flooding/ Storm	Will mitigate effects of future hazmat/flooding events by having supplies readily at hand and accessible to both municipalities to stop damage during disaster events	Hwy Dept	In Progress	Cost		<ol style="list-style-type: none"> Include in 2022 HMP
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Develop modern and efficient salt storage facility at joint DPW facility. Joint project with Village of Akron, Town of Newstead lead	Winter Storm	Will mitigate effects of future winter storms by allowing de-icing materials to be readily accessible and available to DPW	Town Board	Complete	Cost		<ol style="list-style-type: none"> Discontinue Project completed.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Building Dept	In Progress	Cost		<ol style="list-style-type: none"> Include in 2022 HMP Currently reviewing FEMA regulation requirements
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building Dept	In Progress	Cost		<ol style="list-style-type: none"> Include in 2022 HMP Update to most recent FIRMS
						Level of Protection		
						Damages Avoided; Evidence of Success		



Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Newstead participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.34-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	-	-	-	-	-	-	X
Cyber Attack	X	X	-	-	-	-	-	-	-	X
Earthquake	X	X	-	-	-	-	-	-	-	X
Expansive Soils	X	X	-	-	-	-	-	-	-	X
Extreme Temperature	X	X	-	-	-	-	-	-	-	X
Flood	X	X	X		X	X		X		X
Hazardous Materials	X	X	-	-	-	-	-	-	-	X
Landslide	X	X	-	-	-	-	-	-	-	X
Pandemic	X	X	-	-	-	-	-	-	-	X
Severe Storm	X	X	-	-	-	-	-	-	-	X
Severe Winter Storm	X	X	-	-	-	X	-	-	-	X
Wildfire	X	X	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.34-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Newstead would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.34-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-001	Open storm water channels and culverts and remove debris from key drainage waterways to accommodate storm water/flooding	1	Flood, Severe Storm	<p>Problem: Culverts and storm water channels become blocked with debris and contribute to flooding. Affected roads include Tonawanda Creek Road, Burdick Road, Koepsel Road, Martin Road, Cedar Street, Berghorn Road, Brackett Road, Bruning Road and Brucker Road.</p> <p>Solution: Remove debris from key drainage floodways to accommodate storm water surges.</p>	No	No	1 year	Town Highway Department	Staff time	Reduce flooding hazard	Municipal budget	High	SIP	SP
2022-Town of Newstead-002	Mitigate erosion along Tonawanda Creek at Bruning Road	2	Flood	<p>Problem: The Tonawanda Creek is eroding the roadway at Bruning Road which results in need for regular repair.</p> <p>Solution: Complete an engineering study. Design and install flood mitigation at this location. Such measures could include rip rap installation, floodwalls, and other measures.</p>	No	No	2 years	Town Highway Department	Pending Engineering analysis	Reduce flooding and protect travel along Bruning Road	FEMA, HMGP, BRIC	High	NSP	NR



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-003	Protect the Montgomery Marsh Dam to the 0.2% annual chance flood event	1	Flood	<p>Problem: The Montgomery Marsh Dam is in the 0.2% annual chance flood event</p> <p>Solution: The town will contact the facility managers of privately owned dams and discuss options for protecting the dams to the 0.2% annual chance flood event.</p>	Yes	No	Within 5 years	Town Engineer	\$1,000 staff time for outreach and coordination	Ensure the dam continues to provide flood protection services	FEMA, HMGP, BRIC, HMA	High	SIP	PR
2022-Town of Newstead-004	Protect the Pohl Road Bridge from damage caused by storm debris	1	Flood	<p>Problem: The Pohl Road Bridge has sustained damage from storm debris impacts.</p> <p>Solution: The town will conduct a feasibility study to choose effective means to strengthen and improve drainage capacity and mitigate bridge damage from storm debris. The Town Highway Department will then implement these mitigation measures.</p>	No	No	2 years	Town Highway Department	Pending engineering analysis	Protect bridge from further damage and protect travelers on the roadway	FEMA, HMGP, BRIC, HMA	High	SIP	PP



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-005	Floodplain Administrator to attend training on floodplain management	3	Flood	<p>Problem: Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.</p> <p>Solution: Obtain/host training and certification for floodplain managers.</p>	No	No	Within 5 years	ECDHSES, Town Emergency Manager	\$3,000	Certified floodplain managers trained Floodplain management improved.	County	High	LPR	PR
2022-Town of Newstead-006	Protect Emergency Management offices from utility failure	1	All Hazards, Utility Failure	<p>Problem: The new Emergency Management Office at 50 John Street lacks backup power and is vulnerable to power failure.</p> <p>Solution: Town will assess the cost and determine the proper size of a backup generator for the Emergency Management facility. The Highway Department will install the generator and necessary electrical components and be</p>	Yes	No	Within 3 years	Town Emergency Management, Town Board	~\$50,000	Permit Emergency Management services continue during a hazard event.	Town budget, EMPG	High	SIP	ES



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				responsible for maintenance.										
2022-Town of Newstead-007	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	Flood, HazMat	<p>Problem: Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron</p> <p>Solution: Stockpile sand piles, bags, and associated equipment. Share cost and maintenance and access to material with Village Akron.</p>	No	No	Within 1 year	Town Emergency Management, and Village of Akron Board	\$100,000	Protect life and property from flooding and Hazmat danger	Town budget, EMPG	High	SIP	ES
2022-Town of Newstead-008	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share with homeowners	High	SIP	PP



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.										
2022- Town of Newstead-009	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	2	Flood	Problem: Floodplain management ordinance may not meet all requirements, including freeboard. Solution: Town Board will review and approve a floodplain management ordinance that addresses all of FEMA's requirements.	No	No	Within 1 year	Town Board, FPA	Staff time	Ensure community is protected from flooding	Municipal budget	High	LPR	PR
2022- Town of Newstead-010	Expand use of Geographic Information Systems into emergency response.	1	All Hazards, HazMat	Problem: The town is not maximizing the use of Geographic Information Systems into emergency	No	No	Within 5 years	Town Board, FPA, Town Highway Department	\$50,000	Ensure town is maximizing the use of available emergency	Municipal budget, EMPG	High	LPR	ES



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				management services. Solution: GIS system expansion – additional data layers and increased training to Fire Departments. Increase training efforts to fire depts to allow maximum use of system for emergency planning						response tools				
2022- Town of Newstead-011	Identify Permanent Housing Locations	1	All Hazards	Problem: The town is not able to identify locations for permanent housing for use after a natural hazard. Solution: The town will work with the county to identify and potentially acquire locations for permanent housing.	No	No	Within 3 years	FPA, Town Board	Staff time	Ensure residents have access to a safe location to settle after a displacing hazard event.	Municipal budget	High	SIP	ES
2022- Town of Newstead-012	Reduce flooding along specified roadways	1	Flood	Problem: Spring / Fall flooding is regular in area of Cedar Street and Koepsel Road located in Zone A and Burdick Road, Fletcher Road, Tonawanda Creek Road, and Kelkenberg Road in Zone B.	No	No	2 years	Town Highway Department	TBD by engineering analysis	Preserve emergency vehicle access along important roadways	BRIC, HMGP, municipal budget	High	SIP	PR



Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: Town Highway Department will conduct an analysis to determine the best methods, including log removal, to reduce flooding from the stream.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.34-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Newstead-001	Open storm water channels and culverts and remove debris from key drainage waterways to accommodate storm water/flooding	1	1	1	1	0	1	1	0	1	0	1	1	1	1	11	High
2022-Town of Newstead-002	Mitigate erosion along Tonawanda Creek at Bruning Road	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022-Town of Newstead-003	Protect the Montgomery Marsh Dam to the 0.2% annual chance flood event	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-Town of Newstead-004	Protect the Pohl Road Bridge from damage caused by storm debris	1	1	1	1	0	1	1	1	1	0	0	1	1	1	11	High
2022-Town of Newstead-005	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Town of Newstead-006	Protect Emergency Management from utility failure	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	High
2022-Town of Newstead-007	Develop stockpile of sand piles, sandbags, dyke and plug material at	1	1	1	1	0	1	1	0	1	1	1	1	1	0	11	High



Table 9.34-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	joint DPW facility. Joint project with Village of Akron																
2022-Town of Newstead-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Town of Newstead-009	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	0	1	1	1	1	0	0	1	1	1	11	High
2022-Town of Newstead-010	Expand use of Geographic Information Systems into emergency response.	1	1	1	1	1	1	1	1	1	0	1	0	1	1	12	High
2022-Town of Newstead-011	Identify Permanent Housing Locations	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	High
2022-Town of Newstead-012	Reduce flooding along specified roadways	1	1	1	1	0	1	1	1	1	0	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.34.9 Action Worksheets

The following action worksheets have been developed by the Town of Newstead to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Newstead Action Worksheet			
Project Name:	Protect Emergency Management from utility failure		
Project Number:	2022-Town of Newstead-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure, All Hazards		
Description of the Problem:	The new Emergency Management Office at 50 John Street lacks backup power and is vulnerable to power failure.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town will assess the cost and determine the proper size of a backup generator for the Emergency Management facility. The Highway Department will install the generator and necessary electrical components and be responsible for maintenance.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against utility failure	Estimated Benefits (losses avoided):	Ensures continuity of operations at the town's municipal emergency management facility
Useful Life:	~20 Years	Goals Met:	1
Estimated Cost:	~\$50,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Emergency Management	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Potential loss of services from this critical facility
	Construct a solar farm	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect Emergency Management from utility failure	
Project Number:	2022-Town of Newstead-006	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided at this facility
Property Protection	1	Project will protect the emergency management office
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	The town the has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	0	
Multi-Hazard	1	All Hazards
Timeline	0	Within 3 years
Agency Champion	1	Town Board
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Town of Newstead Action Worksheet			
Project Name:	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron		
Project Number:	2022-Town of Newstead-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, HazMat		
Description of the Problem:	Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron		
Action or Project Intended for Implementation			
Description of the Solution:	Stockpile sand piles, bags, and associated equipment. Share cost and maintenance and access to material with Village Akron.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against damage from flooding and HazMat leaks	Estimated Benefits (losses avoided):	Ensures protection of life and property during hazard events
Useful Life:	Ongoing program once established	Goals Met:	1
Estimated Cost:	\$100,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	Within 1 year	Potential Funding Sources:	Town Budget, EMPG
Responsible Organization:	Town Emergency Management, and Village of Akron Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Potential loss of services from this critical facility
	Remove all property from hazard exposure areas	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	
Project Number:	2022-Town of Newstead-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect life safety throughout exposed areas of the town
Property Protection	1	Project will protect properties as needed.
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	The town has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, HazMat
Timeline	1	1 year
Agency Champion	1	Town Emergency Management, and Village of Akron Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



9.35 Town of North Collins

This section presents the jurisdictional annex for the Town of North Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of North Collins’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.35.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of North Collins’s hazard mitigation plan primary and alternate points of contact. The Town of North Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments. The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.35-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: John M. Tobia, Town Supervisor Address:10569 Main St., North Collins, NY 14111 Phone Number: 716-337-3839 Email: jtobia@northcollinsny.org	Not Identified
NFIP Floodplain Administrator	
Name/Title: John M. Tobia, Town Supervisor Address:10569 Main St., North Collins, NY 14111 Phone Number: 716-337-3839 Email: jtobia@northcollinsny.org	

9.35.2 Municipal Profile

The Town of North Collins is in the south-central portion of Erie County. The town is approximately 43 square miles in size and contains the Village of North Collins. The town is bounded on the north by the Towns of Eden and Boston, on the east by the Town of Concord, to the south by the Town of Collins and on the west by the Town of Brant and the Cattaraugus Indian Reservation. North Collins was founded in 1852 as the "Town of Shirley", and was formed from the northern portion of the original Town of Collins. In 1853 the town adopted its current name and in incorporated in 1911. The village is the community’s main settlement.

The first white settlers arrived in the area in 1809 and were primarily English Quakers from New England. The second wave of settlers arrived from Germany beginning about 1830. The third wave was mostly Italians, after 1900, from the City of Buffalo who came to work on town farms. The Town of North Collins is a predominantly rural community but improvements in transportation coupled with available, inexpensive land have drawn





residents seeking a rural lifestyle. Significant suburban residential development occurred in the town during the late 20th Century. (comp plan), U.S. Route 62 and NYS Routes 75 and 249 traverse the town. The south branch of Eighteen Mile Creek flows through the town on its way to Lake Erie (Town of North Collins website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of North Collins was 2,291. The estimated 2019 population was 2,130, a seven percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 15.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.35.3 Jurisdictional Capability Assessment and Integration

The Town of North Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.35.3). The Town of North Collins’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of North Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.35-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 114	Local	Code Enforcement
Comment: NYS Uniform and Energy Code 2020; The purpose of this chapter is to provide for the removal or repair of buildings in business, industrial and residential sections of the Town of North Collins that, from any cause, may now be or shall hereafter become dangerous or unsafe to the public, and which continue in violation of the Town Code and to also provide for a means of abatement and enforcement of Town Law regarding continuing violations of the Town Code.					
Zoning Code	Yes	Yes	Chapter 265	Local	Zoning Board
Comment: A comprehensive zoning plan is hereby established for the area of the Town of North Collins outside the incorporated area of the Village of North Collins by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The comprehensive zoning plan set forth in the text and map which constitute this chapter is adopted in order to					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>promote and protect the public health, safety, comfort, convenience and prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. The comprehensive zoning plan also gives consideration to the recommendations contained in the Master Plan for the Town of North Collins prepared in 1969.</p>					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 206	Local	Planning Board
<p>Comment: The Town of North Collins Planning Board is hereby empowered to review, approve, approve with modifications or disapprove all site plans as required by § 206-12 of this chapter. The purpose of such site plan review and approval procedures is to ensure conformity and adequate adherence to the various provisions of this chapter and Chapter 265, Zoning, of the Town of North Collins; to ensure that uses of land so affected by these provisions meet design, function and layout criteria established by this chapter that will culminate in development that will protect the health, safety and general welfare of Town residents and are compatible with the intent of the Master Plan and its proposals and recommendations; and to ensure the ability of the Town to accommodate the growth resulting from the proposed use without undue adverse effect on the Town and its citizens and taxpayers and the protection of the health, safety and common welfare of the Town and its citizens.</p>					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	No	No	-	Local	-
Comment: The town does not participate in the NFIP.					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Not Indicated	Local	Town Board/Planning Board
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	Yes	No	Not Indicated	Local	Town Board
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	Yes	No	Not Indicated	Local	Town Board
Comment: None					
Other	No	-	-	-	-
Comment: None					



Development and Permitting Capability

The table below summarizes the capabilities of the Town of North Collins to oversee and track development.

Table 9.35-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning/Zoning/Town Boards
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Town has land adjacent to park that could be used for housing/other projects

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of North Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.35-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	-Meetings are scheduled by the request of the Town Board.
Zoning Board of Adjustments	Yes	Board Meetings are scheduled by request of the petitioner.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	-
Construction/Building/Code Enforcement Department	Yes	Code Enforcement is responsible for permitting, zoning, and site plans.
Emergency Management/Public Safety Department	Yes	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Not indicated
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Code Enforcement
Staff with expertise or training in benefit/cost analysis	Yes	Code Enforcement
Professionals trained in conducting damage assessments	Yes	Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	-
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of North Collins.

Table 9.35-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of North Collins.





Table 9.35-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	Yes	http://www.northcollinsny.org/default.html
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning and Zoning Boards
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of North Collins.

Table 9.35-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.35-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.35.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Tobia, Town Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of North Collins.

Table 9.35-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of North Collins	0	0	\$0	0	0

Source: FEMA, 2019
 Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town of North Collins has identified the New Oregon Park as being vulnerable to flooding, and that flood hazard maps adequately address the flood risk within the jurisdiction. There have been no previous Substantial Damage determinations within the village, nor any RiskMAP projects. The town does not maintain a lost of property owners interested in flood mitigation, due to low risk.

NFIP Compliance

The Town does not participate in the NFIP.



9.35.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of North Collins has identified the following routes and procedures to evacuate residents prior to and during an event.

- Code Red is sounded to all residents giving directions for routes and shelters, specific to each event. The town also uses social media to reach residents.

Sheltering

The Town of North Collins has identified the following designated emergency shelters within the town.

Table 9.35-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Gowanda State Rd	100	No	Yes	No	None	Shelter/Kitchen
Langford Fire Dept.	Langford Rd	125	No	Yes	Yes	EMT	Food/Shelter
Town Hall	Gowanda State Rd	125	No	Yes	No	Sheriff/EMT	Shelter/Water

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of North Collins has identified the following sites suitable for placing temporary housing units.

Table 9.35-11. Temporary Housing Locations

Site Name	Site Address	Infrastructure /Utilities Available	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Fricano Park	Gowanda State Road	Yes	800	Park Grounds	Will need toilet facilities to accommodate big crowd
Langford Park	Langford Road	Water/electric	300	Park Grounds	Will need toilet facilities to accommodate big crowd
Tractor Pull Area	Sission Highway	Water/electric	500	Park Grounds	Will need toilet facilities to accommodate big crowd

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning



requirements and floodplain laws. The Town of North Collins has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.35-12. Permanent Housing Locations

Site Name	Site Address	Infrastructure /Utilities Available	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Fricano Park area	Gowanda State Road	Nearby	30	Vacant unused park land	Everything would need to be brought to code

9.35.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.35-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.35-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	4	0	3	0	4	0	2	0	3	0	3	0
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	4	0	3	0	4	0	2	0	3	0	3	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.35.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of North Collins’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified



using mapping techniques and technologies and for which the Town of North Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.35-1. Town of North Collins Hazard Area Extent and Location Map 1

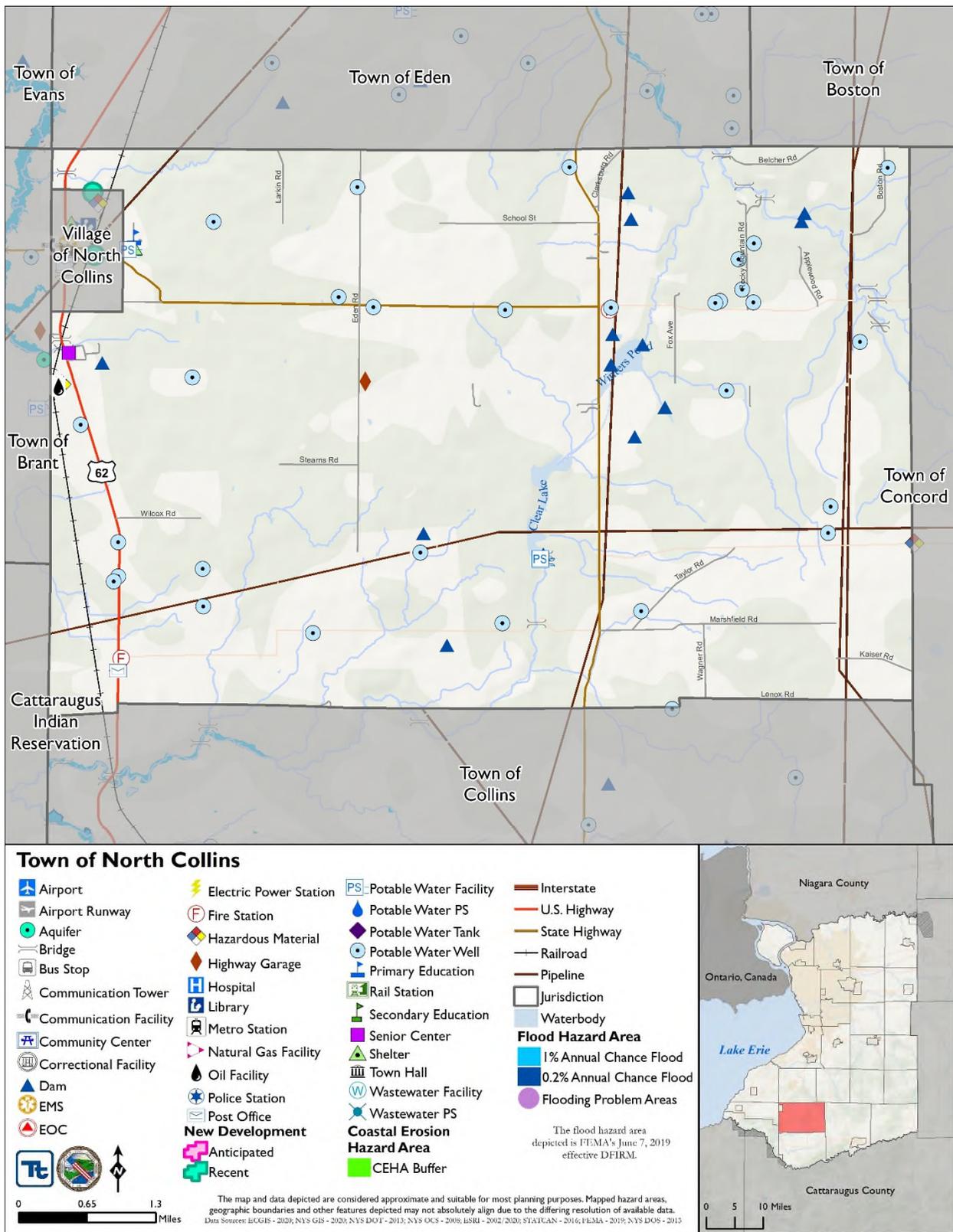




Figure 9.35-2. Town of North Collins Hazard Area Extent and Location Map 2

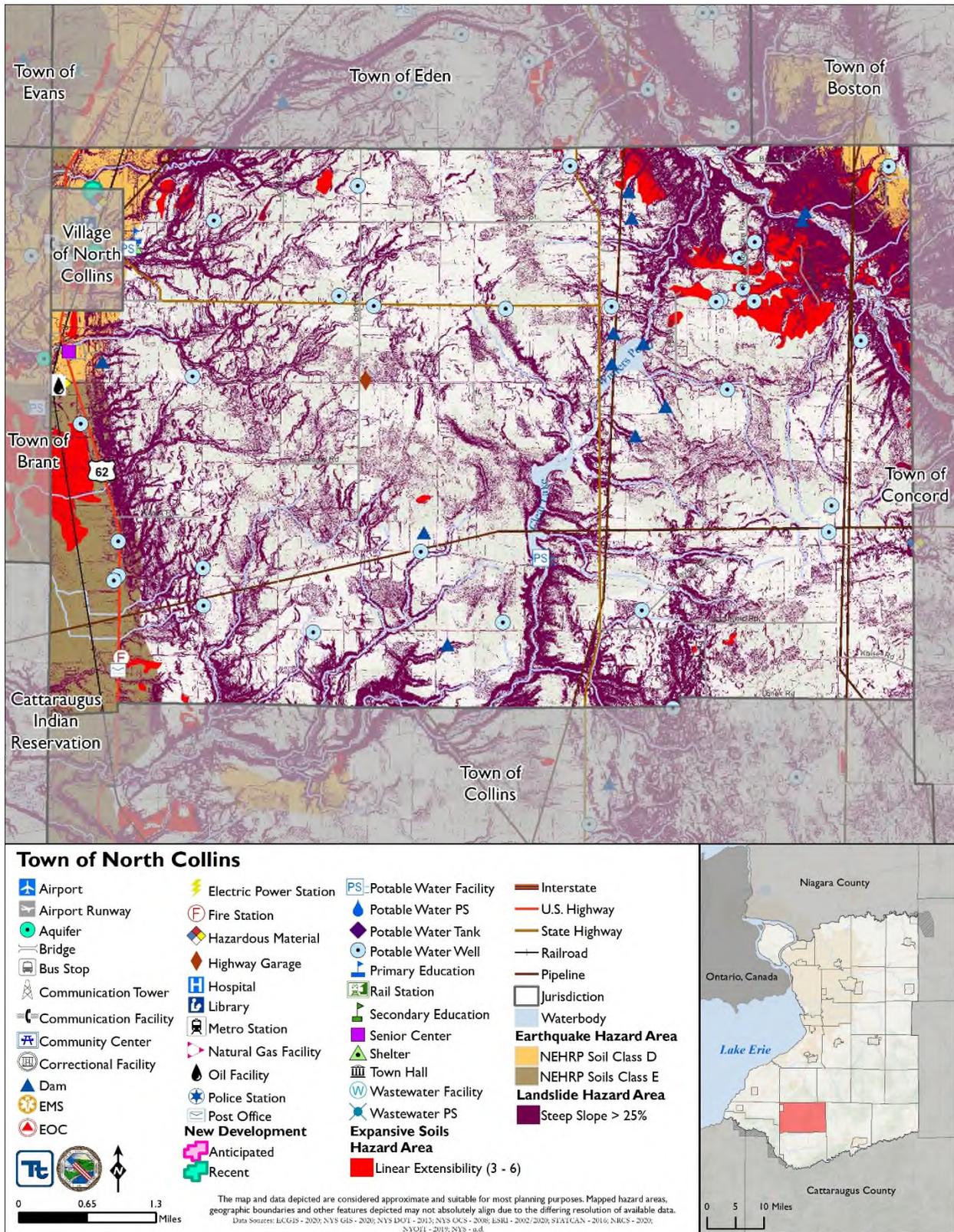
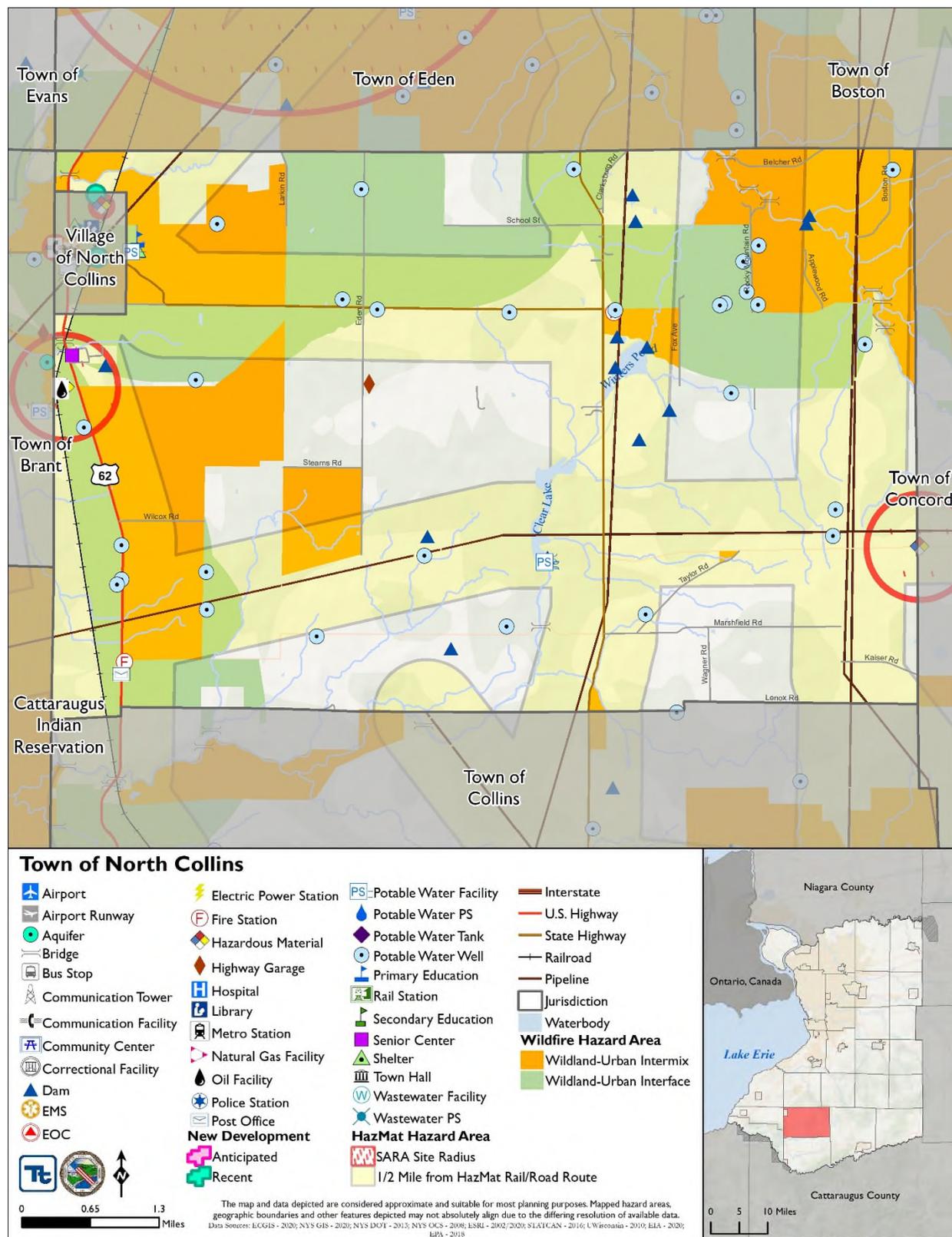




Figure 9.35-3. Town of North Collins Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of North Collins’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.35-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.35-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the town did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the town did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the town did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the town did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the town did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the town did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
October 27- November 1, 2019	Lakeshore Flooding High Wind DR-4472 NY	Yes	No



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
February 2020	COVID-19	Yes	Multiple ongoing costs to town - PPE

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of North Collins’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of North Collins. The Town of North Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.35-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.35-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Town of North Collins’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of North Collins has identified the following vulnerabilities within their community:

- Town Hall and Evacuation Center (Senior Center) do not have backup power.
- New Oregon Road area experiences flooding issues.
- The town now has a water district and any power outages or flooding could cause problems.

9.35.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.35-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
-	Storm water management to reduce the damage to the North East corner of North Collins Village. Diversion of stormwater in conjunction with village storm sewer repair.	Runoff Flooding	DPW	Not Identified	No Progress	-	-	1. Include in the 2022 HMP as 2022-T. North Collins-001. 2. The existing storm drainage system is inadequate for the needs of the town and village. 3.
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of North Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of North Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.35-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood		X	X					X	X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X								X
Severe Winter Storm		X								X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.35-19 summarizes the comprehensive range of specific mitigation initiatives the Town of North Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.35-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.35-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. North Collins-001	Storm Drainage System Improvements	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The existing storm drainage system is inadequate for the needs of the town and village.</p> <p>Solution: The village and town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce impacts of storms on the properties along Railroad Ave.</p>	No	No	Short	Village of North Collins and Town of North Collins	High	High, property protections and reduces flooding and erosion	CDBG	High	SIP, NSP	SP, NR
2022-T. North Collins-002	Town Hall and Senior Center Generators	1, 2	All Hazards	<p>Problem: The Town Hall and Evacuation Center (Senior Center) are critical facilities and do not have backup power.</p> <p>Solution: The Town of North Collins will seek funding to purchase and install automatic permanent generators at these facilities to ensure continuity of operations of government and life safety and use of the evacuation center. The town will ensure that both generators are installed outside of increased areas for additional hazard impacts (outside of floodprone areas, covered from storm impacts, etc.).</p>	Yes	No	Short	Town of North Collins	High, estimated \$75,000/generator	High, ensures continual operations of government and life safety	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV Community Assistance Visit

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program

Timeline:

The time required for completion of the project upon implementation





CRS Community Rating System
 DPW Department of Public Works
 EHP Environmental Planning and Historic Preservation
 FEMA Federal Emergency Management Agency
 FPA Floodplain Administrator
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program
 OEM Office of Emergency Management

HMGF Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Cost:
 The estimated cost for implementation.

Benefits:
 A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.35-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. North Collins-001	Storm Drainage System Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High
2022-T. North Collins-002	Town Hall and Senior Center Generators	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.35.9 Action Worksheets

The following action worksheets have been developed by the Town of North Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Storm Drainage System Improvements		
Project Number:	2022-T. North Collins-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The existing storm drainage system is inadequate for the needs of the Town and Village.		
Action or Project Intended for Implementation			
Description of the Solution:	The village and town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce impacts of storms on the properties along Railroad Ave.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, property protections and reduces flooding and erosion
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	SIP, NSP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	As soon as funding is available
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	CDBG
Responsible Organization:	Village of North Collins and Town of North Collins	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	\$500,000	Costly and may not solve problem
	Install sump pumps	\$500,000	May not fully solve problem, needs to cover large area, not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Storm Drainage System Improvements	
Project Number:	2022-T. North Collins-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects homes
Property Protection	1	Protects property
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village Support project
Legal	1	
Fiscal	-1	Will need to seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	Combined project with Village of North Collins
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Town Hall and Senior Center Generators		
Project Number:	2022-T. North Collins-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	The Town Hall and Evacuation Center (Senior Center) are critical facilities and do not have backup power.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of North Collins will seek funding to purchase and install automatic permanent generators at these facilities to ensure continuity of operations of government and life safety and use of the evacuation center. The town will ensure that both generators are installed outside of increased areas for additional hazard impacts (outside of Floodprone areas, covered from storm impacts, etc.).		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures continual operations of government and life safety
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	Estimated \$75,000/generator	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Immediately after funding received
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town of North Collins	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Town Hall and Senior Center Generators	
Project Number:	2022-T. North Collins-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures 24/7 operation of shelter location
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town DPW can install
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding
Environmental	1	No Concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.36 Village of North Collins

This section presents the jurisdictional annex for the Village of North Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of North Collins’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.36.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of North Collins’s hazard mitigation plan primary and alternate points of contact. The Village of North Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Mayor’s office, Clerk/Treasurer, and Department of Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.36-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Vincent George, Mayor Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-570-5992 Email: NCMayor2020@gmail.com	Name/Title: Jan Hutchinson, Clerk/Treasurer Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-337-3160 Email: VillageClerk@VillageofNorthCollins.org
NFIP Floodplain Administrator	
Name/Title: Michael W. Perry, DPW Supervisor Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-570-5991 Email: NCDPW@Yahoo.com	

9.36.2 Municipal Profile

The Village of North Collins is in the southwest portion of Erie County approximately 22 miles south of downtown Buffalo. The village is surrounded by the Town of North Collins to the north, east, and south and by the Town of Brant to the west. The village is 0.8 square miles (comp plan) in size. Big Sister Creek passes very close to the village border. US Route 62 and 249 traverse the town. The community was formerly known as "Rose's Corners" and "Kerr's Corners" (Village of North Collins, 2020).

According to the U.S. Census, the 2010 population for the Village of North Collins was 1,232. The estimated 2019 population was 2,130, a 72.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.2 percent of the population is 5 years of age or younger and 12.8



percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.36.3 Jurisdictional Capability Assessment and Integration

The Village of North Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.36.3). The Village of North Collins’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of North Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.36-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Article II: Chapter 62	Local	Code Enforcement
Comment: NYS Uniform and Energy Code 2020; The Uniform Fire Prevention and Building Code of the State of New York shall be applicable in the Village of North Collins.					
Zoning Code	Yes	Yes	Article VIII: Section 181-51	Local	Board of Trustees
Comment: Pursuant to the authority conferred by Article 7 of the Village Law of the State of New York and for each of the purposes specified therein, the Village Board of the Village of North Collins, County of Erie and State of New York, has ordained and does hereby enact the following chapter, regulating and restricting the location, size and use of buildings and other structures and the use of land in the Village of North Collins.					
Subdivision Ordinance	Yes	Yes	Article II: Chapter 154	Local	Board of Trustees
Comment: The purpose of subdivision regulations in the Village of North Collins is to: <ul style="list-style-type: none"> • Enable the Planning Board to implement its authority and power to approve subdivision plats in the public interest. • Achieve the orderly, efficient and economical development of the village through subdivision. • Promote development in accordance with the Master Plan of the Village of North Collins. • D. Promote and protect the health, safety and welfare of the entire community. 					
Stormwater Management Ordinance	Yes	Yes	Article V: Section 103-28	Local	Code Enforcement



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Storm drainage provisions: <ul style="list-style-type: none"> • Roofs and paved areas, including yards and courts, shall be drained. Storm drainage shall be conveyed to an adequate and approved system of stormwater disposal, where available. Storm drains shall be discharged in such manner that water will not flow onto sidewalks. • Where a drainage system may be subject to backwater, suitable provision shall be made to prevent its overflow into the building. • Leaders and gutters, if used, shall be constructed of noncombustible material. • Where storm drainage is interrupted by altering the ground level or contour or by any other means, adequate drainage must be provided to prevent flooding or an unnecessary accumulation of surface water, either up or down stream from the altered site. 					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Article I: Chapter 26-2	Local	Board of Trustees
Comment: The Planning Board is hereby authorized and empowered to approve plats showing lots, blocks or sites, with or without streets or highways, and to pass and approve the development of plats already filed in the office of the Clerk of the county if such plats are entirely or partially undeveloped.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	No	Yes	-	-	-
Comment: The Village does not participate in the NFIP.					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-



Section 9.36: Village of North Collins

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Updated January 2018	Local	Board of Trustees
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	N/A	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of North Collins to oversee and track development.

Table 9.36-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Farmland purchased by developer to either subdivide or build apartment buildings

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of North Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.36-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Joint Planning Board
Zoning Board of Adjustments	Yes	Zoning Board of Appeals
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Village DPW. Duties and services include: paving; plowing, streets and sidewalks; highway maintenance; brush and leaf pickup; and taking care of water system.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/Building Inspector. Duties and services include providing information and enforcement of village codes and issuing building permits.
Emergency Management/Public Safety Department	Yes	Emergency Manager
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED; outside Fire Alarm
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Managed by DPW
Mutual aid agreements	Yes	With Fire, Police, etc.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	One emergency manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of North Collins.

Table 9.36-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes; Clerk/Board of Trustees
Capital improvements project funding	Yes; Clerk/Board of Trustees
Authority to levy taxes for specific purposes	Yes, Board of Trustees
User fees for water, sewer, gas or electric service	Yes, Board of Trustees
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Clerk/Mayor
Incur debt through special tax bonds	Yes, Clerk/Mayor
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes, Clerk/Board of Trustees
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of North Collins.



Table 9.36-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Information available through Mayor and Clerk.
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	CodeRED and the outdoor fire siren
Natural disaster/safety programs in place for schools	Yes	Regular drills done at both schools.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of North Collins.

Table 9.36-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.36-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.36.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael W. Perry, DPW Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of North Collins.

Table 9.36-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of North Collins	0	0	\$0	0	0

Source: FEMA, 2019
 Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Village of North Collins is not participating in the NFIP Program. Flood risk to the village is minimal.

NFIP Compliance

Not applicable.



9.36.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of North Collins has indicated that evacuation routes are specific to hazard event and routes will vary according to the location and type of event.

Sheltering

The Village of North Collins has identified the following designated emergency shelters within the Village.

Table 9.36-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with the county to identify and designate an Emergency Shelter. See Mitigation Action 2022-V. North Collins-#001							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of North Collins has identified the following sites suitable for placing temporary housing units.

Table 9.36-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-V. North Collins-#002					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of North Collins has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.36-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-V. North Collins-#002					



9.36.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.36-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.36-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	-	0	-	0	-	0	-	2	0	1	0
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	2	0	1	0	0	-	2	0	0	-
Total Permits Issued	0	0	2	0	1	0	0	0	4	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Timberbuilt	Commercial	2		Eagle Drive		SFHA, NEHRP Soil Class D and E Hazard Area, Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Pipelines		Rebuilt and Expanded with new building				
Tractor Supply	Commercial	1		Main Street		None		Demo existing building and rebuild new				
Best Self Behavioral Health	Commercial	2		Spruce Street		Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area		Remodeled and expanded w/ engineering				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Cricket Meadows	Residential	1 or 2		Langford Rd		Possible flood or landslide areas due to no engineering consult		Possible apartment buildings				
Subdivision of home lots	Residential	Up to 6		Langford Rd – upper		None		Housing Subdivision				

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.





9.36.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of North Collins's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of North Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.36-1. Village of North Collins Hazard Area Extent and Location Map 1

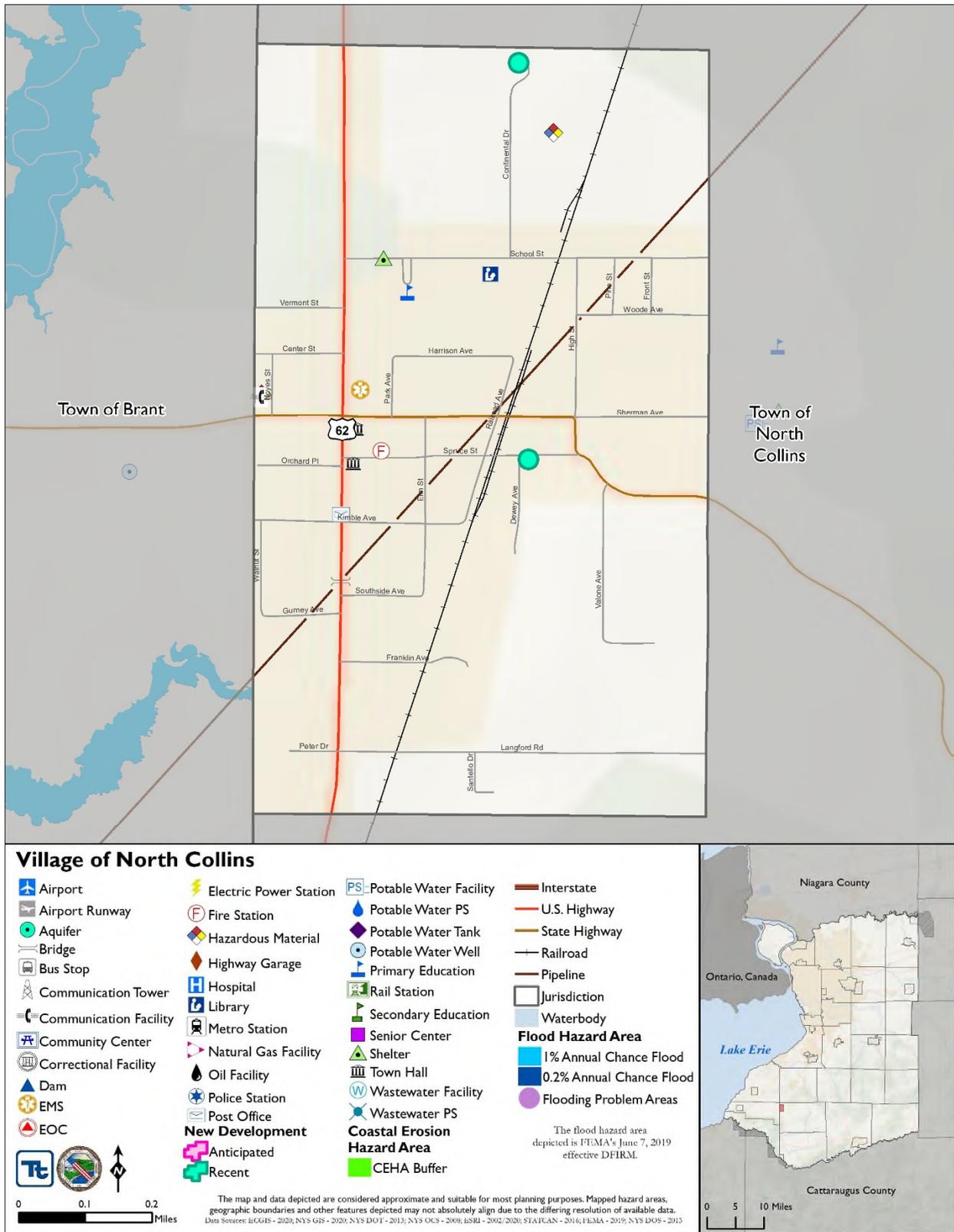




Figure 9.36-2. Village of North Collins Hazard Area Extent and Location Map 2

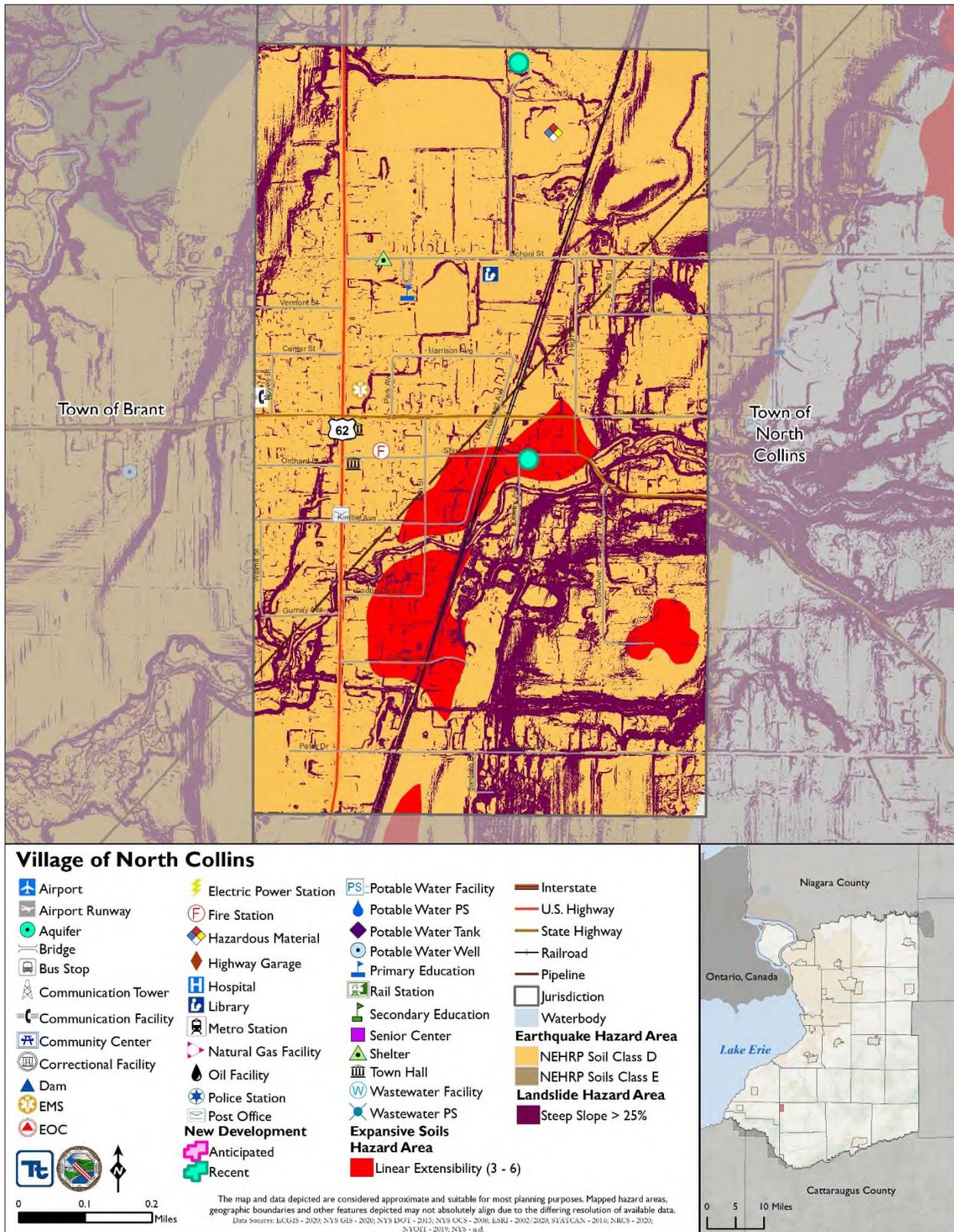
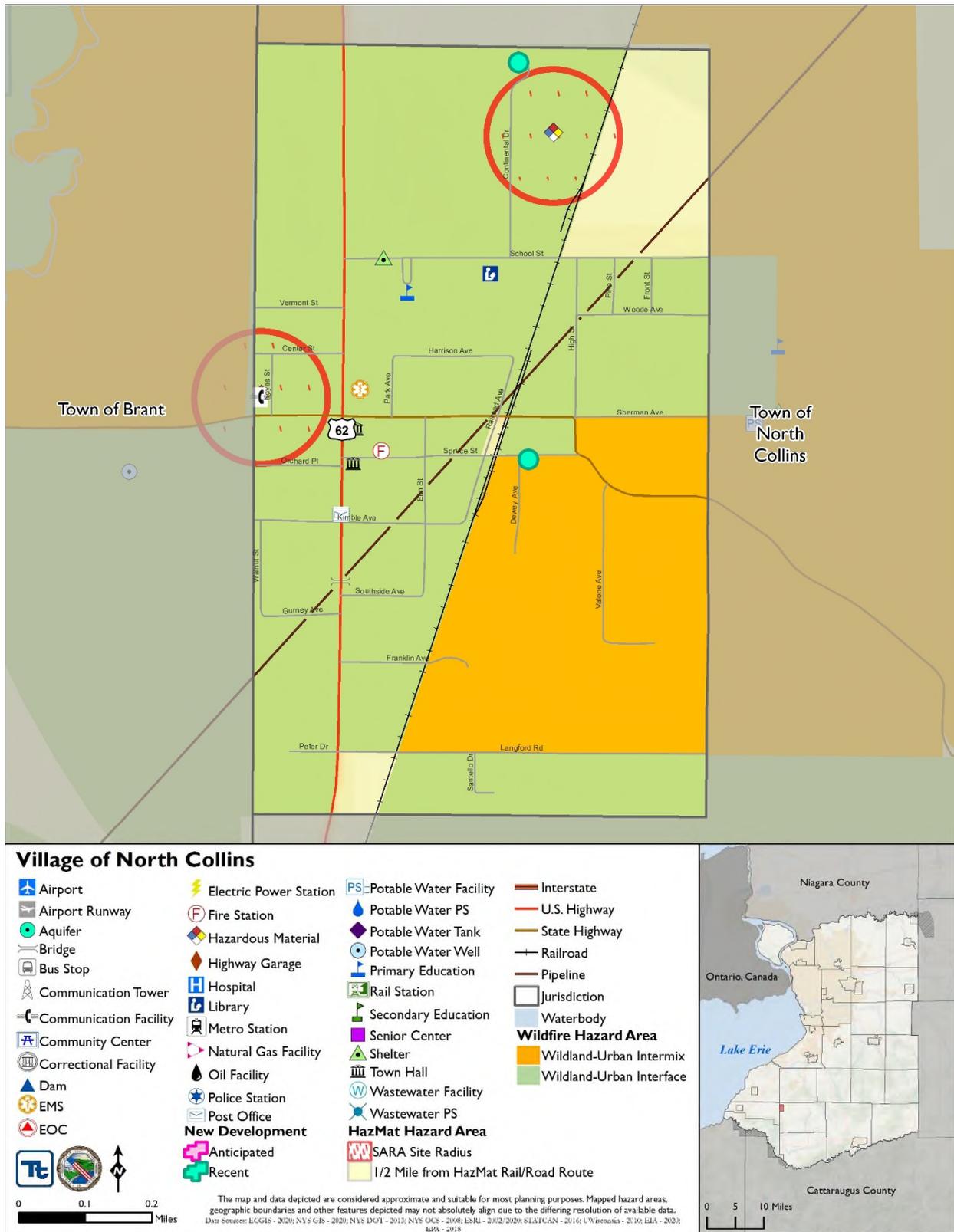




Figure 9.36-3. Village of North Collins Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of North Collins’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.36-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.36-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	-
August 11-15, 2015	Flash Flood	No	-
October 28-29, 2015	High Wind	No	-
November 6, 2015	Thunderstorm Wind	No	-
November 12, 2015	High Wind	No	-
November 18, 2015	High Wind	No	-
January 11, 2017	High Wind	No	-
March 8, 2017	High Wind	No	Yes, flagpole broken from wind = \$750
March 13, 2017	Winter Storm	No	-
July 20, 2017	Tornado	No	-
August 4, 2017	Thunderstorm Wind	No	-
December 10-15, 2017	Lake-effect Snow	No	-
December 24-29, 2017	Lake-effect Snow	No	-
January 2, 2018	Blizzard	No	-
October 6, 2018	Lightning	No	-
February 24, 2019	High Wind	No	-
February 24, 2019	Lakeshore Flooding	No	-
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	-
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	-
November 27, 2019	Lakeshore Flooding	No	-
January 12, 2020	Lakeshore Flooding	No	-
January 18, 2020	Lakeshore Flooding	No	-

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable



Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of North Collins’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of North Collins. The Village of North Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.36-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	High	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.36-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of North Collins’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of North Collins has identified the following vulnerabilities within their community:

- Back yard flooding of residents inside the block of Sherman Ave (Route 249), Park Avenue, Harrison Avenue, and Railroad Avenue.
- Culvert replacement and redirection of creek on Gurney Avenue (eroding into the foundation of the house next door). See Mitigation Action 2022-V. North Collins-003.
- 3 Sisters Creek realignment or erosion prevention needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue. See Mitigation Action 2022-V. North Collins-004.
- Reported incidents of excessive flooding between Southside Avenue and Franklin Avenue.
- Dead trees resting in Right-of-way on wires along Main Street (across from Franklin Avenue)
- Storm drains needed along the portion of Railroad Avenue between Harrison Avenue and Sherman Avenue. See Mitigation Action 2022-V. North Collins-005.

9.36.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.36-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
-	Replacement and enlargement of existing storm sewer system	Runoff, Flooding	DPW	Flooding	No Progress	Level of Protection	-	1. Include in 2022 HMP. 2. See Mitigation Action 2022-V. North Collins-005 3.
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of North Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of North Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.36-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X						X			X
Cyber Attack	X						X			X
Earthquake	X						X			X
Expansive Soils	X						X			X
Extreme Temperature	X						X			X
Flood	X	X	X				X	X	X	X
Hazardous Materials	X						X			X
Landslide	X						X			X
Pandemic	X						X			X
Severe Storm	X	X	X				X	X	X	X
Severe Winter Storm	X	X	X				X	X	X	X
Utility Failure	X						X			X
Wildfire	X						X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.36-19 summarizes the comprehensive range of specific mitigation initiatives the Village of North Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.36-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. North Collins-001	Emergency Shelter	1, 2, 3	All Hazards	Problem: The village does not have any designated Emergency Shelter locations.	Yes	No	Short	Village of North Collins	Low - Medium	High	Municipal Budget	High	LPR	PI, ES
				Solution: The village will work with Erie County Emergency Services to identify and designate an Emergency Shelter.										
2022-V. North Collins-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	Problem: The village does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.	Yes	No	Short	Village of North Collins	Low - Medium	High	Municipal Budget	High	LPR	PI, ES
				Solution: The village will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose. The village will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										
2022-V. North Collins-003	Gurney Ave Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Storm	Problem: Severe storms and flooding have exacerbated erosion along Gurney Avenue, destroying the foundation of homes along the creek.	No	No	Short	Village of North Collins DPW, Engineering	Medium, estimated \$50,000 to replace culvert	High, property protections	HMGP	High	SIP, NSP	SP, NR
				Solution: The village will seek funding to upsize and replace the culvert on Gurney Avenue to increase flow of water away from the homes										



Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				and reduce flooding. If deemed necessary by engineering, the village will employ green infrastructure improvements to the area to stabilize the creek bed to further eliminate erosion and property destructions.										
2022-V. North Collins-004	Three Sisters Creek Stabilization	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Three Sisters Creek realignment or erosion prevention is needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue.</p> <p>Solution: The village will seek funding to realign and stabilize the portion of Three Sisters Creek that runs adjacent to properties on Main St, Kimble Ave, Elm St, and Southside Ave. The village will work with Engineering, DPW, and the County SWCD to implement structural and non-structural methods to control erosion including adding vegetation, armoring the banks, or installing basins and diversion channels as deemed necessary.</p>	No	No	Short	Village of North Collins DPW, Engineering, Erie County SWCD	High	High, property protections and reduces flooding and erosion	HMGP, BRIC	High	SIP, NSP	SP, NR
2022-V. North Collins-005	Storm Drainage System Improvements	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The existing storm drainage system is inadequate for the needs of the Town and Village of North Collins.</p> <p>Solution: The Village and Town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce</p>	No	No	Short	Village of North Collins and Town of North Collins	High	High, property protections and reduces flooding and erosion	CDBG	High	SIP, NSP	SP, NR



Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				impacts of storms on the properties along Railroad Avenue.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ◆ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.





- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.36-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. North Collins-001	Emergency Shelter	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V. North Collins-002	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V. North Collins-003	Gurney Ave Culvert Replacement	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	9	High
2022-V. North Collins-004	Three Sisters Creek Stabilization	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	9	High
2022-V. North Collins-005	Storm Drainage System Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.36.9 Action Worksheets

The following action worksheets have been developed by the Village of North Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Gurney Ave Culvert Replacement		
Project Number:	2022-V. North Collins-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Severe storms and flooding have exacerbated erosion along Gurney Avenue, destroying the foundation of homes along the creek.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will seek funding to upsize and replace the culvert on Gurney Avenue to increase flow of water away from the homes and reduce flooding. If deemed necessary by engineering, the village will employ green infrastructure improvements to the area to stabilize the creek bed to further eliminate erosion and property destructions.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, property protections
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	Estimated \$50,000/culvert	Mitigation Action Type:	Structure and Infrastructure Projects, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP dependent on funding
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMGP
Responsible Organization:	Village of North Collins DPW, Engineering	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	\$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Gurney Ave Culvert Replacement	
Project Number:	2022-V. North Collins-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects homes
Property Protection	1	Protects properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	Project may require permitting
Fiscal	-1	Village will seek funding
Environmental	0	If need to do stabilizations/redirect creek
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Three Sisters Creek Stabilization		
Project Number:	2022-V. North Collins-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Three Sisters Creek realignment or erosion prevention needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will seek funding to realign and stabilize the portion of Three Sisters Creek that runs adjacent to properties on Main St, Kimble Ave, Elm St, and Southside Ave. The Village will work with Engineering, DPW, and the County SWCD to implement structural and non-structural methods to control erosion including adding vegetation, armoring the banks, or installing basins and diversion channels as deemed necessary.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, property protections and reduces flooding and erosion
Useful Life:	40 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure ProjectsIP, Natural Systems ProtectionSP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP, dependent on funding
Estimated Time Required for Project Implementation:	6 months – 1 year	Potential Funding Sources:	HMGP, BRIC
Responsible Organization:	Village of North Collins DPW, Engineering, Erie County SWCD	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate properties along creek	N/A	Not feasible
	Elevate roadways	1 Million	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Three Sisters Creek Stabilization	
Project Number:	2022-V. North Collins-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects homes on these streets
Property Protection	1	Ensures roadway and personal property protections
Cost-Effectiveness	1	
Technical	1	
Political	1	Village supports project
Legal	0	Project may require permitting
Fiscal	-1	Project requires funding support
Environmental	0	Possible environmental concerns, village will consult NYS DEC
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	



9.37 Town of Orchard Park

This section presents the jurisdictional annex for the Town of Orchard Park. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Orchard Park’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.37.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Orchard Park’s hazard mitigation plan primary and alternate points of contact. The Town of Orchard Park followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager, Building Inspector, Town Engineer, Code Enforcement, and Town Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.37-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Rich Mrugalski/ Emergency Manager Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-545-0557 Email: mrugalskir@orchardparkny.org	Name/Title: Wayne Bieler/ Town Engineer Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-662-6425 Email: bielerw@orchardparkny.org
NFIP Floodplain Administrator	
Name/Title: Steve Bremer/ Building Inspector Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-662-6430 Email: breners@orchardparkny.org	

9.37.2 Municipal Profile

In 1850, the Town of Orchard Park was formed from the original Town of Hamburg. It is 39 square miles and is one of the county’s “South Towns”. The separate Village of Orchard Park is entirely contained within the town. US Routes 20 and 219 pass through the town.

The first settlers in the area arrived in 1803, mainly Quaker families established farmsteads in the town’s southwest corner. German families later settled south of the village area. As the community grew, links with neighboring communities improved. Some dirt roads became plank roads in the 1840s, and were gradually upgraded to stone, macadam, and brick as transportation technology changed. A railroad was extended to Orchard Park in 1883. In 1900, an electric trolley line began running between Buffalo and the town but was abandoned in 1932, with the advent of buses and automobiles. Orchard Park experienced significant residential





suburban development in the latter half of the 20th century. The South Buffalo residents of Irish heritage were the first to arrive and the town generally became a bedroom community of Buffalo. (Town of Orchard Park 2020) The building of Rich Stadium, now New Era Field, as the home of the Buffalo Bills football team, was a defining development within the town. (Town of Orchard Park 2007)

According to the U.S. Census, the 2010 population for the Town of Orchard Park was 25,808. The estimated 2019 population was 26,361, a 2.1 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.9 percent of the population is 5 years of age or younger and 22.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.37.3 Jurisdictional Capability Assessment and Integration

The Town of Orchard Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.37.3). The Town of Orchard Park’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Orchard Park. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.37-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 45 Building Construction, Adopted 1970	Local	Building Inspectors Department
Comment: <i>This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Orchard Park. This article is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this article.</i>					
Zoning Code	Yes	No	Chapter 144 Zoning, Adopted 1985	Local	Building Inspectors Department and Planning Department



Section 9.37: Town of Orchard Park

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: Adopted by the Town Board of the Town of Orchard Park 5-15-1985. Such regulations shall be made in accordance with the general plan and designed to lessen congestion in the streets; to secure safety from fires, flood, panic, and other dangers; to promote the health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to facilitate the provision of transportation, water, sewerage, schools, parks, and other public requirements. Such regulations shall be made with reasonable consideration, among other things, to the characteristics of the district and its peculiarities for particular uses and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the town.</p>					
Subdivision Ordinance	Yes	No	Chapter 121 Subdivision, Adopted 1958	Local	Building Inspectors Department, Engineering Department and Planning Department
<p>Comment: Site plan procedures include: 1) Sketch plan to include data showing how development may impact an adjoining property, the availability of utilities, the effect on drainage systems, natural watercourses, and other environmental concerns. 2) Where a subdivision or open development area is traversed by a watercourse, drainageway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width or construction, or both, as will be adequate for the purpose. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard. 4) Surface water retention facilities shall be developed where required in order that the rate of stormwater runoff after construction is no greater than the rate of runoff prior to construction.</p>					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 119A & 119B Storm Sewer and Stormwater Management & Erosion Control, Adopted 2007	Local	Engineering Department and Building Inspectors Department
<p>Comment: The purpose of this chapter and Chapter 144, Article XII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 119B-1 hereof. This chapter and Chapter 144, Article XII, seek to meet those purposes by achieving the following objectives: A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised; B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised; C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. The ordinance includes but is not limited to the following guidelines: 1) At a minimum, a development's site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the land development activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and the location(s) of the stormwater discharge(s). 2) A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
<p>Comment:</p>					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</p>					
Growth Management	No	No	-	-	-
<p>Comment:</p>					



Section 9.37: Town of Orchard Park

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Site Plan Review	Yes	Yes	Chapter 45; Building Construction Adopted 1970.	Local	Planning Department, Building Inspectors Department and Engineering Department
<p>Comment: <i>The Town uses a subdivision plan review and a commercial plan review process:</i></p> <p>1) <i>An applicant's site plan will include the following: legal data, impact on the environs, natural features, existing man-made features, proposed development, impact on stormwater pollution, and other information or materials. If a stormwater pollution prevention plan (SWPPP) is submitted pursuant to § 95-4B(6) of this chapter, such SWPPP shall be considered by the Town Board, Planning Board and others as part of an analysis of an applicant's site plan, and the site plan and SWPPP shall not be approved unless they comply with the performance and design criteria and standards in Chapter 96, Stormwater Management, of the Code.</i></p> <p>2) <i>Topographical features, including a map showing existing contour intervals of no more than five feet. Two-foot contour intervals will be required if the topography is relatively flat. Areas of steep slopes should be delineated as necessary.</i></p> <p>3) <i>Hydrologic features, which should include drainage and natural runoff patterns, flood zones, noted wetlands, vegetative cover and average depth to groundwater.</i></p>					
Environmental Protection Ordinance	No	Yes	Chapter 144 – Zoning. Adopted by the Town Board of the Town of Orchard Park 5-15-1985.		
<p>Comment: <i>The Town does not have dedicated ordinance put parts of environmental protection are found in the zoning and stormwater prevention ordinances. The intent is to enforce environmental compliance through zoning.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 66 (Flood Damage Prevention); adopted 5/1/2019	Local	Building Inspector
<p>Comment: <i>The Orchard Park Town Building Inspector is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions. It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <ul style="list-style-type: none"> A. <i>Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i> B. <i>Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i> C. <i>Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters;</i> D. <i>Control filling, grading, dredging and other development which may increase erosion or flood damages;</i> E. <i>Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and</i> F. <i>Qualify for and maintain participation in the National Flood Insurance Program.</i> 					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 119A, Stormwater Management Erosion & Sediment Control, Adopted 2007	Local	Stormwater Management Officer
<p>Comment: <i>The purpose of this chapter and Chapter 144, Article XII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 119B-1 hereof. This chapter and Chapter 144, Article XII, seek to meet those purposes by achieving the following objectives:</i></p> <ul style="list-style-type: none"> A. <i>Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;</i> B. <i>Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;</i> C. <i>Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;</i> D. <i>Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;</i> E. <i>Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</i> F. <i>Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.</i> 					
Emergency Management Ordinance	No	Yes	-	-	-
<p>Comment: <i>Mitigation Action</i></p>					



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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Completed 2006	Local	Planning Department
Comment: <i>The goals include the following 1) Protect and Preserve Open Space and Prime Farmlands; 2) Protect Significant Environmental Resources; 3) Provide a Safe and Efficient Transportation Network that Compliments the Existing Town Atmosphere 4) Recognize and Promote All Departments of Town Government as Having Public Service and Assistance to Citizens as the Primary Objectives</i>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No			
Comment: <i>Open spacing planning can be found in the Towns Comprehensive Plan</i>					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No			
Comment: <i>The Conservation Board handles habitat issues within the Town</i>					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No			
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Orchard Park Comprehensive Emergency Plan, March 2012	Local	Emergency Manager
Comment: <i>The CEMP provides a comprehensive evaluation of the municipality's vulnerabilities as well as an analysis of the overall preparedness of the community.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					



Development and Permitting Capability

The table below summarizes the capabilities of the Town of Orchard Park to oversee and track development.

Table 9.37-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Inspector, Engineering, Planning Departments, Town Board for Commercial Developments
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Building Inspector / Code Enforcement Department
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The process for controlling buildable land is handled through the Zoning Ordinance. No quantitative number are kept.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Orchard Park and their current responsibilities which contribute to hazard mitigation.

Table 9.37-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	<p>The Planning Board, established in 1948 pursuant to New York State and Town Law, consists of seven members and one alternate appointed by the Town Board. The members serve for a seven-year term, with one members' term expiring annually, except for the alternate member who is appointed annually for a one-year term.</p> <p>The Planning Board reviews all development projects and subdivision developments which take place in the town, and makes recommendations on all commercial, industrial, and business development to the Town Board. The Planning Board has full approval authority, and binding jurisdictional authority regarding all residential subdivision developments, on which the Town Board may make recommendations. The Board is also charged with generating and reviewing proposed ordinances intended to become part of Orchard Park Town Law, review and recommendation on proposed zoning changes and review from time to time of existing zoning codes with recommendations for updating and appropriate changes. The Planning Board works closely with the Conservation Board, the Town Board, the Engineering Department, and the Planning Department.</p>
Zoning Board of Appeals	Yes	<p>The Zoning Board of Appeals was established in 1941 and is currently made up five members. The Zoning Board of Appeals hears and deliberates on cases from citizens seeking relief from the Town ordinances. Decisions by the Board are based on strict criteria defined by the State and may be appealed by court action. The Board can also advise the Town Board regarding zoning and development issues as they deem necessary. Lastly, the Zoning Board of Appeals has the authority to approve the location of cell towers as per Town of Orchard Park Code.</p>
Planning Department	Yes	<p>The role of the planning department includes but is not limited to developing planning documents, conducting analysis, and helping create a more sustainable and healthy community for all.</p>



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mitigation Planning Committee	Yes	The Public Safety Committee is made up of volunteers appointed each year by the Town Board. The Public Safety Committee works closely with law enforcement, fire departments, and other relevant agencies. The Orchard Park Police Captain acts in an advisory role and as liaison to the Town. Requests regarding the placement of stop signs, no parking restrictions, speed limits, traffic signals, intersections, traffic issues and other areas where public safety is a concern are referred to the Public Safety Committee for review and recommendations to the Town Board.
Conservation Board	Yes	The Conservation Board consists of seven members appointed by the Town Board. Each member serves for a two-year term, with three members' terms expiring in even years and four members' terms expiring in odd years. The function of the Conservation Board is to approve or deny submitted landscape plans and determine what is the required landscaping for Commercial projects. The board serves for the purpose of generating and reviewing proposed environmental ordinances intended to become part of Orchard Park Town Law, to review, amend, and approve required landscape plans submitted as part of required documents for business, commercial and industrial development projects, to review and recommend to the Town Board on requests for Conservation Easements. In the past this Board has completed an open space inventory, which was updated several years ago. It has researched and produced a Town Open Space Plan and has recently worked on the establishment of the Town Green Print.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	It is the mission of the Orchard Park Economic Development Committee to assist businesses to locate and expand in Orchard Park. In an effort to help promote Orchard Park to the commercial and industrial community, the OPEDC has compiled the following list of available commercial and industrial properties in Orchard Park for purchase, lease, or rent. For additional information on specific listings, please contact the respective company contact person.
Public Works/Highway Department	Yes	The Highway and Parks Department is responsible for services ranging from snowplowing and road repair to planting the flowers and trees in the town parks.
Construction/Building/Code Enforcement Department	Yes	Building Inspector/Code Enforcement Department – reviews building permits
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED Community Notification System and App
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department – snowplowing, road repairs
Mutual aid agreements	Yes	Town has a MA agreement with Erie County and through the Superintendent of Highways Association
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department and the Planning Department



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department and Building Inspectors Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	Yes	Engineering Department
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Building Inspector
Surveyor(s)	Yes	Engineering Department
Emergency Manager	Yes	Currently the Town does not have a designated department for this function; however, there is an emergency manager
Grant writer(s)	Yes	Town Board, On Call Basis
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Orchard Park.

Table 9.37-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Orchard Park.

Table 9.37-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Has various information regarding preparedness for the community as well as guidance on what to do during and after an event.
Social media for hazard mitigation education and outreach	Yes	Has various information regarding preparedness for the community as well as guidance on what to do during and after an event.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	The Town uses CodeRed messaging system
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Orchard Park.

Table 9.37-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4 - Areas with Hydrants, Class 8 - Areas without Hydrants	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,



future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.37-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	N/A
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.37.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Steve Bremer, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Orchard Park.

Table 9.37-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Orchard Park	20	14	\$8,609	0	2

Source: FEMA 2020a, FEMA 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town does not have a list of properties that have been damaged by flooding or those that are interested in flood mitigation. The town does not have any RiskMAP projects underway in the jurisdiction. The town has not identified any way they make substantial damage determination, nor do they have properties that are mitigated. The existing flood hazard maps adequately address flood risk within the town.

NFIP Compliance

The building inspector is in charge of floodplain management and the town engineer is a certified floodplain manager. The town does not have access to resources to determine the impacts of climate change. The town



would like to have training as needed for any changes that occur national flood plan standards for staff in the Building Inspectors Department and the Engineering Department. Additional training for Engineering Staff on modeling of flood plains would be useful. As the NFIP provides permit review, the town would need additional funding and staff to increase service capacity. The town does not have any outstanding violations and the municipality had a CAV on May 18, 2020.

The local law number for the flood damage prevention ordinance is Chapter 66, Flood Damage Prevention, Last update 2019. The existing program meets all requirements, and the town does use the planning process, subdivision review, commercial review, and stormwater Phase II program to reduce flooding. The town is not interested in participating in the FEMA CRS. The Orchard Park Town Building Inspector is appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions. The municipality has a freeboard of two feet.

9.37.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Orchard Park has identified the following routes and procedures to evacuate residents prior to and during an event: Route 20, Route 20A, Abbott Road, Route 179 (Milestrip Road), Route 219, Route 240/277, Baker Road, Jewett Holmwood Road, New Armor Duells Road, and Transit Road. In the event of an evacuation, the Orchard Park Police Department is tasked with directing traffic to the main evacuation routes within the Town and Village.

Sheltering

The Town of Orchard Park has identified the following designated emergency shelters within the town.

Table 9.37-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No	None	Warming and cooling station only
Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Orchard Park has identified the following sites suitable for placing temporary housing units.



Table 9.37-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Compost/Soccer Complex	6909 Milestrip Road	300,000 Sq. Ft. Available	Parkland	Yes	Yes, satisfied
Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	400,000 Sq. Ft. Available	Vacant Parkland	Yes	Yes, satisfied
Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	52,000 Sq. Ft. Available	Parking Lot	Yes	Yes, satisfied
Brush Mountain Park	4520 California Road	200,000 Sq. Ft. Available	Parkland	Yes	Yes, satisfied

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Orchard Park has not identified any permanent housing locations.

Table 9.37-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – mitigation action number 009					

9.37.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.37-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.37-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	68	0	57	0	55	0	49	0	40	0	33	0
Multi-Family	2	0		0		0	3	0	10	0	8	0
Other (commercial, mixed-use, etc.)	5	0	3	0	2	0	5	0	7	0	1	0
Total Permits Issued	75	0	60	0	57	0	57	0	57	0	42	0
Property or Development Name	Type of Development		# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development			
Recent Major Development and Infrastructure from 2015 to Present												
Riley Meadows West	Residential		29 Homes		Murphy Road		None		One phase remaining to be constructed			
Pleasant Acres West	Residential		18 Homes		New Taylor Road		0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, Steep Slopes (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		Last two phase under construction			
Knoche Farms	Residential		30 Homes		Milestrip Road		Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		Two remaining phases yet to be constructed			
Orchard Grove Apartments	Residential		16 Buildings/96 Units		California Road		None		Under construction			
Sheffer Farms	Residential		14 Units		California Road		Flood Plain, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		Under construction			
Orchard Park Community Activity Center	Commercial		1 Building		California Road		SFHA, Hazardous Materials Facilities Hazard Area		Portion of parking in Flood Plain			
Eagle Heights Phase 8	Residential		31 Homes		Knob Hill Road		Wildland-Urban Intermix Hazard Area, Expansive Soils Hazard Area		Completed			
Buffalo Medical Group	Commercial		1 Building		3900 North Buffalo Street		Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½		First Phase Completed			



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				Mile Buffer from HazMat Pipelines	
The Residents at the Ridge	Residential	3 Buildings/22 Units	5205 Chestnut Ridge Road	Wildland-Urban Interface Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Expansive Soils Hazard Area	Completed
Ellicott Development	Commercial	1 Building	3910 North Buffalo Road	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Completed
Dollar General	Commercial	1 Building	2737 Southwestern Blvd	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area	Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Birdsong Subdivision Phase 3B	Residential	62 Homes	Jewett Holmwod Road	None	
Riley Meadows West	Residential	38 Homes	Murphy Road	Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Last phase remaining
Knoche Farms	Residential	31 Homes	Milestrip Road	None	Last Phase remaining
Smokes Creek Subdivision	Residential	26 Homes	Jewett Holmwood Road	Flood Plain	Review Submission
Old Transit Road Subdivision	Residential		Transit Road	None	Review Submission
Ellicott Development	Commercial	Mixed Use	North Buffalo Road	None	Review Submission
Freeman Farms (Talisin Dev.)	Residential	11 Lots	Wellington Lane	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Review Submission
Broxton Heath	Residential	23 Lots	Powers Road	Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways	Review Submission
Benderson Development	Commercial	3 Buildings	Corner of Milestrip Road and Orchard Park Road	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Review Submission
Nexgen	Residential	26 Lots	Old Transit Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard	Review Submission



				Area, ½ Mile Buffer from HazMat Pipelines	
Speedway Convenience Store and Gas Station	Commercial	1 Building	Southwestern Blvd and Angle Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area	Review Submission
5245 Murphy Road	Residential	195 Units	5245 Murphy Road	SFHA, Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Review Submission
Orchard Meadows Subdivision	Residential	12 Lots	Old Salem Court	None	Review Submission
Heathwood Assisted Living	Residential	110 Units	North Buffalo Rd and Webster Road	None	Review Submission
Quaker Lake Terrace	Residential	17 Lots	Quaker Lake Terr.	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area,	Review Submission
New York Beer Project	Commercial	1 Building	Windward Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Review Submission
Williamsburg Subdivision	Residential	16 Lots	Diller Drive	None	Review Submission

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.37.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.3 (Hazard Ranking) for a detailed summary for the Town of Orchard Park’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Orchard Park has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.37-1. Town of Orchard Park Hazard Area Extent and Location Map 1

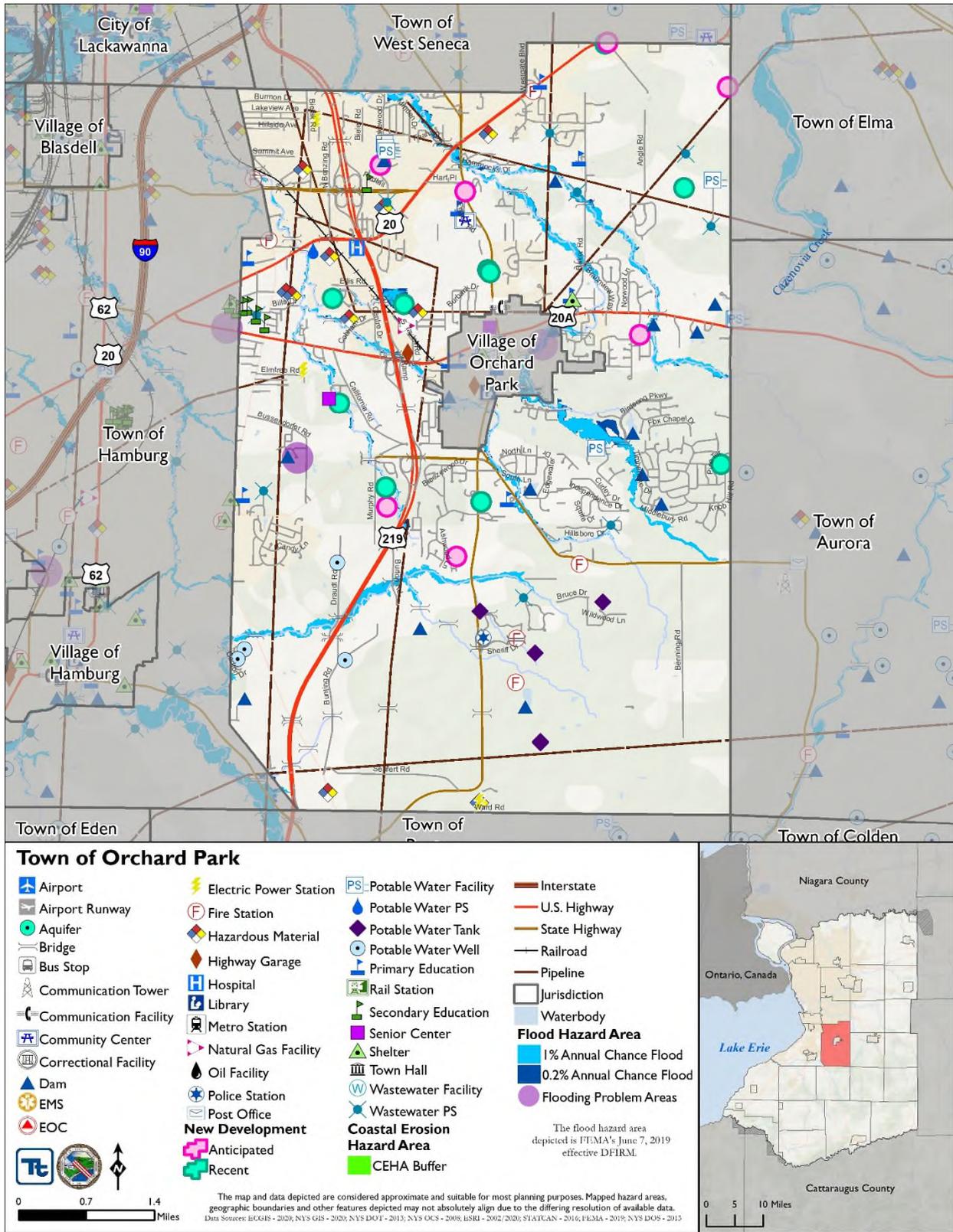




Figure 9.37-2. Town of Orchard Park Hazard Area Extent and Location Map 2

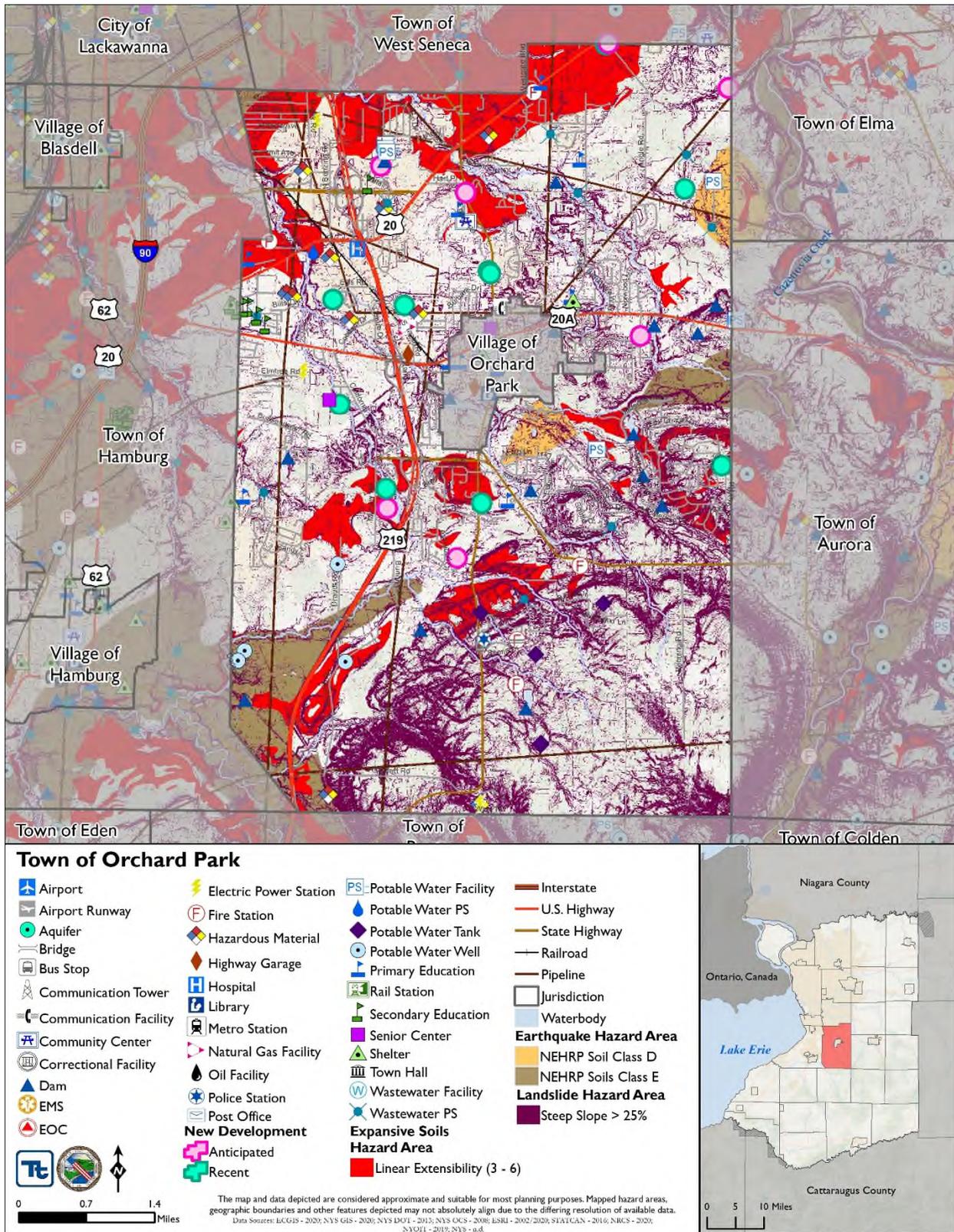
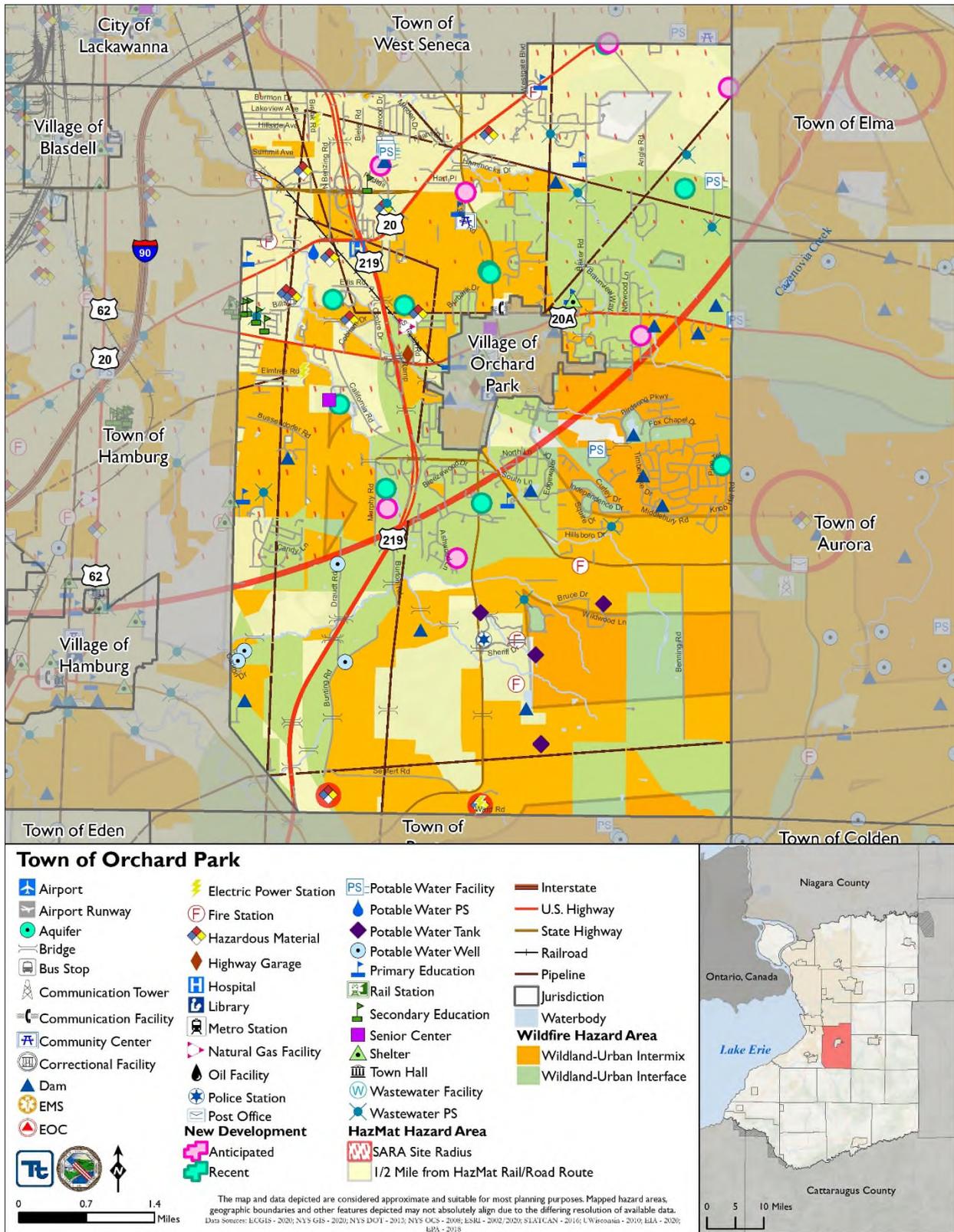




Figure 9.37-3. Town of Orchard Park Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Orchard Park’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.37-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.37-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Yes, a few homes were damaged, and one garage had its roof torn off. No dollar damage was assessed to the Town.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Orchard Park and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.4 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Orchard Park’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Orchard Park. The Town of Orchard Park has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

- Expansive soils have not been an issue for the town and thus will be re ranked as medium to low.
- Hazardous materials travel through the town which pose threat to community members and will be re ranked from low to medium.
- Wildfires have not been a significant threat so will be marked from high to medium.

Table 9.37-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Medium
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.37-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Green Lake Dam	Dam	Yes	Yes	007

Source: GIS 2021

Identified Issues

After review of the Town of Orchard Park’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Orchard Park has identified the following vulnerabilities within their community:

- Only a portion of the main highway building can be run with the current generator and the sewer building does not have a generator. The facility is critical for municipal operation and the building needs power at all times to operate and serve the community at full capacity.
- The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner.
- Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area has caused an increase in the amount of water flowing downstream to the Elmtree Road crossing. This issue is continually becoming worse, and the town believes immediate intervention is necessary to mitigate future damage.
- The current Highway Department communication system restricts communication, by radio, with municipal police, fire, and EMS agencies. This slows down the communication and response of the various departments during hazard events because the Highway Department needs to use analog methods of communication.
- Two creeks that go under town-owned bridges are experiencing problems with sediment build up and creek bank erosion.
- Due to the rural nature of the town, the Fire Districts has dead radio zones in south and north parts of the Town.
- The Green Lake Dam is located in the 100-year floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:





- None

9.37.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.37-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Damages Avoided; Evidence of Success	
1	Cleaning of existing storm sewer system; Will flush existing storm sewer systems of silt and debris to correct flooding problems – currently done every 5 years	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection		
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
2	Rebuild existing storm catch basin; Will rebuild to alleviate restriction caused by broken concrete in catch basin – done on an add needed basis	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection		
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
3	Stream Channel Mitigation: Will continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town. Will be discontinued, and a new mitigation action will be included to address more immediate concerns in action 005.
						Level of Protection		
						Damages Avoided; Evidence of Success	Stabilization measures have decreased the amount of sediment in local creeks allow greater flow.	
4	Purchase Land in Flood Plain Areas; Will continue to evaluate land that may be purchased that falls within the flood plain areas of the Town for recreation and stormwater management purposes	Flooding	Not Identified	Engineering Dept.	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decreased downstream flooding	
5	Generator Maintenance: Will continue to run	Power Outage	Power outages	Maintenance Dept.	Ongoing Capability	Cost		<ol style="list-style-type: none"> Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	generators on a monthly basis to determine the condition of each unit under load		caused by storms, or down power lines in the area			Level of Protection		<ol style="list-style-type: none"> - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
6	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Building Inspector, Legal	Complete	Cost	Low	<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
7	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building Inspector, Legal	Ongoing Capability	Level of Protection	Moderate	<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Damages Avoided; Evidence of Success	Regulatory Compliance	
						Cost		<ol style="list-style-type: none"> Discontinue - This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection		
						Damages Avoided; Evidence of Success	Ongoing as necessary	
8	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Building Inspector	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue - The Town does not have the resources to complete this task
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
9	Join the Community Rating System (CRS)	Flood	Not Identified	Building Inspector, Legal	No Progress	Cost	-	<ol style="list-style-type: none"> Discontinue - The Town does not have the resources to complete this task
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Orchard Park has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Green Lake Dredging and Dam Reconstruction - The project started in 2016 and completed early 2017. The project included dredging the entire lake, removing over 118,000 cubic yards of material, rebuilding the spillway from the dam, and reshaping the downstream face of the dam to meet NYSDEC requirements.
- Green Lake Weir Project - The project is scheduled to start in early 2021. The channel will be dredged to allow grader flow into Green Lake reducing downstream flooding
- Bussendorfer Regional Detention Pond Drainage Improvement Project – This project was completed in 2019. The pond will reduce flooding in the Bussendorfer and Elmtree area of the town and is in conjunction with the Bussendorfer Forsythia Phase 2 Drainage Improvements

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Orchard Park participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.37-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X		X					X	X
Cyber Attack		X		X					X	X
Earthquake		X		X					X	X
Expansive Soils		X		X					X	X
Extreme Temperature		X		X					X	X
Flood		X	X	X	X	X		X	X	X
Hazardous Materials		X		X					X	X
Landslide		X		X					X	X
Pandemic		X		X					X	X
Severe Storm		X		X	X	X			X	X
Severe Winter Storm		X		X	X	X			X	X
Utility Failure		X		X					X	X
Wildfire		X		X					X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.37-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Orchard Park would like to pursue in the future to reduce the effects of hazards. Some upon of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14



evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.37-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Orchard Park - 001	Orchard Park Highway Department Buildings - Generators	1,2,	Severe Storm, Winter Storm, and Flood	<p>Problem: Only a portion of the main highway building can be run with the current generator and the sewer building does not have a generator. The facility is critical for municipal operation and the building needs power at all times to operate and serve the community at full capacity.</p> <p>Solution: Install a new 3 phase generator to run the entire main highway building and install a generator for the entire sewer building. The DPW Superintendent shall conduct a preliminary assessment as to where the new generator shall be installed and to make sure it is not placed in an area where flood can occur.</p>	Yes	No	2 years	Town Highway Dept.	\$200,000	High	HMGP, Municipal Budget	High	SIP	PR, PP
2022-Town of Orchard Park - 002	Community Activity Center - Generator	1,2	Severe Storm, Winter Storm, and Flood	<p>Problem: The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner.</p> <p>Solution: Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size</p>	Yes	No	2 years	Town OEM, Community Center Operator	\$800,000	High	HMGP, Municipal Budget	High	SIP	PR, PP



Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				needed. Once the size is determined, the town shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.										
2022-Town of Orchard Park - 003	Bussendorfer Forsythia Phase 2 Drainage Improvements	1,2	Flood, Severe Storm	<p>Problem: Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area has caused an increase in the amount of water flowing downstream to the Elmtree Road crossing. This issue is continually becoming worse, and the town believes immediate intervention is necessary to mitigate future damage.</p> <p>Solution: The Town Highway Department and the Town Engineer will re-design the current drainage system in the area. The re-design will include directing water to a detention basin in Brush Mountain Park. This will reduce the amount of water flowing downstream towards Elmtree Road. During this design process, additional professional assistance might be needed to determine. Once the design phase is complete, the town shall apply for funding.</p>	No	No	2 years	Town Highway Department Town Engineer	High	High	HMGP, BRIC, Transportation Investment Generating Economic Recovery (TIGER), Emergency Watershed Protection (EWP) program	High	SIP	SP
2022-Town of	Upgrade communication	1,2	All	<p>Problem: The current Highway Department</p>	No	No	1 year	Town of Orchard Park	Moderate	High	Assistance to Firefighters	High	EAP	ES





Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Orchard Park 004	channels for Highway, OEM, Sewer and Village of Orchard Park DPW			<p>communication system restricts communication, by radio, with municipal police, fire, and EMS agencies. This slows down the communication and response of the various departments during hazard events because the Highway Department needs to use analog methods of communication.</p> <p>Solution: An assessment will be done to determine the proper system for the town. Once identified, the town will update their system to meet the needs of the town and village. The system will be similar to what other municipalities use in the region. The update will include obtaining new channels and installing new radios in all town and village vehicles.</p>				Highway Dept., OEM, Fire and Police; Village of Orchard Park DPW			Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants			
2022-Town of Orchard Park - 005	Stream Channel Mitigation	1,2	Flood, Severe Storm	<p>Problem: Two creeks that go under town-owned bridges are experiencing problems with sediment build up and creek bank erosion.</p> <p>Solution: Clean and lower the creek using excavation methods and reforming the shape of the stream. Stabilize banks and prevent erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile</p>	No	No	3 years	Town Highway Dept., SWCD	Moderate	High	Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, BRIDGE NY	High	NSP	NS, SP



Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				fabric. Additional consulting shall be provided by the County SWCD to address the immediate erosion concerns.										
2022-Town of Orchard Park - 006	Orchard Park Fire District Communication Enhancement Project	1,2,3	All	<p>Problem: Due to the rural nature of the town, the Fire Districts has dead radio zones in south and north parts of the Town.</p> <p>Solution: Install a radio tower in the south part of the town or work other agencies to co-locate antennas on their towers. This would require the municipality to go through the SEQR process and determine whether the new tower would have any adverse impacts on the surrounding communities as well as visual impacts. Additional community comment would also be necessary. In addition to the tower, the town will install additional repeaters and boosters. This project will facilitate the communication between the Fire department, OEM, and other municipal and county agencies.</p>	No	Yes	2 years	Town Fire Department	Moderate	High	Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants	High	EAP	ES
2022-Town of Orchard Park-007	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct</p>	No	No	Within 3 years	Town Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP



Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										
2022-Town of Orchard Park - 008	Permanent Housing Location	1,2	All	<p>Problem: The Town of Orchard Park currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort.</p> <p>Solution: The town will conduct an assessment of existing sites across the town that are best suited for permanent housing relocation. These sites should have access to all utilities. The town would then work with the landowner to acquire the property, if not yet owned by the town. The town would then need to apply for FEMA funding to acquire</p>	No	Yes	5 years	Town of Orchard Park OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP



Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the town board and Town Highway Dept./ OEM.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.





- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.37-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Orchard Park -001	Orchard Park Highway Department Buildings - Generators	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Orchard Park -002	Community Activity Center - Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Orchard Park -003	Bussendorfer Forsythia Phase 2 Drainage Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Orchard Park -004	Upgrade communication channels for Highway, Sewer and Village DPW	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Town of Orchard Park -005	Stream Channel Mitigation	1	1	1	0	0	1	-1	1	1	1	1	0	1	1	9	High
2022-Town of Orchard Park -006	Orchard Park Fire District Communication Enhancement Project	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Town of Orchard Park -007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Town of Orchard Park -008	Permanent Housing Location	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.37.9 Action Worksheets

The following action worksheets have been developed by the Town of Orchard Park to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Community Activity Center - Generator		
Project Number:	2022-Town of Orchard Park -002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Problem: The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the town shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$800,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, Municipal Budget
Responsible Organization:	Town OEM, Community Center Operator	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	High	Unstable energy source
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Community Activity Center - Generator	
Project Number:	2022-Town of Orchard Park -002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway Dept.
Other Community Objectives	1	Various objectives
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	2022-Town of Orchard Park -003		
Project Number:	Bussendorfer Forsythia Phase 2 Drainage Improvements		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area and increased amount of water flowing downstream to the Elmtree Road crossing. This issue has continually becoming worse, and the town believe immediate intervention is necessary to mitigate future damage,		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Dept. will be tasked to redesign drainage in the area, direct water to the newly constructed detention basin in Brush Mountain Park and reduce the amount of water flowing downstream to the Elmtree Road. During this design process, additional professional assistance might be needed to determine. Once the design phase is complete, the town shall apply for funding.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Flood reduction
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	Moderate	Mitigation Action Type:	Structural and infrastructure project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	HMGP, Building Resilient Infrastructure and Communities (BRIC), Transportation Investment Generating Economic Recovery (TIGER), Emergency Watershed Protection (EWP) program
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Close all flooded roads	High	Issue will not be resolved
	Flood mitigation	High	Flood waters will be redirected
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	2022-Town of Orchard Park -003	
Project Number:	Bussendorfer Forsythia Phase 2 Drainage Improvements	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	1	This project has positive environmental impacts
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway Dept.
Other Community Objectives	1	Various objectives
Total	12	
Priority (High/Med/Low)	High	



9.38 Village of Orchard Park

This section presents the jurisdictional annex for the Village of Orchard Park. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Orchard Park’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.38.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Orchard Park’s hazard mitigation plan primary and alternate points of contact. The Village of Orchard Park followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Code Enforcement, Emergency Management, and Clerk. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.38-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Richard J. Mrugalski/ Emergency Manager Address: 4295 S. Buffalo Street, Orchard Park NY Phone Number: 716-545-0557 Email: mrugalskir@orchardparkny.org	Name/Title: John Gullo/ Code Enforcement Address: 4295 S. Buffalo Street Municipal Building – 1st Floor Orchard Park, NY 14127 Phone Number: 716.662.9327 Email: BuildingInspector@OrchardParkVillage.org
NFIP Floodplain Administrator	
Name/Title: John Gullo/ Code Enforcement Address: 4295 S. Buffalo Street Municipal Building – 1st Floor Orchard Park, NY 14127 Phone Number: 716.662.9327 Email: BuildingInspector@OrchardParkVillage.org	

9.38.2 Municipal Profile

The Village of Orchard Park is 1.4 square miles and is situated entirely within the Town of Orchard Park. The first settlers to the village area were Quakers who arrived in 1803. The village was first called “Potter’s Corners” and incorporated with its current name in 1821. U.S. Route 20A and NYS Route 277 traverse the village.

According to the U.S. Census, the 2010 population for the Village of Orchard Park was 3,246. The estimated 2019 population was 3,148, a three percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 20.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.



9.38.3 Jurisdictional Capability Assessment and Integration

The Village of Orchard Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.38.3). The Village of Orchard Park’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Orchard Park. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.38-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 92 - Building Code Administration and Enforcement	Local	Code Enforcement Office
<i>Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Village. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter. The Code Enforcement Officer administers and enforces all provisions of this chapter.</i>					
Zoning Code	Yes	No	Chapter 225 – Zoning; adopted 12/3/1979 and amended as needed	Local	Code Enforcement Officer
<i>Comment: Such regulations are made in accordance with the Comprehensive Plan and designed to lessen congestion in the streets, to secure safety from fire, panic, floods, and other dangers; to promote the health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to facilitate the provision of transportation, water, sewerage, schools, parks and other public requirements. Such regulations are made with reasonable consideration, among other things as to the characteristics of the district and its peculiarities for particular uses and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the Village.</i> <i>The chapter identifies several zoning districts that promote the public health, safety, morals, and general welfare of the village. This includes: residential low-density, residential medium-density, residential medium-high density, commercial, professional-commercial, industrial, and land conservation.</i>					
Subdivision Ordinance	No	No	-	-	-
<i>Comment:</i>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 185 – Stormwater Management and Erosion Control; adopted 12/29/2008	Local	Department of Public Works
<p>Comment: <i>The purpose of this chapter, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 185-1 hereof. This chapter seeks to meet those purposes by achieving the following objectives:</i></p> <p><i>A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;</i></p> <p><i>B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, GP-02-01, or as amended or revised;</i></p> <p><i>C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;</i></p> <p><i>D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;</i></p> <p><i>E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</i></p> <p><i>F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.</i></p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: <i>Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Village Code 225 -21 7/1998	Local	Code Enforcement Office
<p>Comment: <i>Site plan review considers the compatibility of the proposed project with adjoining land uses and with other proposed development, having particular reference to its probable effect on the value of other land and to the adequacy of features intended to promote public health, safety and welfare and the general purposes of this chapter.</i></p>					
Environmental Protection Ordinance	Yes	Yes	Chapter 107 Adopted 1979 Local Law 1. Environmental Quality Review	Local	Planning Board
<p>Comment: <i>The purpose of this chapter is to implement for the Village of Orchard Park SEQR and comply with the minimum environmental standard to protect the environment and overall health of the community.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 123 – Flood Damage Prevention; adopted 4/8/2019	Local	Code Enforcement Officer
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <p><i>A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i></p> <p><i>B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i></p> <p><i>C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;</i></p> <p><i>D. Control filling, grading, dredging and other development which may increase erosion or flood damages;</i></p> <p><i>E. Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;</i></p> <p><i>F. Qualify and maintain for participation in the National Flood Insurance Program.</i></p>					



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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>The Village Code Enforcement Officer is appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.</i></p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 184 – Storm Sewers; adopted 12/29/2008	Local	Stormwater Management Officer
<p><i>Comment: The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of the Village of Orchard Park through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this article are:</i></p> <ul style="list-style-type: none"> <i>A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;</i> <i>B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;</i> <i>C. To prohibit illicit connections, activities and discharges to the MS4;</i> <i>D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and</i> <i>E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.</i> 					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	Yes	No	-	-	-
<p>Comment:</p> <ul style="list-style-type: none"> • Chapter 176 (Sewers) – adopted 7/12/2004; prohibits discharges to any sanitary sewer 					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment:					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					





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	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Orchard Park Comprehensive Emergency Plan, March 2012	Local	Emergency Manager
Comment: <i>The goal of the plan includes: 1) Prepare people for hazard events 2) Protect the community from hazard events 3) Reduce vulnerability to hazards. 4) Encourage smart and strategic planning to reduce long term risk.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Orchard Park to oversee and track development.

Table 9.38-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	<p>The Code Enforcement Department is responsible for issuing permits. Building permits are required for the following:</p> <ul style="list-style-type: none"> • For all new construction, remodeling or additions • When a repair to an existing building is required • When a repair affects the structure of an existing building • When an electrical circuit is installed or extended • When a generator is installed • When remodeling involves the removal or relocation of walls; or affects the structure of a building • When a solid fuel device or natural gas insert, such as a wood burning stove or fireplace is installed or repaired • When the use of a building is changed (e.g., a retail store to a doctor’s office...) • When the required fire safety features in an existing building are affected by repairs, remodeling or alterations • For a deck, shed, fence, pool, sign or newly paved surfaces • A Building Permit is required if the roof structure requires replacement or repairs
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is fully built out.



Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Orchard Park and their current responsibilities which contribute to hazard mitigation.

Table 9.38-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Village Planning Board reviews permit applications in residential and non-residential zones, all referrals from the Zoning Board of Appeals, and any other permits or matters referred by the Code Enforcement Officer or the Village Board.
Zoning Board of Adjustments	Yes	The Village Code Enforcement Officer reviews all permit applications to determine if variances to the Village’s Municipal Code are needed. If a variance is required, the applicant completes a Zoning Board of Appeals application and a public hearing is scheduled.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works (DPW) monitors and maintains the village streets; this includes all pavement maintenance, management and snow plowing duties. The DPW also implements the stormwater management plan to stay current with EPA and DEC regulations.
Construction/Building/Code Enforcement Department	Yes	The Village Code Enforcement Officer reviews all permit applications to determine if variances to the Village’s Municipal Code are needed. If a variance is required, the applicant completes a Zoning Board of Appeals application and a public hearing is scheduled.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW – road maintenance, snow plowing, water quality monitoring, and storm sewer system cleaning
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Code Enforcement Officer
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer is the appointed local administrator to administer and implement Chapter 123 of the village code.
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	On Call Basis



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Orchard Park.

Table 9.38-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Orchard Park.

Table 9.38-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Mayor
Personnel skilled or trained in website development	Yes	Office Administrator
Hazard mitigation information available on your website	Yes	The village maintains a municipal website that includes public notices, upcoming events and meetings, announcements, and information pertaining to hazards
Social media for hazard mitigation education and outreach	Yes	The village has a social media page on Facebook where they post about upcoming events in the municipality.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	The village could use their website and Facebook page to post additional information about specific hazards of concern to the village.
Warning systems for hazard events	Yes	Code RED
Natural disaster/safety programs in place for schools	No	-



Outreach Resources	Available? (Yes/No)	Comment:
Other	No	

Community Classifications

The table below summarizes classifications for community programs available to the Village of Orchard Park.

Table 9.38-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4 - Areas with Hydrants	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.38-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

*Strong Capacity exists and is in use

Moderate Capacity may exist; but is not used or could use some improvement

Weak Capacity does not exist or could use substantial improvement

9.38.4 National Flood Insurance Program (NFIP) Compliance





This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Gullo, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Orchard Park.

Table 9.38-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Orchard Park	7	7	\$59,650	2	2

Source: FEMA 2020a, FEMA 2020b

Notes:

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Village of Orchard Park maintains a list of flood-prone properties as well as a list of homeowners that are interested in flood mitigation. There are no RISK Map projects at this time. After significant flood events, the Code Enforcement Officer conducts substantial damage assessments; however, no assessments were made during recent flood events. At the time of this HMP update, no properties have been mitigated. The villages indicated that flood maps adequately address the areas that are prone to flooding.

NFIP Compliance

The village Code Enforcement Officer is in charge of floodplain manager and there are no certified floodplain managers in the village at this time. The village has access to resources to determine future flooding conduction from climate change through the village and county. The village would like to have the general training for staff regarding floodplain management. The FPA provides permit review, education, inspections, issues certificate of compliance, and engineering services for all residents and businesses

The village does not have any outstanding violations at this time and the last CAV was 08/04/2014. Chapter 123 of the village code pertains to flood damage prevention in the village. It was adopted on April 8, 2019. The current chapter meets the minimum state and federal standards, requiring all new construction or substantial improvements of structures in the SFHA to have their lowest floor elevated at least two feet above the base flood elevation.

The village does not have any other programs, plans, or ordinances in place that support the NFIP program. At the time of this plan update, the village is not interested in joining the CRS program.

9.38.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Village of Orchard Park has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 20, Route 20A, Abbott Road, Route 179 (Milestrip Road), Route 219, Route 240/277, Baker Road, Jewett Holmwood Road, New Armor Duells Road, and Transit Road.

The Town of Orchard Park Police Department will be tasked with directing traffic to the main evacuation routes within the town and village.

Sheltering

The Village of Orchard Park has identified the following designated emergency shelters within the village.

Table 9.38-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No (action 003)	None	Warming and cooling station only
Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only

Temporary Housing

The Village of Orchard Park has identified the following sites suitable for placing temporary housing units.

Table 9.38-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Compost/Soccer Complex	6909 Milestrip Road	Yes	300,000 Sq. Ft. Available	Parkland	Yes
Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	Yes	400,000 Sq. Ft. Available	Vacant Parkland	Yes
Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	Yes	52,000 Sq. Ft. Available	Parking Lot	Yes
Brush Mountain Park	4520 California Road	Yes	200,000 Sq. Ft. Available	Parkland	Yes



Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Orchard Park has not identified any permanent housing locations and believes coordination for this would need to be determined with each landowner outside of the village due to the limited space within the municipality.

Table 9.38-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – proposed in mitigation action 007					

9.38.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.38-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.38-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	1	0	0	0	0	0	1	0	0	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	1	0	0	0	0	0	1	0
Total Permits Issued	1	0	1	0	1	0	0	0	1	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None identified												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.38.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section

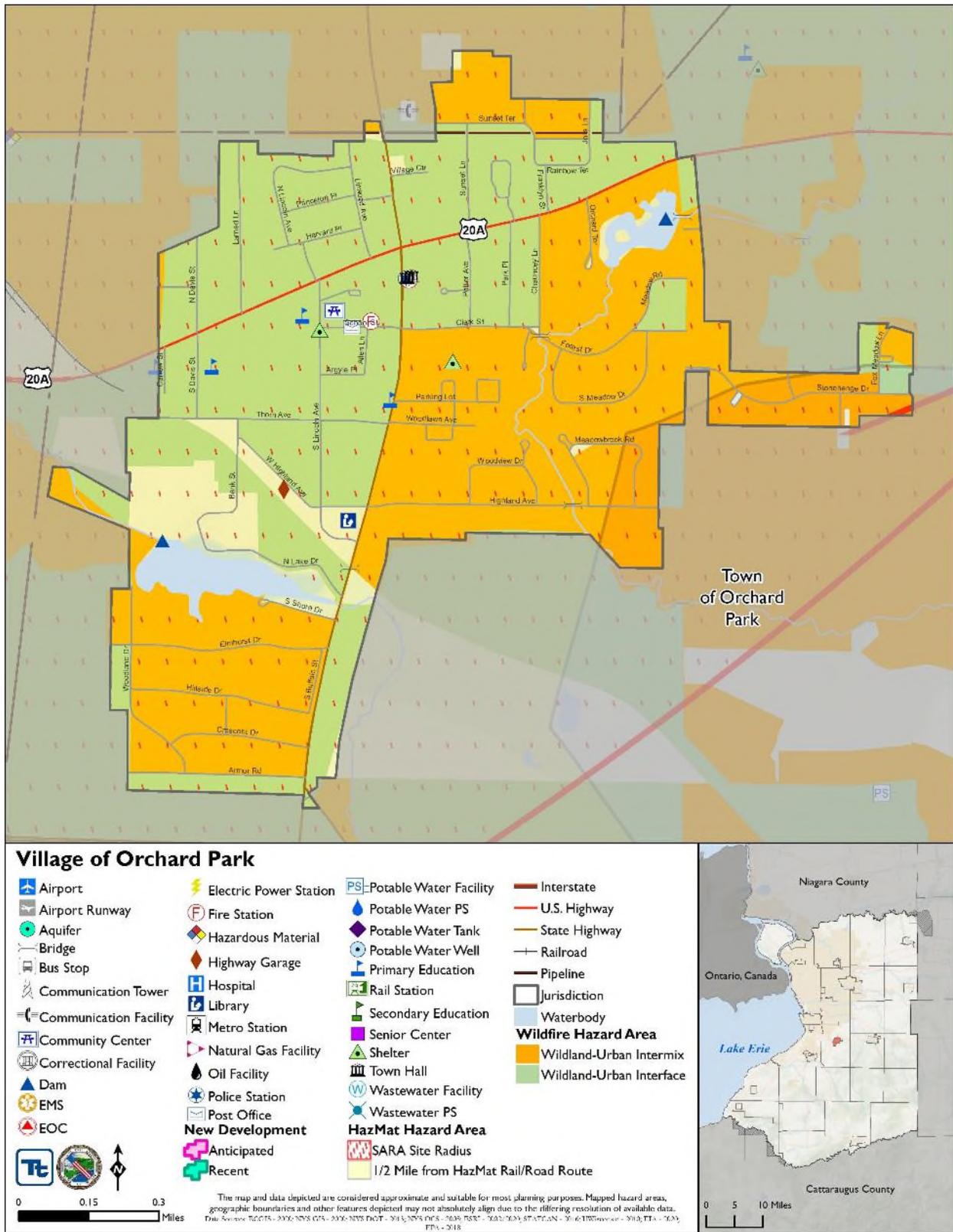


5.4 (Hazard Ranking) for a detailed summary for the Village of Orchard Park’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Orchard Park has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.38-3. Village of Orchard Park Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Orchard Park’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.38-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.38-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the village did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the village did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the village did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the village did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the village did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the village did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the village did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the village did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began	Although the County was impacted, the village did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the village did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the village did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the village did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the village did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the village did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher	Although the County was impacted, the village did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the village did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the village did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the village did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the village did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the village did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the village did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the village did not report damages
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Village of Orchard Park and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Orchard Park’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.





As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Orchard Park. The Village of Orchard Park has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

The village had no edits to the following hazard rankings.

Table 9.38-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.38-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Freemans Dam	Dam	Yes	Yes	004
Green Lake Dam	Dam	Yes	Yes	004

Source: GIS 2021

Identified Issues

After review of the Village of Orchard Park’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Orchard Park has identified the following vulnerabilities within their community:



- Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity.
- The current DPW system cannot communicate by radio with police, fire and EMS agencies in the village. This slows down the communication and response of the various departments during hazard events and thus time is wasted using analog methods of communication.
- The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner.
- The Freemans Dam and Green Lake Dam are both located in the 1% annual chance flood area.
- The village does not have an emergency management ordinance. This is out of compliance with the state and federal standard for municipalities and the Village of Orchard Park needs to adopt a model emergency management ordinance.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.38.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.38-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Damages Avoided; Evidence of Success	
1	Cleaning of existing storm sewer system; Will flush existing storm sewer systems of silt and debris to correct flooding problems – currently done every 2 years	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
2	Rebuild existing storm catch basin; Will rebuild to alleviate restriction caused by broken concrete in catch basin – done on an add needed basis	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
3	Stream Channel Mitigation; Will continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Village Board, Legal	Complete	Cost	Low	<ol style="list-style-type: none"> Discontinue Completed
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Regulatory Compliance	
5	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Village Board, Legal	Ongoing Capability	Cost	-	<ol style="list-style-type: none"> Discontinue Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Ongoing as necessary	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Orchard Park has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Cleaning of existing storm sewer system.
- Rebuild existing storm catch basins.
- continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts.
- Updating/revising floodplain management ordinances to comply with latest FEMA regulations.
- Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Orchard Park participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013). The table below indicates the range of proposed mitigation action categories.

Table 9.38-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion				X						X
Cyber Attack				X						X
Earthquake				X						X
Expansive Soils				X						X
Extreme Temperature				X						X
Flood		X	X	X		X		X	X	X
Hazardous Materials				X						X
Landslide				X						X
Pandemic				X						X
Severe Storm		X		X	X	X				X
Severe Winter Storm				X						X
Utility Failure		X		X	X	X				X
Wildfire				X						X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.38-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Orchard Park would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.38-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Orchard Park - 001	Freemans Pond Dredging and Stream Rehabilitation Project	1,2	Flood	<p>Problem: Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity.</p> <p>Solution: Clear Freeman Pond of debris and sediment and increase the pond size to increase overall capacity. Additional bank stabilization will also need to be conducted to reduce flooding and water overflow, as well as erosion.</p>	Yes	Yes	2-3 Years	Village Engineer and DEC	High	High	Municipal Budget, Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, NYS DEC Climate Smart Communities Grant Program	High	NSP	NR
2022-Village of Orchard Park - 002	Upgrade communication channels for Highway, Sewer and Village DPW	All	All	<p>Problem: The current DPW system cannot communicate by radio with police, fire and EMS agencies in the village. This slows down the communication and response of the various departments during hazard events and thus time is wasted using analog methods of communication.</p> <p>Solution: Obtain new channels, and install new radios in all Town and Village vehicles. The system shall be the most modern and up to date system that existing municipalities use in</p>	No	No	1 year	Town Highway Department, OEM, Fire and Police; Village DPW	Moderate	High	Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants	High	EAP	ES





Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the region. The town and village OEM, Fire Services, and Board shall conduct some preliminary research to determine the exact cost to install this new system. Potentially a SEQR would need to be conducted to determine any adverse environmental impacts on any infrastructure that would be built as a result.										
2022-Village of Orchard Park - 003	Community Activity Center - Generator	1,2	Severe Storm, Utility Failure	<p>Problem: The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner.</p> <p>Solution: Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the village shall work with the facility operator to apply for HMGP/ BRIC funding and hire a contractor to install the generator. The location for the new generator shall be in</p>	Yes	No	2 years	Town OEM and Village, Community Center Operator, Municipal Engineers	\$800,000	High	HMGP, Municipal Budget	High	SIP	PR, PP



Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				a place that is safe from any hazard event.										
2022-Village of Orchard Park - 004	Dam Retrofitting	1,2	Flood	<p>Problem: The Freemans Dam and Green Lake Dam are both located in the 1% annual chance flood area.</p> <p>Solution: While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Village engineer shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA guidelines to withstand severe storms. If not, the village will apply for mitigation funding, accordingly.</p>	Yes	No	2 years	Village DPW	Moderate	High	HMGP	High	SIP	SP
2022-Village of Orchard Park - 005	Emergency Management Ordinance Adoption	All	All	<p>Problem: The village does not have an emergency management ordinance. This is out of compliance with the state and federal standard for municipalities and the Village of Orchard Park needs to adopt a model emergency management ordinance.</p> <p>Solution: The village shall develop and adopt an emergency management ordinance based on the New York Homeland Security and</p>	No	No	1 year	Village Board of Trustees	Low	Moderate	Municipal Budget.	High	LPR	ES





Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Emergency Services template/ model. Once the policy has been agreed upon, the village board shall adopt the policy for the municipality.										
2022-Village of Orchard Park - 006	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).</p>	No	No	Within 3 years	Village Code Enforcement	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP
2022-Village of Orchard	Permanent Housing Location	1,2	All	<p>Problem: The Village of Orchard Park currently does not have any official permanent housing location within the village. Given the</p>	No	Yes	5 years	Village of Orchard Park OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP



Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Park - 007				<p>village has limited land and does not have any specific place for the repetitive housing relocation, the village needs identify new land for this effort.</p> <p>Solution: The village will conduct an assessment of existing sites across the village that are best suited for permanent housing relocation. These sites should have access to all utilities. The village would then work with the land owner to acquire the property, if not yet owned by the village. The village would then need to apply for FEMA funding to acquire the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the village board and DPW, and OEM</p>										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:





FPA Floodplain Administrator
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.38-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Orchard Park -001	Freemans Pond Dredging and Stream Rehabilitation Project	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Orchard Park -002	Upgrade communication channels for Highway, Sewer and Village DPW	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Village of Orchard Park -003	Community Activity Center - Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Orchard Park -004	Dam Retrofiring	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-Village of Orchard Park -005	Emergency Management Ordinance Adoption	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Village of Orchard Park -006	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Orchard Park -007	Permanent Housing Location	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.38.9 Action Worksheets

The following action worksheets have been developed by the Village of Orchard Park to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Freemans Pond Dredging and Stream Rehabilitation Project		
Project Number:	2022-Village of Orchard Park -001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity.		
Action or Project Intended for Implementation			
Description of the Solution:	Clear freeman pond and increase the pond size to increase overall capacity. Additional bank stabilization will also need to be conducted to reduce flooding and water overflow, as well as erosion,		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year flood	Estimated Benefits (losses avoided):	Flood Loss
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	High	Mitigation Action Type:	Natural System Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding secured
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	Municipal Budget, Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, NYS DEC Climate Smart Communities Grant Program
Responsible Organization:	Village Engineer and DEC	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build new retention pond	Moderate	No space
	Rehabilitation project	High	Best alternative
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Freemans Pond Dredging and Stream Rehabilitation Project	
Project Number:	2022-Village of Orchard Park -001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is the most cost effective based on village's evaluation
Technical	1	There are no technical issues
Political	1	There are no political opposing parties
Legal	1	There are no legal issues
Fiscal	-1	The village does not have the fiscal resources for this
Environmental	1	This has positive impact on the environment
Social	1	This has a positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	0	This addresses a single hazard
Timeline	1	The designated timeline is feasible
Agency Champion	1	This project is under the responsibility of the DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Community Activity Center - Generator		
Project Number:	2022-Village of Orchard Park -003		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Utility Failure		
Description of the Problem:	The community activity center does not have a generator. This facility is often used during hazard events as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the village shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	Estimated Benefits (losses avoided):	Continued Operation
Useful Life:	20 years	Goals Met:	1,2
Estimated Cost:	\$800,000	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, Municipal Budget
Responsible Organization:	OEM and Village, Community Center Operator, Municipal Engineers	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install Solar	High	Variant based on weather
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Community Activity Center - Generator	
Project Number:	2022-Village of Orchard Park -003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective
Technical	1	There are no technical issues
Political	1	There are no political issues
Legal	1	There are no legal complications
Fiscal	-1	The village does not have adequate resources
Environmental	0	This has minimal impact on environment
Social	1	This has positive social impact
Administrative	1	This has no administrative barriers
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	This timeline is feasible
Agency Champion	1	The village OEM
Other Community Objectives	1	Various
Total	11	
Priority (High/Med/Low)	High	



9.39 Town of Sardinia

This section presents the jurisdictional annex for the Town of Sardinia. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Sardinia’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.39.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Sardinia’s hazard mitigation plan primary and alternate points of contact. The Town of Sardinia followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Emergency Manager and Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from person with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.39-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gerard Whittington, Emergency Manager Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-432-2435 Email: Gerard.whittington@erie.gov	Name/Title: Beverly Gambino, Supervisor Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-496-8900 Email: beverlygambino@outlook.com
NFIP Floodplain Administrator	
Name/Title: Gene Degman, Code Enforcement Office Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-807-7818 Email: accugene2@att.net	

9.39.2 Municipal Profile

Sardinia is a rural community located in the southeast corner of Erie County. The town is approximately 50 square miles, and contains three hamlets: Sardinia, Protection and Chaffee. The town is bordered by Wyoming County to the east and Cattaraugus County to the south. The Towns of Holland and Colden are to the north and the Town of Concord is on the west. The town is approximately 35 miles from downtown Buffalo. The Town contains two state highways, NYS Route 39 and NYS Route 16. Town of Sardinia is situated within three watersheds: Cazenovia Creek-Buffalo River watershed in the north; Buffalo Creek watershed in the northeast; and Cattaraugus Creek watershed in the south. The area’s first white settlement around 1809. George Richmond and Ezra Nott were the first settlers. By 1810, there were fifteen other families in the area. The town contains 38 registered historic buildings. (Town of Sardinia 2003)



According to the U.S. Census, the 2010 population for the Town of Sardinia was 2,775. The estimated 2019 population was 2,780, a 0.1 percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.9 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.39.3 Jurisdictional Capability Assessment and Integration

The Town of Sardinia performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.39.3). The Town of Sardinia’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Sardinia. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.39-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL2-2006, Chapter 52, Construction Code, Uniform	Local, State	Code Enforcement/Building Department
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.					
Zoning Code	Yes	No	LL1-2005, Chapter 115, Zoning	Local	Planning Board, Code Enforcement Officer
Comment: The purpose of this chapter is to provide for the orderly growth of the Town of Sardinia by setting minimum requirements in accordance with a comprehensive plan designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. Specifically, this chapter is adopted to: A. Implement the Town of Sardinia Comprehensive Plan. B. Regulate the use of land. C. Regulate the location, height and bulk of buildings and their accessory structures.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
D. Preserve and protect significant natural resources. E. Preserve and protect the rural character of the community.					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	LL1-2005, Chapter 115, Zoning Article IX Site Plan Approval	Local	Planning Board
Comment: Prior to the development of individual parcels for commercial activities, including but not limited to multifamily residential and manufactured housing parks, a site plan for the land activity or development must be reviewed and approved. The purpose of these regulations is to enable the town to control the placement of buildings and accessory structures and ancillary improvements so that they do not impact neighboring land uses or negatively impact the surrounding community. The implementation of these requirements furthers the public health, safety and general welfare of the community by allowing the reviewing body to restrict the number, size and location of vehicular access points along all roads; require buffering of incompatible land uses; require adequate aesthetic enhancements in the form of soft and hard landscaping features; require buildings to have architectural features which are consistent with human scale and/or require architectural styles that are consistent or reflective of the surrounding community; and require the provision of open space in multifamily residential or manufactured housing parks for recreational opportunities or permit the town to accept monies in lieu of providing such open space for the creation of recreational opportunities elsewhere in the community. Site plan review includes assessment of hazard risk					
Environmental Protection Ordinance	Yes	Yes	LL1-2005, Chapter 115, Zoning	Local	Planning and Zoning Board
Comment: Zoning administration includes assessment of hazard risk.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 63, Flood Damage Prevention	Local	FPA
Comment: BFE+2 feet is required for all construction in the SFHA (residential and non-residential). It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: No					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	Chapter 105, Trees and Chapter 49, Buildings, Unsafe	Local	Town Board, Planning Board,
Comment: The purpose of this article is to allow entry onto private property to cut trees that endanger the public life and property within the Town of Sardinia.					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003	Local	Planning Board, Town Board
Comment: The Comprehensive Plan helps ensure that local land use decisions are sensitive to regional context and are consistent with countywide goals and objectives. Goals of the Plan include <ul style="list-style-type: none"> • Preserve and protect the rural and small-town character of the Town of Sardinia • Balance residential and business development with the protection of natural resources, agricultural land, and rural character • Manage growth to ensure high quality development • Protect natural resources • Maintain the water quality of streams 					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Natural Resources and Environmental Protection.	Local	Town Board
Comment: Natural features within the Town of Sardinia include streams, wetlands, floodplains, steep slopes, and forests. These features are significant to the natural ecology of the area, and influence the types and density of development that is feasible and appropriate in various areas within the town.					
Economic Development Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Economic and Business Development	Local	Town Board
Comment: Issues and opportunities relating to business and economic development include: <ul style="list-style-type: none"> • Providing appropriate infrastructure and other services to local businesses • Market potential for businesses in the town • Identifying appropriate locations for future business expansion • Ensuring “business-friendly” policies in the town 					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Economic and Business Development	Local	Town Board
Comment: Infrastructure within the Town of Sardinia consists of roads and highways, electrical and other utilities, and water service. Trails provide alternative means of transportation and are addressed in the Parks and Recreation section of the Plan.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	Town of Sardinia Comprehensive Plan, 2003, Transportation and Infrastructure	Local	-
Comment: Goals of this Chapter include: <ul style="list-style-type: none"> • Maintain a supportive business environment to retain existing businesses and to attract new business development. <ul style="list-style-type: none"> ○ Encourage commercial and industrial expansion and new commercial and industrial development in appropriate areas of the town. In particular: Encourage the clustering of businesses in specific areas along Routes 16 and 39 and East Schutt Road. Encourage limited business development in and around the Hamlets of Chaffee and Sardinia of the type and scale that is harmonious with the residential neighborhoods of the Hamlets. ○ Encourage tourism and related business development. 					
Agriculture Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003	Local	Town Board
Comment: This chapter of the Comprehensive Plan sets the goal to promote the continued viability of agriculture and the retention of farmland.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Sardinia to oversee and track development.

Table 9.39-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town Building Department/Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	The town provided data for this Plan that detailed the lack of development within the floodplain in the past five years.
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	There is adequate land in the town to accommodate permanent and temporary locations

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Sardinia and their current responsibilities which contribute to hazard mitigation.



Table 9.39-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board conducts site plan and development reviews that incorporate natural hazard exposure
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals conducts variance hearings to determine if proposals may proceed in contravention of zoning and in consideration of natural hazard risks.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Highway Department is one of the core functions of the town government
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/Building Inspector provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Department of Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Ready Erie Preparedness
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Roadway maintenance is performed, as appropriate, by the State Department of Transportation, Erie County Highway Department and Town Highway Department.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Floodplain Administrator enforces building restrictions in floodplains.
Surveyor(s)	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Sardinia.

Table 9.39-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Sardinia.

Table 9.39-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Supervisor
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	Yes	Hazard mitigation information is posted as necessary
Social media for hazard mitigation education and outreach	Yes	Town Clerk
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to	No	Links to established websites



Outreach Resources	Available? (Yes/No)	Comment:
communicate hazard-related information		
Warning systems for hazard events	Yes	Ready Erie Preparedness, NY Alert, website, Facebook
Natural disaster/safety programs in place for schools	No	School System/Board of Cooperative Educational Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Sardinia.

Table 9.39-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.39-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong



Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.39.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gene Degman, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Sardinia.

Table 9.39-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Sardinia	4	6	\$114,205	0	3

Source: FEMA 2020a and 2020b
 Notes:
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas prone to flooding in the town are mainly along Cattaraugus Creek and some of its tributaries. There are no RiskMAP projects currently underway in the town. The town indicated that no properties have been mitigated and that a list of property owners interested in mitigation is not maintained. The town’s flood hazard maps adequately address the flood risk within the jurisdiction. The town does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Town of Sardinia does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in May 2016. The Code Enforcement Officer is responsible for floodplain administration and this individual is not a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that its floodplain management staff are not in need of assistance or training to support its floodplain management program. The town does not make Substantial Damage determination. The town’s floodplain management meets minimum requirements and includes inspections and permit review utilizing GIS technology. The town does not participate in the Community Rating System.



9.39.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Sardinia has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 39
- Route 16
- Genesee Road, Savage Road, Allen Road, and Middle Road are also evacuation routes and are county owned.

The town will coordinate with the County Highway Department and fire departments to keep evacuation routes clear and coordinate public notifications. The fire department and the Highway Department will coordinate with the Sheriff and NYS Police for purposes of notification, planned routes and shelter locations. First responders will assist evacuees as needed.

Sheltering

The Town of Sardinia has identified the following designated emergency shelters within the town.

Table 9.39-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	12320 Savage Road	TBD	No	Yes	Yes	First Responders/Red Cross	-
St. Jude's Roman Catholic Church	12800 Genesee Road	TBD	No	Yes	TBD	First Responders/Red Cross	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Sardinia has identified the following sites suitable for placing temporary housing units and has stated its intention to coordinate with the American Red Cross during emergencies.

Table 9.39-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to address this # 2022-Sardinia Town-006					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites



currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Sardinia has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.39-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to address this # 2022-Sardinia Town-006					

9.39.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.39-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.39-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	2	0	3	0	7	0	7	0	3	0	5	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	52	0	79	0	55	0	53	0	76	0	61	0
Total Permits	54	0	82	0	62	0	60	0	79	0	66	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.39.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Sardinia’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified



using mapping techniques and technologies and for which the Town of Sardinia has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.39-1. Town of Sardinia Hazard Area Extent and Location Map 1

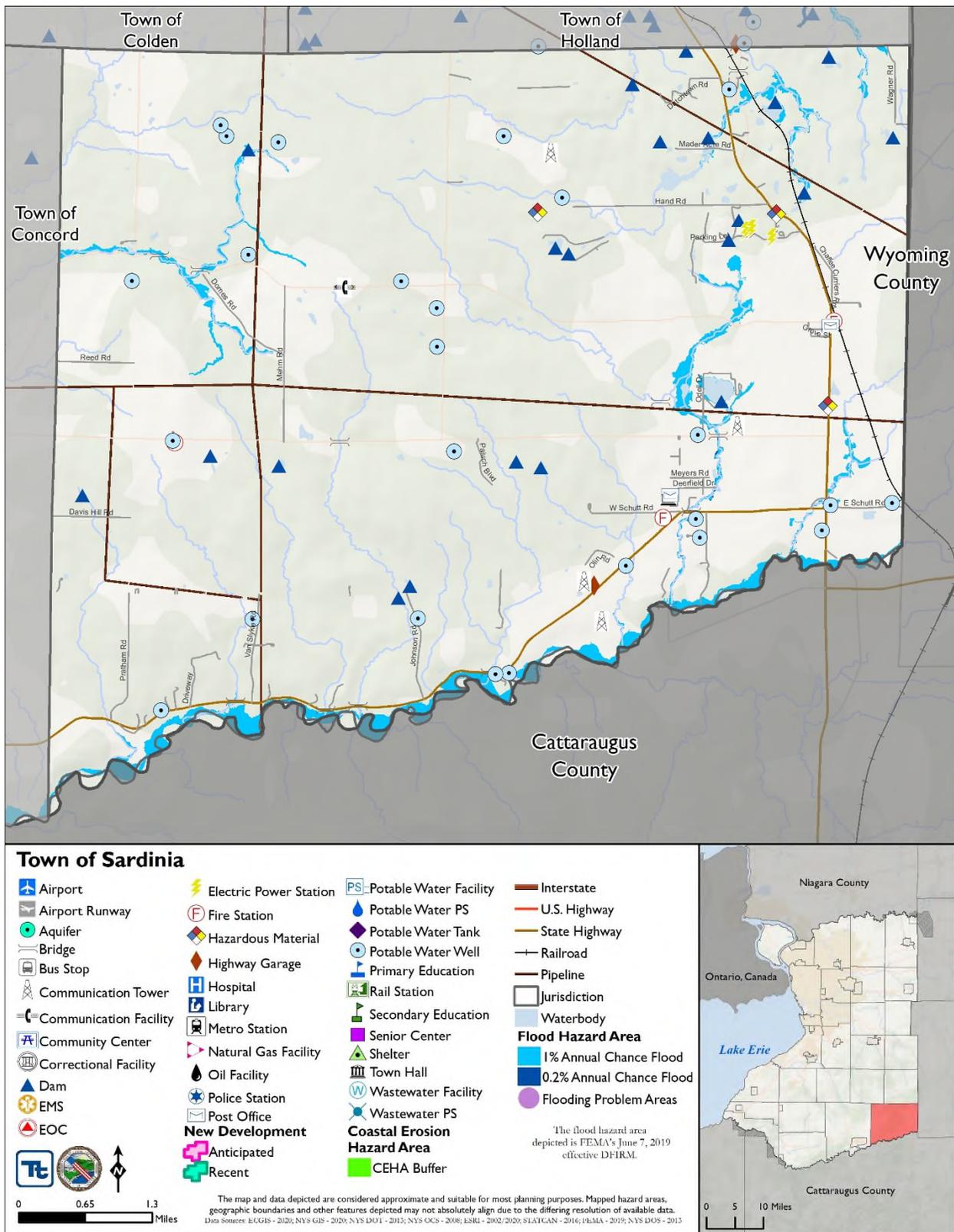




Figure 9.39-2. Town of Sardinia Hazard Area Extent and Location Map 2

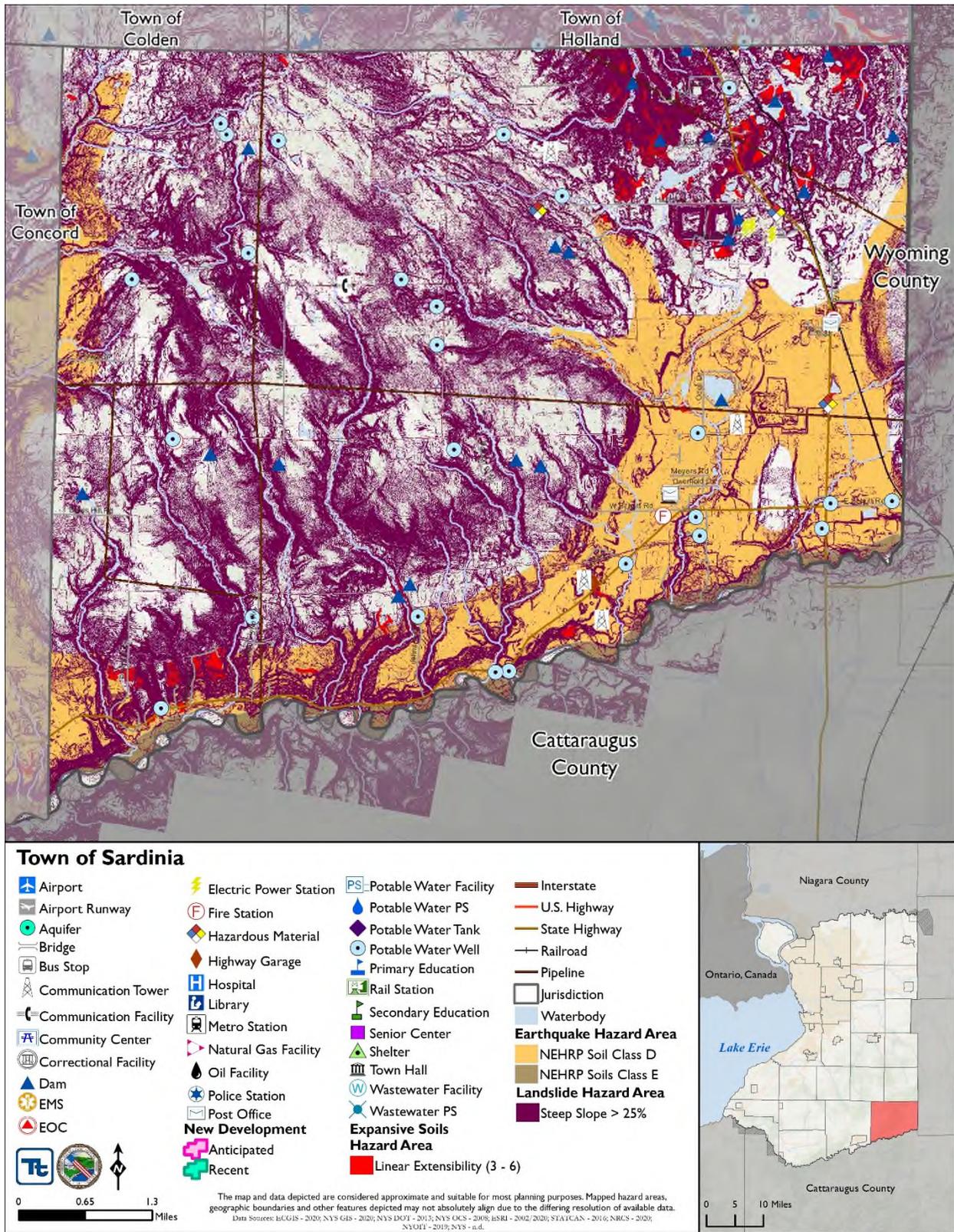
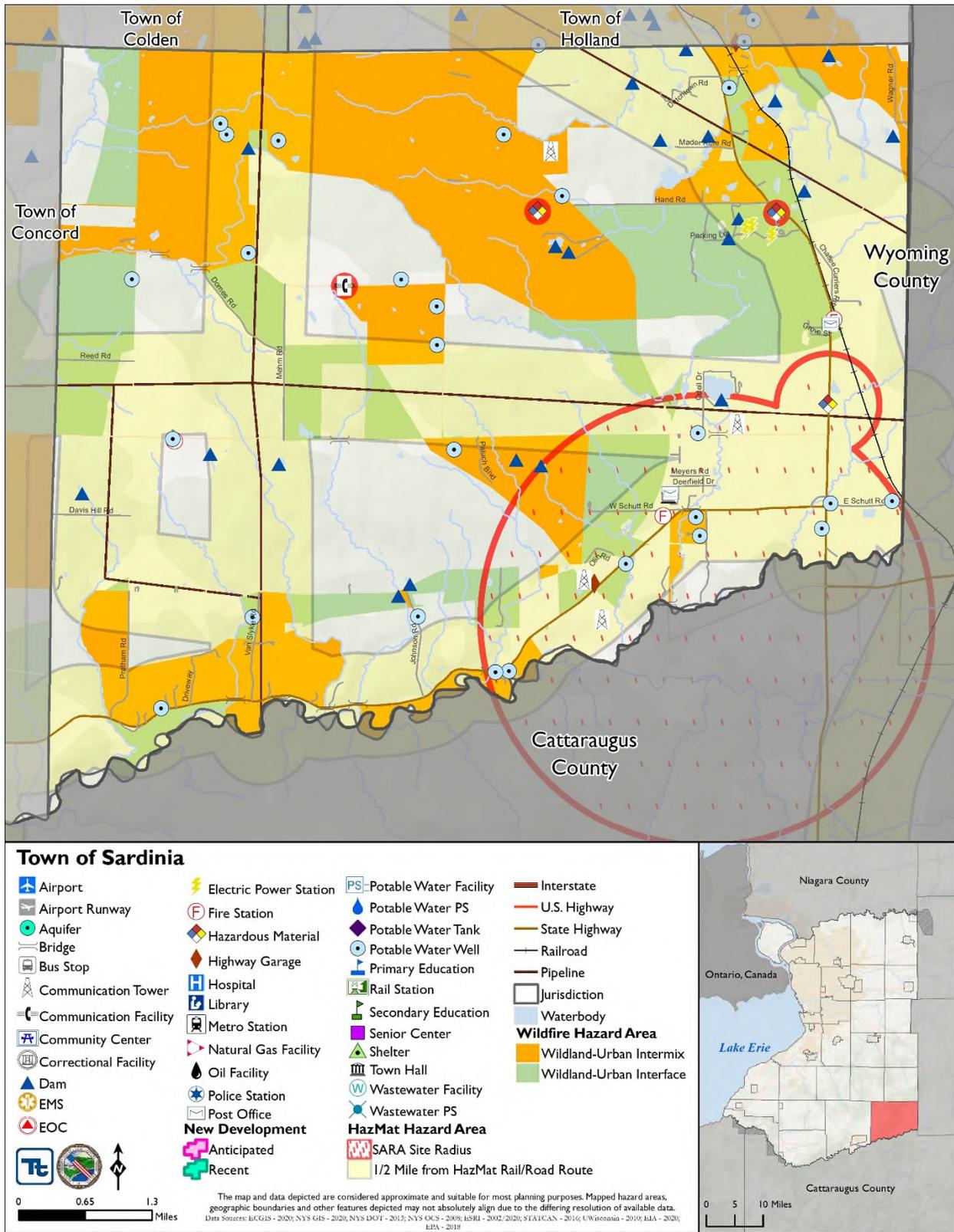




Figure 9.39-3. Town of Sardinia Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Sardinia’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.39-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.39-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, town did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, town did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, town did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, town did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, town did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, town did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Sardinia’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Sardinia. The Town of Sardinia has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated to make the following changes based upon relative rate of occurrence.

- Change the Flood risk from Low to Medium
- Change the Hazardous Materials risk from Medium to High
- Change the Landslide risk from Medium to Low.

Table 9.39-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Medium	High
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	High	





Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.39-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Donald Kelleck Pond Dam	Dam	X	X	2022-T Sardinia-002
Erie County Conservation Society Dam	Dam	X	X	2022-T Sardinia-003
Pfarners Pond Dam	Dam	X	X	2022-T Sardinia-004

Source: FEMA 2021

Identified Issues

After review of the Town of Sardinia’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Sardinia has identified the following vulnerabilities within their community:

- Trucks become a problem on roadways during heavy snow and storm events. Trucks should follow designated detour routes during these hazard events.
- The town has been impacted by COVID-19.
- There are three dams located within the Special Flood Hazard Area.
- There may be Repetitive Loss Properties located within the town.
- The town was not able to identify temporary and permanent housing locations.

9.39.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own



table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.39-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	Work with landowner, farmer, and Town to implement a Water Retention solution at corner of Genesee Rd and Savage Rd	Flood	Flood conditions during thaw	Town of Sardinia	Complete			1. Discontinue 2. 3. Complete
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Planning Board	Complete			1. Discontinue 2. 3. Complete
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flood	Not Identified	Code Enforcement	Complete			1. Discontinue 2. 3. Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Code Enforcement	Ongoing			1. Discontinue 2. 3. Ongoing capability
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Planning Board	Complete			1. Discontinue 2. 3. Complete
	Require staff involved in floodplain management and ordinance enforcement to	Flood	Not Identified	Code Enforcement	Ongoing			1. Discontinue 2.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	<ol style="list-style-type: none"> 1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	become Certified Floodplain Managers (CFMs).					Damages Avoided; Evidence of Success	<ol style="list-style-type: none"> 3. Ongoing capability



Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Sardinia participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.39-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X			X			X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X		X	X			X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X			X			X			X
Severe Winter Storm	X			X			X			X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.39-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Sardinia would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.39-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Sardinia-001	Truck Traffic Detours during Weather Events	1	All Hazards	<p>Problem: Trucks passing through the town, sometimes loaded with hazardous materials, should be aware of best routes to use during storm events.</p> <p>Solution: The town will coordinate with the County Public Works Department and the NYS Department of Transportation to ensure that needed information gets to truck haulers.</p>	No	No	Within 3 years	Town Highway Department, County Public Works, NYS Department of Transportation	\$500 staff time	Reduce risk of road accidents and HazMat releases during hazard events	Municipal budget	High	LPR, EAP	PI
2022-T Sardinia-002	Protect the Donald Kelleck dam to the 0.2% annual flood chance event	1, 2	Flood	<p>Problem: The Donald Kelleck Dam is in the Special Flood Hazard Area.</p> <p>Solution: The town will contact the facility managers of the privately owned dam and discuss options for protecting the dams to the 0.2% annual chance flood.</p>	Yes	No	Within 5 years	Town Highway Department, Emergency Manager	\$500	Ensure continued operation of this flood protection facility	Municipal budget	High	EAP	PI
2022-T Sardinia-003	Protect Erie County Conservation Society dam to the 0.2% chance annual flood	1, 2	Flood	<p>Problem: The Erie County Conservation Society Dam is in the Special Flood Hazard Area and is subject to flooding hazard.</p>	Yes	No	Within 3 years	Town Highway Department, Emergency Manager, County DPW	<\$500 for outreach, TBD by engineering analysis for county owned dams	Facility managers aware of options to protect dams to the 0.2% annual	County and municipal budget	High	EAP	PI



Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will contact the facility managers of this privately owned dam and discuss options for protecting the dam to the 500-year flood level. The County DPW will survey the dam to determine what protections are necessary and carry out the necessary upgrades.						chance flood event				
2022-T Sardinia-004	Protect Pfarmer's Farm dam to the 0.2% annual chance flood event	1, 2	Flood	<p>Problem: The Pfarmer's Farm dam is in the Special Flood Hazard Area.</p> <p>Solution: The town will contact the facility managers of the privately owned dam and discuss options for protecting the dams to the 500-year flood level.</p>	Yes	No	Within 5 years	Town Engineer	\$500 staff time	Ensure continuity of flood preventions services from this dam	Municipal budget	High	EAP	PI
2022-T Sardinia-005	Residential Property Flood Mitigation.	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including</p>	No	No	Within 3 years	Town Board, FPA, homeowners	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share by property owners	High	SIP	PP



Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.										
2022-T Sardinia-006	Identify temporary and permanent housing locations	2	All Hazards	<p>Problem: The town was not able to identify locations for temporary or permanent housing .</p> <p>Solution: The town will work with the county to identify temporary and permanent housing locations and will acquire access to these housing locations.</p>	No	No	Within 5 years	CEO, FPA	Staff Time	Ensure safe locations for people to live after a natural disaster	Municipal funds	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





NFIP National Flood Insurance Program
OEM Office of Emergency Management

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.39-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Sardinia-001	Truck traffic Detours during Weather Events	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2022-T Sardinia-002	Protect the Donald Kelleck dams to the 0.2% annual flood chance event	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-T Sardinia-003	Protect Erie County Conservation Society dam to the 500-year Flood Level	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-T Sardinia-004	Protect Pfarner’s Farm dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-T Sardinia-005	Residential Property Flood Mitigation.	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-T Sardinia-006	Identify temporary and permanent housing locations	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.39.9 Action Worksheets

The following action worksheets have been developed by the Town of Sardinia to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Sardinia Action Worksheet			
Project Name:	Truck Traffic Detours during Weather Events		
Project Number:	2022-T Sardinia-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Trucks passing through the town, sometimes loaded with hazardous materials, should be aware of best routes to use during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will coordinate with the County Public Works Department and the NYS Department of Transportation to ensure that needed information gets to truck haulers.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	All Hazards	Estimated Benefits (losses avoided):	Reduce risk of road accidents and HazMat releases during hazard events
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	<\$500 for outreach analysis , TBD by engineering for county owned dams	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 year	Potential Funding Sources:	Municipal budget
Responsible Organization:	Town Highway Department, County Public Works, NYS Department of Transportation	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Shut down roadways during emergencies	Very High	Not feasible, endangers safety
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Truck Traffic Detours during Weather Events	
Project Number:	2022-T Sardinia-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the dam.
Property Protection	1	Project will protect the dam from the flood hazard.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	Within 3 years
Agency Champion	1	Town Highway Department, Emergency Manager, County DPW
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Town of Sardinia Action Worksheet			
Project Name:	Residential Property Flood Mitigation		
Project Number:	2022-T Sardinia-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	BFE +2	Estimated Benefits (losses avoided):	Provide flood protection for residential property owners
Useful Life:	Ongoing	Goals Met:	1
Estimated Cost:	TBD by engineer's analysis and cost of each property	Mitigation Action Type:	Structure and Infrastructure Improvement
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 year	Potential Funding Sources:	BRIC, HMGP, FMA, cost share by property owners
Responsible Organization:	Town Board, FPA, homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Encourage property owners to abandon their homes	Very High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Residential Property Flood Mitigation	
Project Number:	2022-T Sardinia-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will provide a mitigation option for residential property owners.
Property Protection	1	Project will protect residential property owners from flood exposure
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 3 years
Agency Champion	1	Town Board, FPA, homeowners
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



9.40 Village of Sloan

This section presents the jurisdictional annex for the Village of Sloan. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Sloan’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.40.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Sloan’s hazard mitigation plan primary and alternate points of contact. The Village of Sloan followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Department of Public Works, Code Enforcement, and the clerk treasurer. The DPW chief, CEO, and clerk treasurer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.40-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Debra Smith, Clerk Treasurer Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1560 Email: sloanny@roadrunner.com	Name/Title: Karen M. Gold, Deputy Clerk Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1560 Email: kgold@villageofsloan.org
NFIP Floodplain Administrator	
Name/Title: Robert Smith, Crew Chief/Department of Public Works Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1561 Email: rsloanhwydpt@roadrunner.com	
Additional Contributors	
Name/Title: Vincent Ferraraccio, CEO Method of Participation: Submitted data and worksheets.	

9.40.2 Municipal Profile

The village was incorporated in 1896 from portions of the original Town of Cheektowaga. Its name honors Samuel Sloan, President of the Lackawanna Railroad. The village is surrounded on three sides by the Town of Cheektowaga and on the west by the City of Buffalo. The Indian trail from Buffalo to Batavia ran through the village and continued to be well travelled and then improved by white settlers from a mud path to a wooden plank road, and toll booths in 1850. The village was a historically important railroad center. Five railroads were built into the village between 1850 to 1880 (Village of Sloan website, accessed 2020).



According to the U.S. Census, the 2010 population for the Village of Sloan was 3,661. The estimated 2019 population was 3,562, a 2.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 15.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.40.3 Jurisdictional Capability Assessment and Integration

The Village of Sloan performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Village of Sloan’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Sloan. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.40-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	19 NYCRR Part 1203; Village Code Ch 205	State	Code Enforcement
Comments: NYS Uniform and Energy Code 2020; This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Sloan. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.					
Zoning Code	Yes	No	VC 455, Zoning	Local	Code Enforcement
Comment: The zoning regulations and districts hereinafter set forth are made in accordance with a comprehensive plan for classifying, regulating and restricting the height, number of stories and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, the density of population and the location and use of buildings, structures and land for trade, industry, residence or other purposes; establishing the boundaries of districts for said purposes; and providing fines and penalties for violations, so as to promote the health, safety, morals and general welfare of the Village of Sloan.					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	No	-	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	Yes	VC 390, Stormwater Management	Local	DPW/CEO
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	VC 205, 455	Local	CEO
<p>Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc.</p> <ul style="list-style-type: none"> The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations. 					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	VC 390	Local	Zoning Board
<p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	No	VC 360-34	Local	Board of Trustees
<p>Comment: The purpose of this article is to provide for the health, safety and general welfare of the citizens of the Village of Sloan through the regulation of nonstormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02. The objectives of this article are:</p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<ul style="list-style-type: none"> To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02; To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; To prohibit illicit connections, activities and discharges to the MS4; To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. 					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	-	-	-	-
Comment: None					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	VC 390	Local	FPA
Comment: There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Cheektowaga	Local	TOC Emergency Management Services
Comment:					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Sloan to oversee and track development.

Table 9.40-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is fully developed

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Sloan and their current responsibilities which contribute to hazard mitigation.

Table 9.40-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustments	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	Department of Public Works
Construction/Building/Code Enforcement Department	Yes	One part-time Code Enforcement Officer
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Annual tasks undertaken by DPW: tree maintenance on right of way, snow/ice removal from streets.
Mutual aid agreements	Yes	With Erie County
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village subcontracts for engineering services
Engineers or professionals trained in building or infrastructure construction practices	Yes	The village subcontracts for engineering services
Planners or engineers with an understanding of natural hazards	Yes	The village subcontracts for engineering services
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	The village has a shared service with the Town of Cheektowaga.
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Sloan.



Table 9.40-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Sloan.

Table 9.40-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village of Clerks' Office
Personnel skilled or trained in website development	Yes	Subcontract with Webmaster
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Official Facebook page for village
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	The village is a member of the Western New York Stormwater Coalition.
Warning systems for hazard events	No	None other than social media
Natural disaster/safety programs in place for schools	Yes	School and volunteer fire department
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Sloan.



Table 9.40-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	N/A	No results for 2020 yet
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.40-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.40.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Robert Smith, DPW Crew Chief





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Sloan.

Table 9.40-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Sloan	0	0	\$0	0	0

Source: FEMA 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The municipality does not have a list of properties that have been damaged by flooding, but the village is aware of areas with street flooding in heavy rains. Some areas are being addressed through curbing installation. The village does not maintain a list of property owners interested in flood mitigation and there are no RiskMAP projects underway. The village does not make Substantial Damage determinations and no properties have been mitigated.

NFIP Compliance

The DPW department is responsible for floodplain management. There are not any certified floodplain managers on staff. The village does not have access to resources to determine possible flooding condition from climate change other than FEMA publications. The village’s floodplain management staff does not need assistance or training because they are not located in a floodplain or have shorelines. The flooding that occurs in the village is minor, and from heavy rains and snow melt. They are partially mitigated by curbing, storm sewer maintenance and repair, assessment and rehabilitation of underground flume.

The village has not had a Community Assistance Contact (CAC) or Community Assistance Visit (CAV). The Village of Sloan’s administration services include outreach through the WNYSC Code official completed time of sale inspections of stormwater facilities for both commercial and residential determines any illegal connection. There are not any outstanding NFIP compliance violations that need to be addressed. The local law number of the village’s flood damage prevention ordinance is VC 390 December 11, 2007. The Code Official supports floodplain management when completing site plan reviews and determining requirements pertaining to landscape and parking lot drainage.

9.40.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Sloan has identified the following routes and procedures to evacuate residents prior to and during an event.

- The Village of Sloan is located within the Town of Cheektowaga and would follow their emergency plan of evacuation and housing.



Sheltering

The Village of Sloan has identified the following designated emergency shelters within the village.

Table 9.40-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Piekarski Community Center	140 Halstead Avenue	75	Yes	Partial	Yes	First aid and EMS with local fire department	Short term shelter use (1-2 days)

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Sloan has identified the following sites suitable for placing temporary housing units.

Table 9.40-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-V. Sloan-#005					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Sloan has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.40-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate locations for Permanent Housing. See Mitigation Action 2022-V. Sloan-#005					

9.40.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.40-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.



Table 9.40-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	1	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0	2	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.40.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Sloan’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Sloan has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.40-1. Village of Sloan Hazard Area Extent and Location Map 1

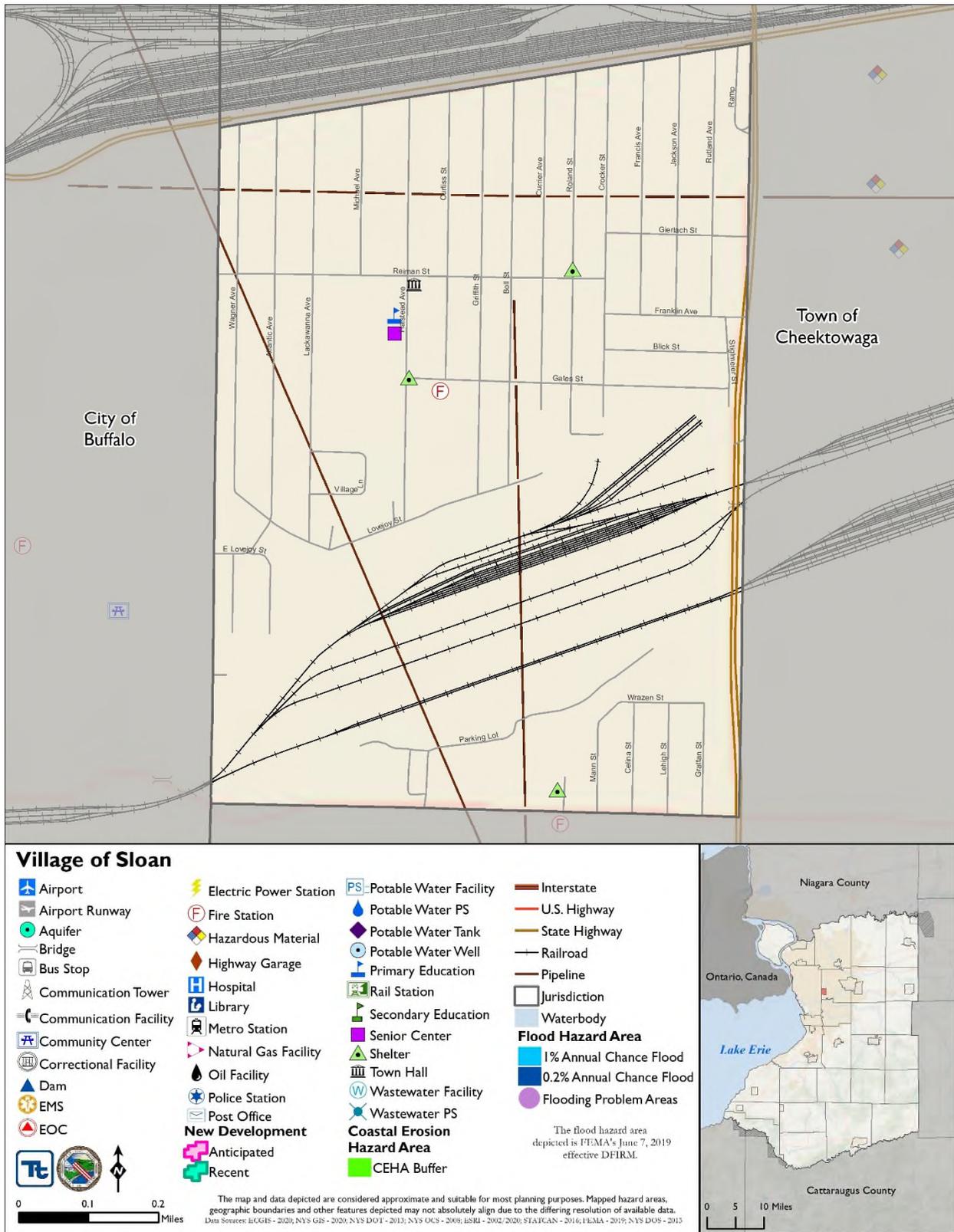




Figure 9.40-2. Village of Sloan Hazard Area Extent and Location Map 2

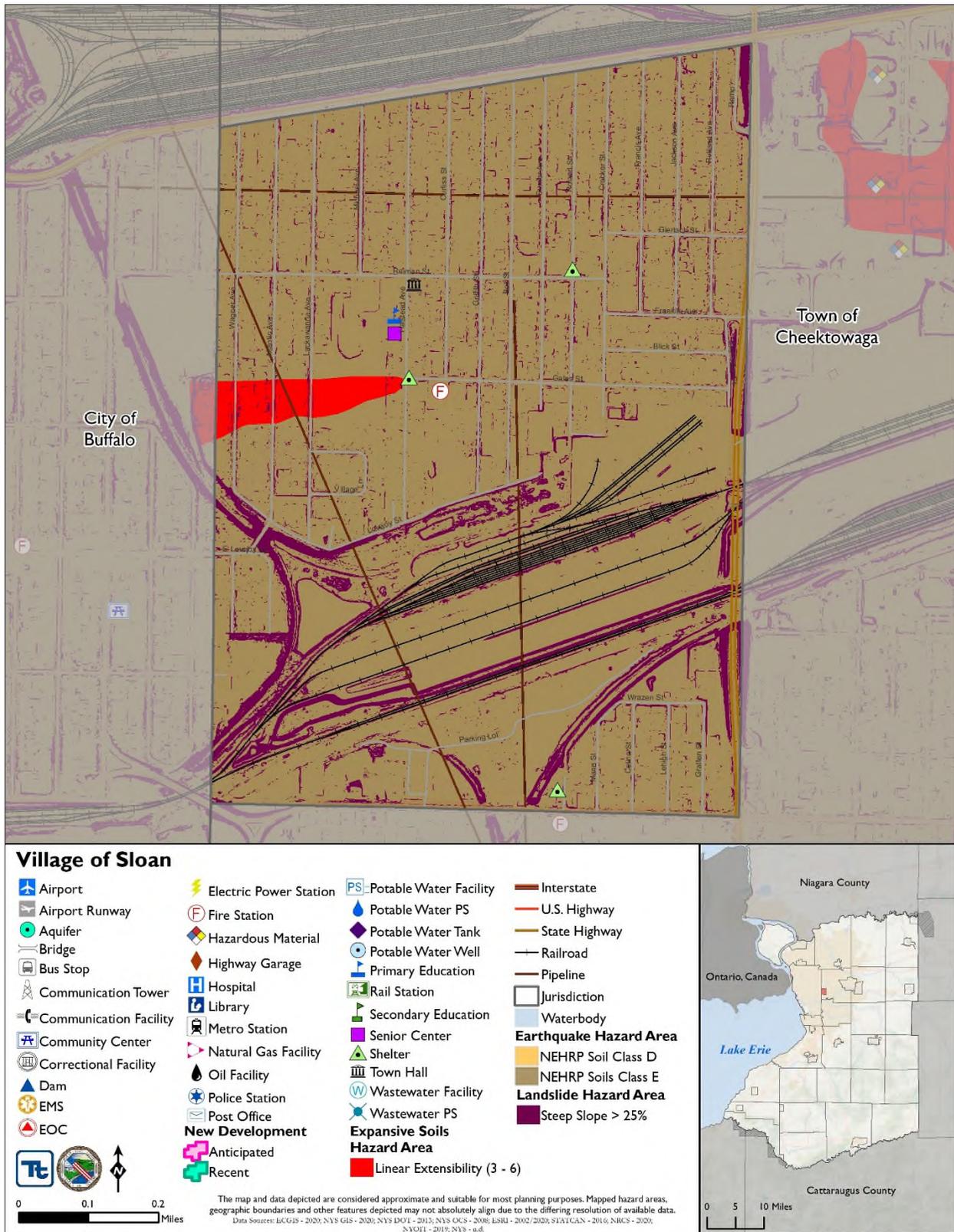
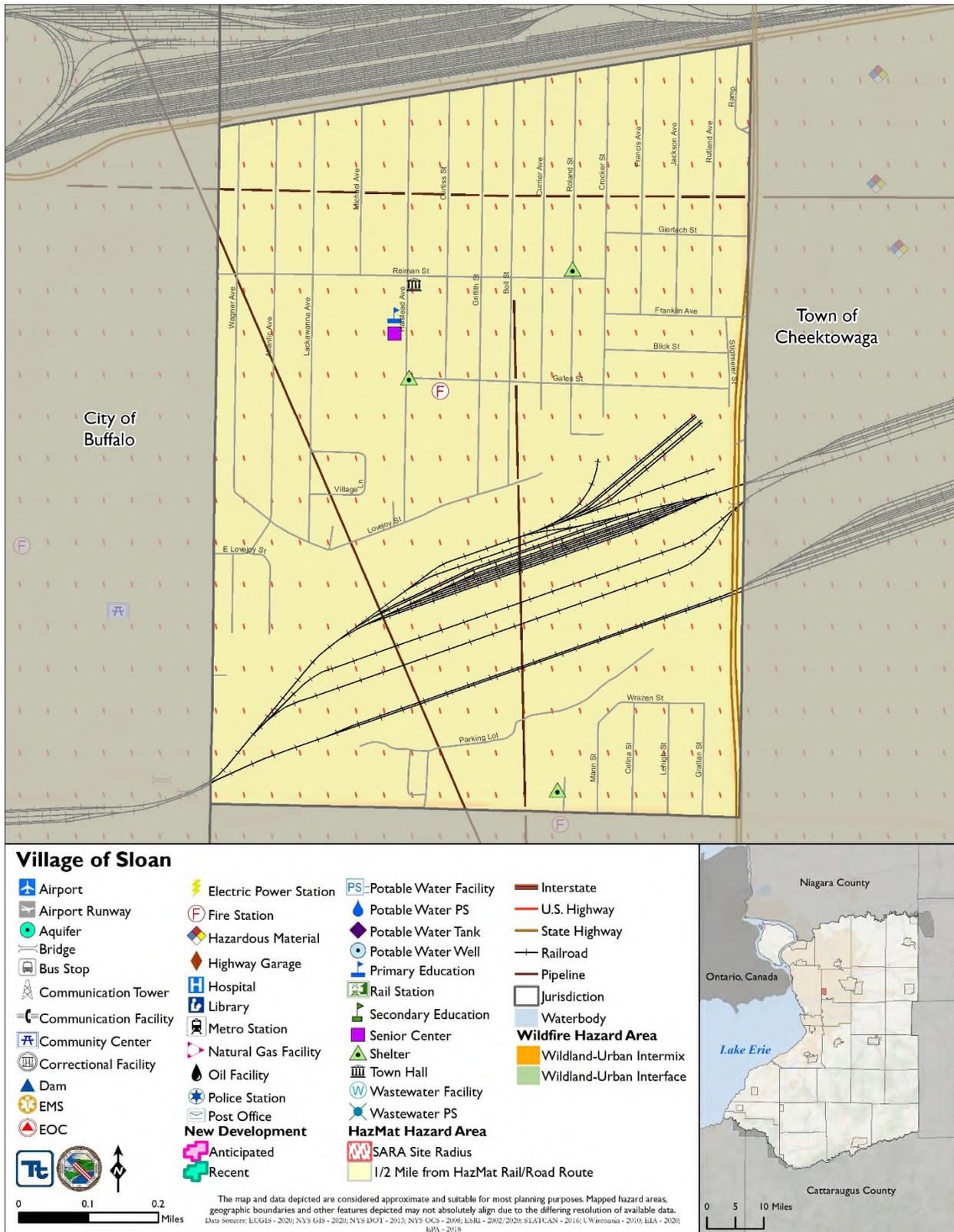




Figure 9.40-3. Village of Sloan Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Sloan’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.40-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.40-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Sloan’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Sloan. The Village of Sloan has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village did not provide feedback on the following hazard rankings.

Table 9.40-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood





Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.40-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: HAZUS-MH 4.2

Identified Issues

After review of the Village of Sloan’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Sloan has identified the following vulnerabilities within their community:

- Sloan Municipal Building 425 Reiman Street- lacks backup generator power. See Mitigation Action 2022-V. Sloan-001.
- Street and residential basement flooding during heavy rains and/or snowmelt. Under NYS DEC Order on Consent, the villages’ sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years. In 2021, the village is undertaking a multi-year project of curbing and DI inspection/repair/replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do not flow into the flume. See Mitigation Action 2022-V. Sloan-002
- Currier Street and portions of Atlantic Avenue do not have curbing, which reduces storm water flow to existing drain inlets, leading to water ponding on street. See Mitigation Action 2022-V. Sloan-003

9.40.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.40-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	EPG Monies Used	
	Undertake smoke tests to determine inappropriate hookups to our storm water system from downspouts, roof leaders, sump pumps, etc.	Flooding	Engineering	Village submitted for an EPA Urban Waters Grant. Reduction of inappropriate hookups would lessen storm water flooding and backups.	Complete	Level of Protection	High	1. Discontinue 2. 3. Project was completed in 2018.
	Inspection of stream flume with sewer camera	Flooding	Engineering	Approx. 75 years ago, village diverted a small stream underground through a flume. The flume has not been assessed for damage/blockage/ infiltration in excess of 30 years	No Progress	Damages Avoided; Evidence of Success	352 deficiencies were noted and letters sent to property owners	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	DPW, Engineering	Outdated floodplain management ordinance	No Progress	Cost		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMS	Flooding	DPW, Engineering	Floodplain management ordinance is not updated to be consistent with new FIRMS	No Progress	Level of Protection		1. Include in the 2022 HMP as action 2022-Village of Sloan-004
						Damages Avoided; Evidence of Success		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Sloan has not identified any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Sloan participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.40-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X			X					X
Cyber Attack	X	X			X					X
Earthquake	X	X			X					X
Expansive Soils	X	X			X					X
Extreme Temperature	X	X			X					X
Flood	X	X			X				X	X
Hazardous Materials	X	X			X					X
Landslide	X	X			X					X
Pandemic	X	X			X					X
Severe Storm	X	X			X				X	X
Severe Winter Storm	X	X			X				X	X
Utility Failure	X	X			X					X
Wildfire	X	X			X					X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.40-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Sloan would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.40-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Sloan-001	Generator for Sloan Municipal Building	1, 2	Utility Failure, All Hazards	<p>Problem: Sloan Municipal Building 425 Reiman Street lacks backup power source Lack of power results in a breakdown of continuity of operations and prevents the Sloan Municipal Building from providing critical services during a hazard event.</p> <p>Solution: The village will work with the county to research and purchase the approximately sized backup generator for the building. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.</p>	Yes	None	1 year	Village of Sloan, DPW, Erie County	\$50,000	Continuity of operations of the Sloan Municipal Building	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Village of Sloan-002	Drain inlet replacement and repair and inspection of flume	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Street and residential basement flooding during heavy rains and/or snowmelt. Under NYS DEC Order on Consent, the villages' sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years.</p> <p>Solution: In 2021, the village is undertaking a multi-year project of curbing and DI inspection/ repair/ replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do NOT flow into the flume.</p>	No	None	Within 5 years	DPW, DEC, Engineering, Construction	High	High, reduces flooding	FEMA BRIC and HMGP	High	SIP	SP



Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				The Village DPW, supported by DEC and engineering and construction as necessary, will seek funding to replace and repair drain inlets to improve water flow and reduce flooding at these locations.										
2022-Village of Sloan-003	Curbing of Currier Street and portions of Atlantic Avenue	1, 2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: Currier Street and portions of Atlantic Avenue do not have curbing, which reduces storm water flow to existing drain inlets, leading to water ponding on street.</p> <p>Solution: The Village DPW will seek engineering support to develop a plan to reduce the stormwater overflow on the streets. Recommendations from engineering will be implemented, depending on funding. Potential solutions include a sump pump to redirect runoff, replacing drain inlets, or upsizing culverts.</p>	No	No	Within 5 years	Engineering, DPW	Medium-High	High, reduce flooding and street closures	FMA, Municipal Budget	High	SIP	SP
2022-Village of Sloan-004	Updated floodplain management ordinance	1, 2, 3	Flood	<p>Problem: Floodplain Management Ordinances need to be updated to comply with newest versions of FIRMS.</p> <p>Solution: The village will update/revise floodplain management ordinances to comply with latest FEMA regulations and new FIRMS.</p>	No	No	1 year	Village of Sloan	Low	High	Municipal Budget	High	LPR	PR
2022-Village of Sloan-005	Temporary and Permanent Housing	1, 2, 3	All Hazards	<p>Problem: The village does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The village will work with Erie County Emergency Services to identify, purchase and designate sites</p>	No	No	1-2 years	Village of Sloan, Erie County Emergency Services	Low-Medium	High	Municipal Budget, Erie County Budget, FEMA, HUD	High	LPR	PR



Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose. The village will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain





Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.40-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Sloan-001	Generator for Sloan Municipal Building	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-V. Sloan-002	Drain inlet replacement and repair and inspection of flume	1	1	1	0	1	1	-1	1	1	1	1	0	1	1	10	High
2022-V. Sloan-003	Curbing of Carrier Street and portions of Atlantic Avenue	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2022-V. Sloan-004	Updated floodplain management ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Sloan-005	Temporary and Permanent Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.40.9 Action Worksheets

The following action worksheets have been developed by the Village of Sloan to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Generator for Sloan Municipal Building		
Project Number:	2022-Village of Sloan-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure, All Hazards		
Description of the Problem:	Sloan Municipal Building 425 Reiman Street lacks backup power source Lack of power results in a breakdown of continuity of operations and prevents the Sloan Municipal Building from providing critical services during a hazard event.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to research and purchase the approximately sized backup generator for the building. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Continuity of operations of the Sloan Municipal Building
Useful Life:	20 years	Goals Met:	1, 2
Estimated Cost:	\$50,000	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village of Sloan, DPW, Erie County	Local Planning Mechanisms to be Used in Implementation if any:	Economic Development, Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Generator for Sloan Municipal Building	
Project Number:	2022-Village of Sloan-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures function of government
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Village can install and implement project
Political	1	Village supports project
Legal	1	
Fiscal	-1	Village will need to seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	1 year
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Drain inlet replacement and repair and inspection of flume		
Project Number:	2022-Village of Sloan-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Street and residential basement flooding during heavy rains and/or snowmelt. Under NYSDEC Order on Consent, the villages' sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years.		
Action or Project Intended for Implementation			
Description of the Solution:	In 2021, the village is undertaking a multi-year project of curbing and DI inspection/ repair/ replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do NOT flow into the flume. The Village DPW, supported by NYSDEC and engineering and construction as necessary, will seek funding to replace and repair drain inlets to improve water flow and reduce flooding at these locations.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	Estimated Benefits (losses avoided):	High, reduces flooding
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	3-5 years	Potential Funding Sources:	FEMA BRIC and HMGP
Responsible Organization:	Village of Sloan DPW, NYSDEC, Engineering, Construction	Local Planning Mechanisms to be Used in Implementation if any:	Economic Development, Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadways	\$1 million	Costly and may not solve problem
	Relocate roadway	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Drain inlet replacement and repair and inspection of flume	
Project Number:	2022-Village of Sloan-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduces flooding of roadway
Property Protection	1	Reduces runoff onto properties
Cost-Effectiveness	1	
Technical	0	Village will be supported by NYSDEC
Political	1	
Legal	1	
Fiscal	-1	Village will seek funding
Environmental	1	No environmental concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	0	
Agency Champion	1	DPW
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



9.41 Village of Springville

This section presents the jurisdictional annex for the Village of Springville. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Springville’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.41.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Springville’s hazard mitigation plan primary and alternate points of contact. The Village of Springville followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including the Village Administrator and the Mayor. The Village Administrator and the Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.41-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Liz Melock, Village Administrator Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 Email: lmelock@villageofspringvilleny.com	Name/Title: Bill Krebs, Mayor Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 X1573 Email: wkrebs@villageofspringvilleny.com
NFIP Floodplain Administrator	
Name/Title: Mike Kaleta, Code Enforcement Officer Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 x1525 Email: mkaleta@villageofspringvilleny.com	
Additional Contributors	
Name/Title: Duane Boberg, Superintendent of Public Works Method of Participation: Assisted with completion of municipal capabilities worksheet	

9.41.2 Municipal Profile

The Village of Springville is located 45 minutes from downtown Buffalo, almost to Erie County’s southern border and among the Allegheny Mountain foothills. The village incorporated in 1834 and was named for its many freshwater springs. It is entirely contained within the Town of Concord. US Route 219 and NYS Route 39 traverse the village.



The first white settler to the area was Christopher Stone in 1807. Historically, Springville was the center of a prosperous agricultural district, providing services and goods to farmers in the countryside and serving as a market for agricultural products. In 1878, the Buffalo, Rochester and Pittsburgh railroad was extended to the village and in 1906 additional railroad connections were established. The railroads improved access and encouraged development of the village by providing a reliable means of obtaining raw materials and distributing manufactured goods. Despite the declining industrial economy regionally, several manufacturing businesses remain important to the local economy. The importance of farming has lessened in recent decades. Extension of US Route 219 as a limited access highway spawned large scale retail development along Cascade Drive (Village of Springville 2020).

“Pop” Warner, the father of Pee Wee football, is a nationally known figure who lived in Springville. His personal collections are housed in the Warner Museum. (village website). The Village of Springville remains the economic and social heart of the community, the only village in the Town of Concord, and an urban center serving southern Erie and Cattaraugus Counties (Village of Springville 2014).

According to the U.S. Census, the 2010 population for the Village of Springville was 4,296. The estimated 2019 population was 4,298, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 15.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.41.3 Jurisdictional Capability Assessment and Integration

The Village of Springville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.41.3). The Village of Springville’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Springville. The comment field provides information as to where hazard mitigation has been integrated.



Table 9.41-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL6-2006, Village of Springville. 2006. Building Construction and Fire Prevention. Chapter 73 Village Code	Local	Code Enforcement
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Springville. This Chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.					
Zoning Code	Yes	No	Village of Springville. 1979. Zoning, Chapter 200 Village Code	Local	Planning Board, Code Enforcement
<p>Comment: The Zoning Code sets the objectives to lessen the potential for excessive erosion. In the Wellhead Overlay District, no discharging or allowing any sewage or polluted liquid of any kind to flow on or beneath the surface of the ground is permitted. All excavation slopes more than 1:1 shall be adequately fenced and Stripping of topsoil for sale or for use on other premises is prohibited. This chapter is adopted for the purpose of promoting the health, safety, morals, and the general welfare of the community and in furtherance of the following related and more specific objectives relating to hazard mitigation:</p> <ul style="list-style-type: none"> • To guide and regulate the orderly growth, development, and redevelopment of the municipality in accordance with a Comprehensive Plan and with long-term objectives, principles and standards deemed beneficial to the interests and welfare of the people. • To promote, in the public interest, the utilization of land for the purposes for which it is most appropriate. • To secure safety from fire, panic, and other dangers and to provide adequate light, air, and convenience of access. • To eliminate nonconforming uses gradually. • To lessen the potential for excessive erosion and to conserve and reasonably to protect the natural scenic beauty of the municipality and its environs 					
Subdivision Ordinance	Yes	No	Village of Springville. 2007. Subdivision of Land, Chapter 155	Local	Planning Board, Code Enforcement, Village Board
Comment: The Planning Board of the Village of Springville is directed to study each plat of land subdivision within the village and to give approval or disapproval in accordance with the procedure and standards adopted by the Planning Board and approved by the Village Board.					
Stormwater Management Ordinance	Yes	Yes	Chapter 193, Water, Sanitary Sewer, Electric and Storm Sewer Systems, Article IX Storm Sewers	Local	DPW, Planning Board
Comment: The purpose of this chapter is to insure the proper and satisfactory construction of connections and installations of water, sanitary sewer, storm drainage and electric systems of the Village of Springville. The Storm Sewers Article prohibits discharge of anything other than stormwater into the stormwater system; prohibits illicit connections; prohibits activities that could contaminate stormwater; and establishes prevention, control, and reduction of stormwater pollutants by best management practices.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 200, Zoning	Local, County	Local and County Planning Board referral
Comment: The site plan review process is intended to secure compliance with the requirements and standards set forth in this chapter and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location, and dimension of buildings. Site Plan review is part of the planning process in the village and deliberations encompass exposure to natural hazard risk.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Environmental Protection Ordinance	Yes	Yes	Chapter 200, Zoning	Local	Planning Board
Comment: SEQR is part of the development review process and mandates a thorough environmental review for proposed projects.					
Flood Damage Prevention Ordinance	Yes	Yes	LL3-2019, Chapter 97, Flood Damage Prevention.	Local	FPA
<p>Comment: The Ordinance establishes the following purposes</p> <ul style="list-style-type: none"> Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; Control filling, grading, dredging and other development which may increase erosion or flood damages; Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands, and; Qualify for and maintain participation in the National Flood Insurance Program. <p>The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	Chapter 170, Trees	Local	Tree Committee
<p>Comment: The purpose of this chapter is to manage the trees within the public right-of-way, in parks, and on public property in the village; assure the proper planting of new trees in these public spaces, maintain the health of existing trees in these public spaces; aid in maintaining property values in the village; implement the design and environmental goals of the Village Comprehensive Plan, and promote the general health and welfare of the village residents. The chapter aims to:</p> <ul style="list-style-type: none"> Create a Tree Committee to establish regulations governing the planting, maintenance, and removal of trees and shrubs in the public streets, rights-of-way, parks and other municipally owned or controlled property in the village; Preserve green foliage on village streets and public property; Replace trees that must be removed from public property because of disease, lack of treatment or interference with village utilities; Prevent interference with village utility pipes, wires, sidewalks, or streets. 					
Planning Documents					
Comprehensive Plan	Yes	No	Village of Springville Comprehensive Plan, 2014.	Local	Village Board
Comment: The Comprehensive Plan aims to preserve natural environment by protecting sensitive environmental areas from development and encouraging environmentally sensitive site design. Development of a stormwater management program to control stormwater runoff. Restrict development in areas with steep slopes, wetlands, and floodplains to mitigate flooding and erosion issues by requiring floodplain development permits, environmental protection overlay districts, zoning, and strict adherence to regulatory requirements. The Plan includes Floodplain Overlay District Maps.					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	Yes	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business)	No	-	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
development plan, etc.)					
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	Town of Concord and Village of Springville Comprehensive Plan, 1999	Local	Town Board
Comment: The Comprehensive Plan categorizes the development vision and goals into the following functional areas: <ul style="list-style-type: none"> • The Environment • Economic Development: Commerce and Industry • Residential Development • Parks and Recreation • Community Services • Transportation • Infrastructure • Urban Design and Historic Preservation 					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Springville to oversee and track development.

Table 9.41-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Michael Kaleta manages the Code Enforcement Office and issues development permits.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe	Yes	There is vacant property in various parts of the village and some of these properties have water and sewer access.



Indicate if your jurisdiction implements the following	Yes/No	Comment:
If no, please quantitatively describe the level of buildout in the jurisdiction.		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Springville and their current responsibilities which contribute to hazard mitigation.

Table 9.41-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Five Planning Board members administer the Zoning Code in consideration of natural hazard exposure
Zoning Board of Adjustments	Yes	Five-member Zoning Board of Appeals considers requests from applicants to vary from the Zoning Code.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works keeps roadways in good condition, manages electric and water facilities and mitigates against natural hazards.
Construction/Building/Code Enforcement Department	Yes	Mike Kaleta, Code Enforcement Officer. The Department issues building permits and examines the location of proposed construction in the flood zone.
Emergency Management/Public Safety Department	Yes	The Police Department provides emergency management services.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	The village Police Department ensures that warnings are issued during a hazard event, via social media and other systems.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works keeps roadways in good condition, manage electric and water facilities and mitigate against natural hazards.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village retains a consulting engineer to assist with planning administration.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The consultant engineer assists with building or infrastructure related projects as needed.
Planners or engineers with an understanding of natural hazards	Yes	The consultant engineer provided guidance about hazard exposure.
Staff with expertise or training in benefit/cost analysis	Yes	The consultant engineer provided guidance about hazard exposure and preparation of benefit cost analysis.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	Damage assessments at the village can be prepared by the Code Enforcement Officer or the consulting engineer.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	The village Code Enforcement Officer is the designated Floodplain Administrator.
Surveyor(s)	Yes	Consulting Engineer provides surveying services.
Emergency Manager	Yes	Emergency Management services for the village are provided by the Police Department.
Grant writer(s)	Yes	Consultant grant writer completes funding applications.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	The village’s consulting engineer advises the village on environmental project elements.

Fiscal Capability

The table below summarizes financial resources available to the Village of Springville.

Table 9.41-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Springville.



Table 9.41-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	Yes	Office Clerk
Hazard mitigation information available on your website	Yes	The village website contains a large amount of information about zoning and related land use matters, many of which are impacted by hazard exposure.
Social media for hazard mitigation education and outreach	Yes	The village maintains a Facebook page.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Historic Preservation Committee
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red website, Facebook
Natural disaster/safety programs in place for schools	No	School System/Board of Cooperative Educational Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Springville.

Table 9.41-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	5 and 9	June 2014
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	04	January 2015
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.41-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.41.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Kaleta, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Springville.

Table 9.41-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Springville	5	18	\$320,646	6	3

Source: FEMA 2020a and 2020b
 Notes:
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas prone to flooding in the village are mainly along Spring Brook. It is not known if there are any RiskMAP projects currently underway in the village. The village indicated that no properties have been mitigated. The village’s flood hazard maps adequately address the flood risk within the jurisdiction. The village does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Village of Springville does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in December 2009. The Code Enforcement Office is responsible for floodplain administration and this individual is not a certified Floodplain Manager. The village does not have access to resources to determine possible future flooding conditions from climate change. The village stated that its floodplain management staff are not in need of assistance or training to support its





floodplain management program. The village makes Substantial Damage determinations after the damage has been assessed. The village’s floodplain management meets minimum requirements and includes permit review utilizing GIS technology.

Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Springville has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 39 east and west bound
- Route 219
- Route 240/North Cascade Road.
- Old Route 219.

Sheltering

The Village of Springville has identified the following designated emergency shelters within the village. In case of emergency, the village will coordinate with the Red Cross.

Table 9.41-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville-010							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Springville did not identify any sites suitable for placing temporary housing units.

Table 9.41-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville -010					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws.



Table 9.41-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville-010					

9.41.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.41-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.41-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	0	2	0	2	0	2	0	3	0	6	0
Multi-Family	0	0	0	0	1	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	1	0	1	0	0	0	1	0	2	0
Total Permits Issued	0	0	3	0	4	0	3	0	4	0	8	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None identified												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.41.6 Jurisdictional Risk Assessment

The hazard profiles in Section 6 (Mitigation Strategies) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Springville’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Springville has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.41-1. Village of Springville Hazard Area Extent and Location Map 1

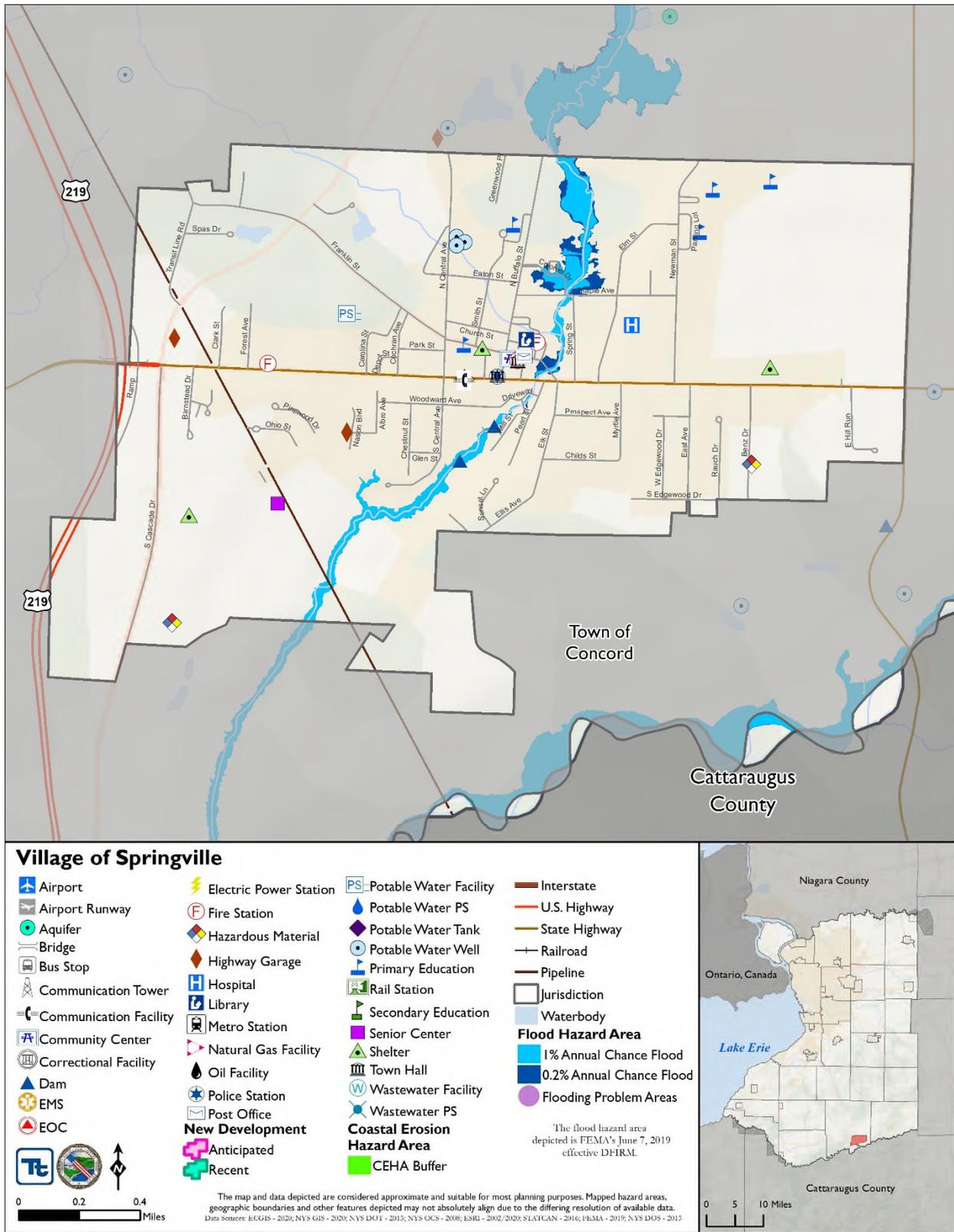




Figure 9.41-2. Village of Springville Hazard Area Extent and Location Map 2

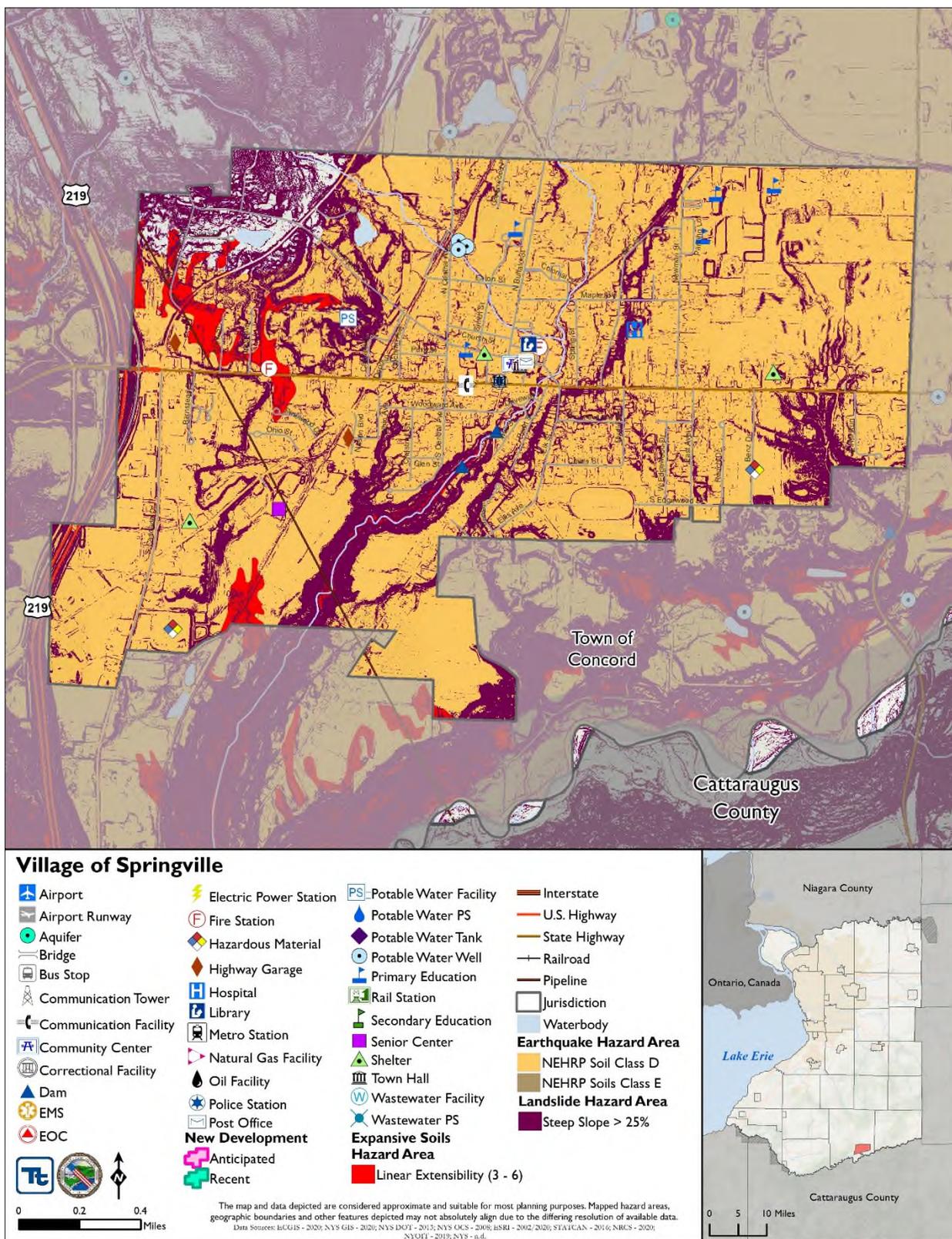
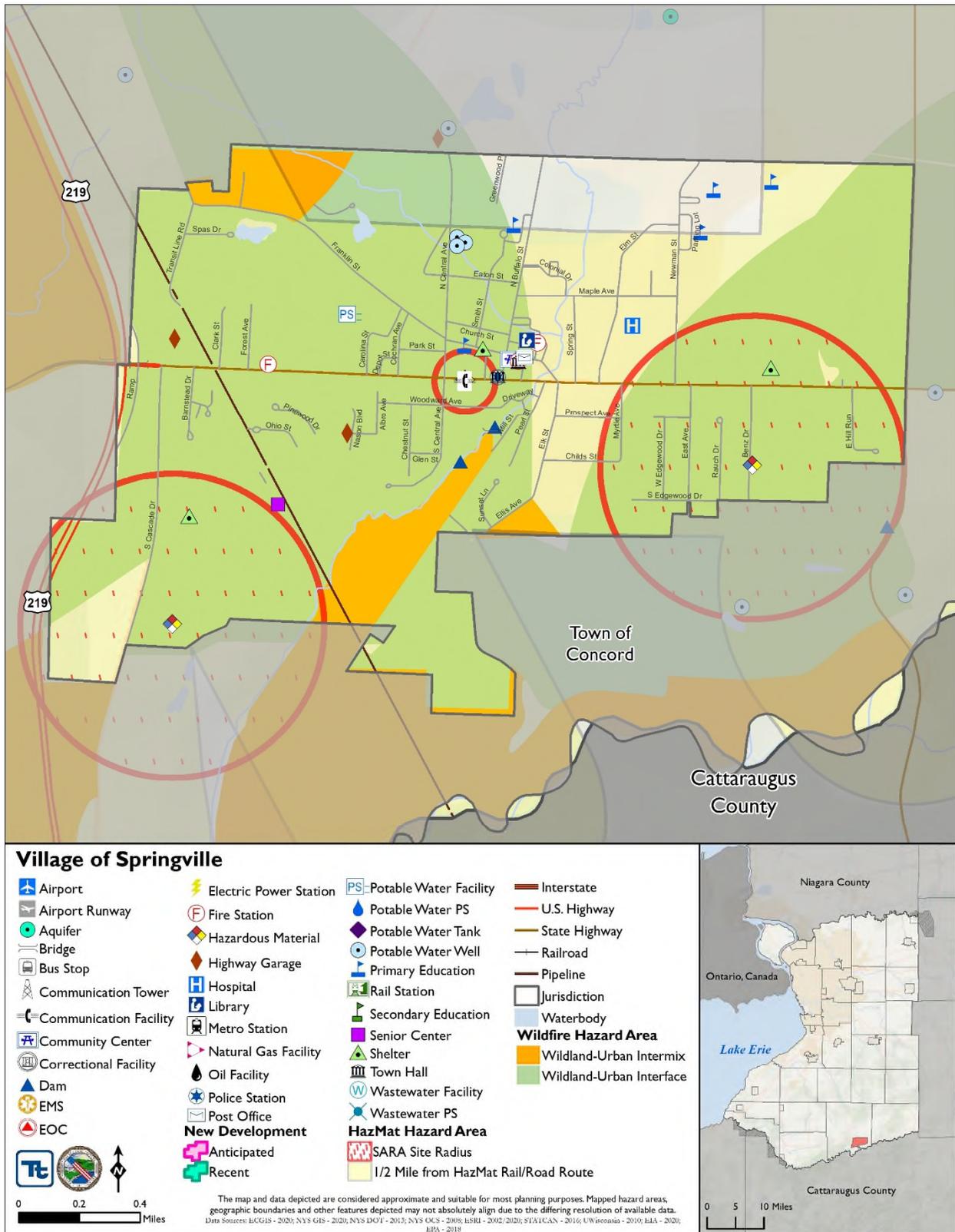




Figure 9.41-3. Village of Springville Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Springville’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.41-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.41-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, village did not report any damages.
November 18, 2015	High Wind	No	Yes, debris clean up
January 11, 2017	High Wind	No	Yes, debris clean up
March 8, 2017	High Wind	No	Yes, debris clean up
March 13, 2017	Winter Storm	No	Although the county was impacted, village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
January 2, 2018	Blizzard	No	Yes, snow removal extra effort
October 6, 2018	Lightning	No	Although the county was impacted, village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, village did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	No	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents. The village was awarded \$5,000 to fund PPE and EMS/Fire cleaning equipment

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Springville’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Springville. The Village of Springville has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated that it agreed with the hazard ranking below.

Table 9.41-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction





Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.41-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: FEMA 2020

Identified Issues

After review of the Village of Springville’s hazard event history, hazard rankings, jurisdiction specific vulnerable

- Flood waters lack open space for open flow.
- The wastewater treatment plant generator only runs the digester building. The facility lacks backup power.
- NYS Route 39 is subject to closure due to hazard events
- Some properties flood repetitively. The village should seek to purchase land that falls within flood plains and assist homeowners with Repetitive Loss Properties.
- The village needs to work with electric service providers to ensure that power is not interrupted during hazard events.
- There are problems with water drainage along NYS Route 39 (Main Street). If the culvert under this state road collapses, it would create a serious problem for the village.
- The culvert over Spring Brook needs replacing.
- Cybersecurity is a serious concern for village operations
- The village is unable to identify locations for emergency shelters, temporary or permanent housing.
- Village offices lack backup power

9.41.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.



Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.41-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Continue maintenance of drainage ditches, culverts and related structures	Flooding	Not Identified	DPW	Ongoing			<ol style="list-style-type: none"> Discontinue Ongoing capability
	The Village will continue evaluate land that may be purchased that falls within the flood plain areas of the Village for recreation and stormwater management purposes	Flooding	Not Identified	Village Board	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Legal, Code Enforcement	Complete			<ol style="list-style-type: none"> Discontinue Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Legal, Code Enforcement, Village Board	Complete			<ol style="list-style-type: none"> Discontinue Complete



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Springville has not identified mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Springville participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.41-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	-	-	X	-	-	X
Cyber Attack	X	X	-	X	-	X	X	-	-	X
Earthquake	X	X	-	X	-	-	X	-	-	X
Expansive Soils	X	X	-	X	-	-	X	-	-	X
Extreme Temperature	X	X	-	X	-	-	X	-	-	X
Flood	X	X	X	X	X	X	X	-	-	X
Hazardous Materials	X	X	-	X	-	-	X	-	-	X
Landslide	X	X	-	X	-	-	X	-	-	X
Pandemic	X	X	-	X	-	-	X	-	-	X
Severe Storm	X	X	-	X	-	X	X	-	-	X
Severe Winter Storm	X	X	-	X	-	-	X	-	-	X
Utility Failure	X	X	-	X	-	X	X	-	-	X
Wildfire	X	X	-	X	-	-	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.41-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Springville would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.41-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Springville-001	Create open space along riverways to allow for storm water flows.	2	Flood	<p>Problem: Several properties within the Village are in the SFHA and are subject to flooding.</p> <p>Solution: The village will evaluate land that may be purchased that falls within the flood plain areas of the village for recreation and stormwater management purposes.</p>	No	No	Within 5 years	Village Board	TBD by purchase options	Retain natural and unobstructed floodways	Village budget HMGP, BRIC, FMA, land trust organizations	High	SIP	PP
2022-V Springville-002	Protect wastewater treatment plant from the risk of power failure	1	All Hazards, Utility Failure	<p>Problem: The village's Wastewater Treatment Facility lacks backup power. The facility provides critical water services.</p> <p>Solution: The village will purchase, install, and maintain a backup generator for the</p>	No	No	Within 3 years	Village DPW	\$320,000	Ensure continued operation at this critical facility.	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program,	High	SIP	ES



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Wastewater Treatment Facility.							Municipal Budget			
2022-V Springville-003	Repetitive Loss Properties	1	Flood	<p>Problem: There are 9 Repetitive Loss Properties within the village.</p> <p>Solution: The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and</p>	No	No	Within 2 years	FPA, homeowners	Low cost to conduct Outreach	Give residents the option to move from the floodplain.	HMGP, BRIC FMA, cost-share for residents	High	SIP	PP



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				elevation as necessary.										
2022-V Springville-004	Work with NYSDOT to ensure that NYS Route 39 remains passable during hazard incidents	1	All Hazards, Flood	<p>Problem: There is concern that a culvert passing under NYS Route 39 could fail and cause a roadway collapse on the Village's Main Street.</p> <p>Solution: Coordinate with NYSDOT to ensure that necessary upgrades and mitigation are carried out in a timely manner.</p>	Yes	No	Within 3 years	NYSDOT, Village DPW	TBD by NYSDOT engineering analysis	Preserve service along this critical transportation corridor	Village budget for outreach; NYSDOT	High	EAP	PI
2022-V Springville-005	National Grid tree trimming will mitigate loss of power during hazard events	2	Utility Failure	<p>Problem: National Grid power lines feeding North St and the North Street substation are vulnerable to outage.</p> <p>Solution: The village will monitor tree trimming activities by</p>	No	No	Within 1 year	Village DPW	Operations budget	Preserve service along this critical transportation corridor	Village budget for outreach; Electric utility companies	High	EAP	PI





Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				National Grid personnel to see if tree trimming and maintenance is taking place in the Grid territory from West Seneca to Springville, which is the route the transmission line takes.										
2022-V Springville-006	Backup power for Village offices	1	Utility Failure	Problem: The Village Office at 5 W. Main St needs a generator installed on the roof to run the Village Office server and computers to process utility payments, taxes, permits, payroll, and receivables. The office is surrounded by sidewalks with no spot for a generator install except the roof.	Yes	No	Within 3 years	Village Administrator, DPW, outside engineering firm	>\$75,000	Ensure continuity of village services	BRIC, HMGP, Village	High	SIP	ES



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>Solution: The village Administrator and DPW Superintendent will contact an engineering firm to look at the feasibility of installing a generator on the roof to power the village office to keep the office running during prolonged power outages. The structural integrity of the flat membrane roof would have to be reviewed also by an engineer. The Village DPW will procure and install the generator.</p>										
2022-V Springville-007	Replace NYSDOT	1	Flood, Severe Storm	<p>Problem: NYSDOT owns the culvert over</p>	No	No	Within 3 years	Village DPW, NYS DOT	>\$150,000	Continuity of services over this	Village budget for monitoring	High	EAP	PI



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	culvert over Spring Brook			<p>Main Street and Spring Brook that runs under buildings and Route 39 in the Village, which is the main road for truck and car traffic through the village. Failure of the roadway due to culvert collapse would be detrimental to the village downtown area.</p> <p>Solution: Monitor NYS DOT maintenance of the culvert and alert NYS if there are any visual deficiencies noticed.</p>						important roadway	and outreach; BRIC, HMGP to address any needs			
2022-V Springville-008	Address Cybersecurity threats	1	Cyber Attack	<p>Problem: The village operations are vulnerable to cyber-attack.</p> <p>Solution: The Village</p>	No	No	Within 3 years	Village Emergency Manager	TBD	Protect critical village operations from cyber attack	Municipal Budget, EMPG	High	LPR	ES



Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Emergency Manager will work with subject matter experts to implement cyber security countermeasures.										
2022-V Springville-009	Identify locations for emergency shelter, temporary and permanent housing locations	1	All Hazards	<p>Problem: The village is not able to identify locations for emergency, temporary or permanent housing.</p> <p>Solution: The village will work with the county and the Town of Concord emergency managers to identify locations for emergency, temporary and permanent shelter. The village will act to secure access to these sites when a natural hazard strikes.</p>	No	No	Within 2 years	Village DPW, FPA, County emergency managers	Staff time	Village can quickly provide emergency shelter, temporary and permanent housing options	Municipal budget	High	LPR	ES



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities





Table 9.41-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Springville-001	Create open space along riverways to allow for storm water flows	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-V Springville-002	Protect wastewater treatment plan from the risk of power failure	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2022-V Springville-003	Repetitive Loss Properties	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-V Springville-004	Work with NYSDOT to ensure that NYS Route 39 remains functional during hazard incidents	1	1	1	1	1	0	1	1	1	1	1	0	1	0	11	High
2022-V Springville-005	Work with Electric Utilities to ensure that power is not interrupted during hazard events	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-V Springville-006	Backup power for Village offices	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-V Springville-007	Replace culvert over Spring Brook	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-V Springville-008	Address Cybersecurity threats	1	1	1	1	1	1	0	1	1	1	0	1	1	0	12	High
2022-V Springville-009	Identify locations for emergency shelter, temporary and permanent housing locations	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.41.8 Action Worksheets

The following action worksheets have been developed by the Village of Springville to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Protect wastewater treatment plant from the risk of power failure		
Project Number:	2022-V Springville-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The village's Wastewater Treatment Facility lacks backup power. The facility provides critical water treatment services.		
Description of the Solution:	The village will purchase, install, and maintain a backup generator for the Wastewater Treatment Facility.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against power failure	Estimated Benefits (losses avoided):	Ensures continuity of wastewater services
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	~\$320,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues
	Build a dedicated solar field	Very high	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Backup power for wastewater treatment plant	
Project Number:	2022-V Springville-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the wastewater treatment plant
Property Protection	1	Project will protect the plant from power failure
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	0	Within 3 years
Agency Champion	1	Village DPW
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-V Springville-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	There are 9 Repetitive Loss Properties within the village.		
Description of the Solution:	The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect safety of residents whose homes are in the floodplain	Estimated Benefits (losses avoided):	Protect homeowners from flooding
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	Outreach cost is low. Cost to acquire or mitigate properties will vary by property	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 2 years
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, BRIC FMA, cost-share for residents
Responsible Organization:	FPA, homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management, Education and Awareness
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues
	Require all homes to be raised six feet	Very high	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-V Springville-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect the safety of residents who live in the floodplain
Property Protection	1	Project will protect village residences from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 3 years
Agency Champion	1	FPA, homeowners
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



9.42 City of Tonawanda

This section presents the jurisdictional annex for the City of Tonawanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Tonawanda’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.42.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Tonawanda’s hazard mitigation plan primary and alternate points of contact. The City of Tonawanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including Emergency Management and the Building Department. The Deputy Director of Emergency Management and the Fire Chief represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.42-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark Banks, Director, Emergency Management Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-692-8400 x408 Email: mbanks@tonawandacityfd.com	Name/Title: Chuck Stuart, Fire Chief and Co-Director of Emergency Management Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-695-9291 Email: firechief@tonawandacityfd.com
NFIP Floodplain Administrator	
Name/Title: Erik Lindhurst, Building Inspector Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-695-1806 Email: bldginsp@tonawandacity.com	

9.42.2 Municipal Profile

The City of Tonawanda is four square miles in size and is located within the northwestern corner of Erie County. The Niagara River, Tonawanda Creek/Erie Canal, and the Town of Tonawanda form the city’s northern border. The city is entirely contained within the Town of Tonawanda. NYS Routes 265, 266, 384, 425 traverse the city.

The Iroquois Indians named this area after the Tonawanda Creek. The first white settler to the area was Henry Anguish, who built a log home in 1808 (Wikipedia 2014). The completion of the Erie Canal in 1825 spurred development in the new community. A large lumber mill that operated in Tonawanda lent the town the title of the “Lumber Capital of the World” (City Tonawanda 2018). Tonawanda incorporated as a village in 1854. In 1857 the northern portion of the village separated to become the City of North Tonawanda in Niagara County. In 1903, Tonawanda changed its status from village to city and then lobbied New York to re-construct a segment





of the Erie Barge canal. The mouth of Tonawanda Creek, located in the City of Tonawanda, became the western terminus of the Canal. As transportation modes shifted, the Barge Canal’s importance quickly declined. A decline in regional manufacturing resulted in the decline of business in the City’s downtown area. (City of Tonawanda 2018). The City of Tonawanda is centered on the Gateway Harbor, a public park that runs along the Erie Canal just before it joins the Niagara River. During the summer, local boaters can dock for free in the Harbor (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the City of Tonawanda was 15,130. The estimated 2019 population was 14,830, a two percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.0 percent of the population is 5 years of age or younger and 19.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.42.3 Jurisdictional Capability Assessment and Integration

The City of Tonawanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Mitigation Strategies) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.42.3). The City of Tonawanda’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Tonawanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.42-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	City of Tonawanda Building Code, Chapter 14, 2008	State and Local	New York State Department of State, New York State Code Council. Enforced by the Building Department.
Comment: This ordinance provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this city. This ordinance is adopted					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
pursuant to section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this ordinance, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this ordinance.					
Zoning Code	Yes	No	Zoning, Chapter 14, 1997, amended 2020	Local	Town Board, Planning Board
<p>Comment: The comprehensive zoning plan is adopted to secure safety from flooding, to promote and protect public health, safety, convenience, and other aspects of the general welfare. These general goals include, among others, the following specific purposes relating to hazard mitigation:</p> <ul style="list-style-type: none"> Secure safety from fire, flood, panic, and other dangers. Lessen congestion in the streets and facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. Encourage the most appropriate use of land to protect and conserve property values throughout the city. Bring about the gradual conformity of land and buildings to the comprehensive zoning plan. 					
Subdivision Ordinance	Yes	No	Chapter 58, Subdivision of Land, 1989	Local	Code Enforcement/Building
<p>Comment: This chapter is adopted for the purpose of providing for the orderly growth and development of the city and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health, and welfare of its population.</p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 52, Stormwater Management	Local	City of Tonawanda Common Council, Enforced by the Building Department, and the Engineering Department.
<p>Comment: Proactive stormwater management reduces flood risk. The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the health, safety, and welfare of the public residing within this jurisdiction. This chapter seeks to meet those purposes by achieving the following objectives:</p> <ul style="list-style-type: none"> Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02 or as amended or revised; Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01 or as amended or revised; Minimize increases in stormwater runoff from land development activities to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Ordinances of the City of Tonawanda, Chapter 82, Site Plan, Zoning	Local	City of Tonawanda Common Council, the City of Tonawanda Planning Board, and Enforced by the Building Department.
Comment: Site plan review incorporates consideration of natural hazard exposure					
Environmental Protection Ordinance	Yes	Yes	Chapter 26; Environment	Local	City Council



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The City's Environment Ordinance aims to protect its ecological resources which, in part, provide protection from natural hazard impacts.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 34 Flood Damage Prevention, 2019	Local	FPA
Comment: It is the purpose of this article to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: <ul style="list-style-type: none"> Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; Control filling, grading, dredging and other development which may increase erosion or flood damages; Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands; and Qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Division 6, Section 66-351 thru 366	County	FPA, City Engineer
Comment: Coordination of stormwater management to prevent flooding.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	City of Tonawanda, Comprehensive Plan, 2002	Local	City of Tonawanda Common Council, Enforced by the Building Department, and the Engineering Department.
Comment: The Comprehensive Plan's objectives are to retain open space through preservation of sensitive environmental areas such as steep slopes and waterways. Development in flood-prone areas should be controlled using zoning laws. Development should not increase run-off in waterway areas. City is awaiting NYS approval of the latest version of our Comprehensive Plan.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	Yes	-	-	-	-
Comment:					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	Local Waterfront Revitalization Plan	Local	LWRP Steering Committee
Comment: The Local Waterfront Revitalization Plan (LWRP), or waterfront plan, is a community-driven document that provides guidance on future policies, projects, and actions specifically related to the waterfront. The original plan was developed in 1986 and updated in 1991; many changes have taken place since that time and the City desires to take a proactive approach by developing a solid plan for the future of the waterfront. Although the Niagara River is the most prominent feature, this plan also includes Two Mile Creek, Tonawanda Creek/Erie Canal, and Ellicott Creek. Funding for the update to the plan was provided by a grant from the New York State Department of State under the Environmental Protection Fund.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency Management Plan, February 2018	Local	Emergency Management
Comment: The Comprehensive Emergency Management Plan coordinates emergency service provision during hazard events.					
Strategic Recovery Planning Report	No	No			-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	No	Railroad Emergency Plan	Local	City DPW, Emergency Manager
Comment: The Railroad Emergency Plan equips the city to respond effectively to railroad related emergencies.					

Development and Permitting Capability

The table below summarizes the capabilities of the City of Tonawanda to oversee and track development.

Table 9.42-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The City of Tonawanda Building Department issues the required building, plumbing and electrical permits for the project.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	If a building is constructed in a floodplain then a floodplain permit is required.
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The Building Department estimates that the City of Tonawanda is roughly 95% fully built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Tonawanda and their current responsibilities which contribute to hazard mitigation.



Table 9.42-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The City of Tonawanda Planning Board is a separate board of appointed people that reviews project for compliance with New York State planning guidelines.
Zoning Board of Adjustments	Yes	The City of Tonawanda Zoning Board of Appeals is a separate board of appointed people that reviews specific project variance requests for compliance with local ordinance. This board will then decide if the requested variance is approved or denied based on various factors relating to the neighborhood.
Planning Department	No	-
Mitigation Planning Committee	Yes	OEM, Fire, Police, Engineering
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The City Public Works Department mitigates against natural hazards by protecting assets such as roads, sewer, and water infrastructure.
Construction/Building/Code Enforcement Department	Yes	The Building Inspection Department is responsible for enforcement of the New York State Uniform Fire Prevention and Building Code, the City of Tonawanda Zoning Ordinance and other local laws and ordinances.
Emergency Management/Public Safety Department	Yes	City of Tonawanda Emergency Management involves the Volunteer Director, Disaster Planning Advisory Committee. Over sees emergency planning with the city such as the CEMP, Railroad Emergency Plan. Coordinates with all City Departments Hazard Mitigation Planning. Responsible for the operation of the EOC during an emergency or potential emergency. Works daily with the Fire and Police Departments.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Through city applications, NY Alert, School District though phone calling app
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Public Works Department and Parks Department staff maintain programs to reduce hazard risk, including street repair, culvert maintenance and facility management.
Mutual aid agreements	Yes	Police, Fire, Emergency Management. DPW
Other	Yes	Traffic and Safety Board and Local Waterfront Revitalization Committee
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The Building Inspector and the City Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Building Inspector and the City Engineer



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with an understanding of natural hazards	Yes	The Building Inspector and the City Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Trained to perform evaluations and determine the professional assistance required to perform a complete evaluation. Staff performing this level evaluations are the Building Inspector, City Engineer, Fire Inspector and Fire Personnel and Emergency Management Director
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	The Building Inspector and the City Engineer have limited training in the use of GIS software.
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Erik Lindhurst, Building Inspector
Surveyor(s)	No	-
Emergency Manager	Yes	Coordinates all activities for city in concert with the Police Chief and Fire Chief.
Grant writer(s)	Yes	Consultant grant writer
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Tonawanda.

Table 9.42-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes, Treasurer
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes, Treasurer
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Treasurer
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No



Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Tonawanda.

Table 9.42-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	City Clerk's office
Personnel skilled or trained in website development	Yes	City Clerk's office
Hazard mitigation information available on your website	Yes	https://www.tonawandacity.com/residents/emergency_management.php
Social media for hazard mitigation education and outreach	Yes	Facebook pages for Tonawanda Emergency Management, Fire, Police, Fire Department Union IAFF Local 859. Booths at public events sharing information.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Disaster Planning Advisory Committee
Other programs already in place that could be used to communicate hazard-related information	Yes	The city provides hazard mitigation information during public and educational events.
Warning systems for hazard events	Yes	Broadcast Media, Social Media, School District Radio Station, NY Alert, ReadyErie App
Natural disaster/safety programs in place for schools	Yes	Project Save, Communicable Disease Disaster Plan, District Wide Safety Plan, Building Level Safety Plan.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Tonawanda.

Table 9.42-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	March 1, 2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable





Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (Intergovernmental Panel on Climate Change, 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.42-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.42.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Erik Lindhurst, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Tonawanda.

Table 9.42-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Tonawanda	4	9	\$26,665	0	0

Source: FEMA 2020a and 2020b
 Notes:
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the City of Tonawanda that are prone to flooding include a small section of parkland along Tonawanda Creek. There are five structures located in the floodplain which have LOMC’s; these structures have been





removed from the floodplain. The city does not maintain a list of properties that have been damaged by flooding nor a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The city did not identify how many (if any) properties have been mitigated. The city flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The City of Tonawanda does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in February 2017. The Building Department is responsible for floodplain administration, however; the Building Inspector is not a certified Floodplain Manager. The city does not have access to resources to determine possible future flooding conditions from climate change. The city did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. When determining if proposed development on an existing structure qualifies as a substantial improvement, the FPA will estimate the value of new work completed versus the assessed value of the entire property. The Building Inspector issues floodplain permits for any construction or substantial improvement to properties within the floodplain. The Building Inspector reviews construction documents that are provided with the permit documents for compliance with all applicable codes and ordinances. Once the permit is issued the Building Inspector will conduct the required inspections to verify that construction conforms with submitted plans.

9.42.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Tonawanda has identified the following routes and procedures to evacuate residents prior to and during an event.

- Routes 265/384/425 for north to south evacuation
- Route 266 for westbound evacuation
- Fletcher Street for east and westbound evacuation

The City Police Department coordinates evacuation effort per the Comprehensive Emergency Management Plan. Auxiliary Police and Fire Police may also be utilized during evacuations. Emergency notifications are made via broadcast media, social media, and mobile announcements from emergency vehicles. In some situations, notification will be made door to door by first responders.

Sheltering

The City of Tonawanda has identified the following designated emergency shelters within the city.

Table 9.42-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Tonawanda High School	600 Fletcher Street	500	No, Assistance Provided by SPCA	Yes	Yes	Local EMS and Hospitals in region.	2 Kitchens, Refrigerators, Freezers, Griddles, Ovens, Convection



Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
(ARC Approved)							Ovens, Microwave Ovens, 2-way radios, 30 phone lines, PA System, At times Govt. surplus food on site
Tonawanda Senior Center (ARC Approved)	35 Main Street	60	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Small Kitchen
Tonawanda Youth Center (ARC Approved)	291 Kohler Street	45	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Small Kitchen
Boys and Girls Club (ARC Approved)	325 Franklin Street	150 sleeping, 250 sitting	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Kitchen, Steamer, Refrigerators, Freezers, 8 Burners, Maximum seating 250 PA System

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Tonawanda has identified the following sites suitable for placing temporary housing units.

Table 9.42-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Veterans Park	Niagara Street	24	Trailers on Pavement	Water, Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations
Big Lots Plaza Parking Lot	750 Young Street	30 to 40 (More if Businesses are Closed)	Trailers on Pavement	Water, Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations
Kohler Pool Parking Lot	291 Kohler Street	20	Trailers on Pavement	Water, Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The City of Tonawanda did not identify any permanent housing locations.



Table 9.42-12. Permanent Housing Locations

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will coordinate with county and neighboring municipalities (Action 2022-City Tonawanda-006)					

9.42.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.42-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.42-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	12	0	18	0	14	0	9	0	11	0	7	0
Multi-Family	0	0	1	0	1	0	1	0	3	0	1	0
Other (commercial, mixed-use, etc.)	4	0	3	0	3	0	3	0	8	0	2	0
Total Permits Issued	16	0	22	0	18	0	13	0	22	0	10	0
Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development							
Recent Major Development and Infrastructure from 2015 to Present												
233 Wales Ave	Commercial	2,376 panel ground mounted solar array.	Wales Avenue	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed and occupied							
332 Wheeler	Commercial	41,000sf heavy equipment sales & service building – Milton CAT	332 Wheeler Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Under construction							
378 Franklin	Commercial	12,528 sf Addition	378 Franklin Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½	Under construction							



				Mile Buffer from HazMat Pipelines	
80 Clinton	Commercial	97.92Kw roof top solar	80 Clinton St.	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Completed
560 Fillmore	Commercial	60x100 warehouse	560 Fillmore Ave.	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed and occupied
150 Fillmore	Commercial	Roof top solar	150 Fillmore Ave.	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed
72 East Niagara	Commercial mixed use	Mixed use building w/ 14 apartments & one commercial space.	72 East Niagara Street	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Under construction
377 Delaware	Residential	(2) New 12-unit apartment buildings.	377 Delaware Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Under construction
330 East Niagara	Residential	Converted existing vacant industrial to 18-unit apartment building.	39.40-1-2.12	NEHRP Soils Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Gateway Harbor	Park	Development and redevelopment of existing and new parkland	Young Street, Tonawanda, NY 14150	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Some aspects of the total project have been completed, some are being bid, and some are in design.
Former Water Plant	Residential	Unknown	38.52-3-1	Wildland-Urban Interface Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Property just sold to new owner



SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.42.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Tonawanda's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Tonawanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.42-1. City of Tonawanda Hazard Area Extent and Location Map 1

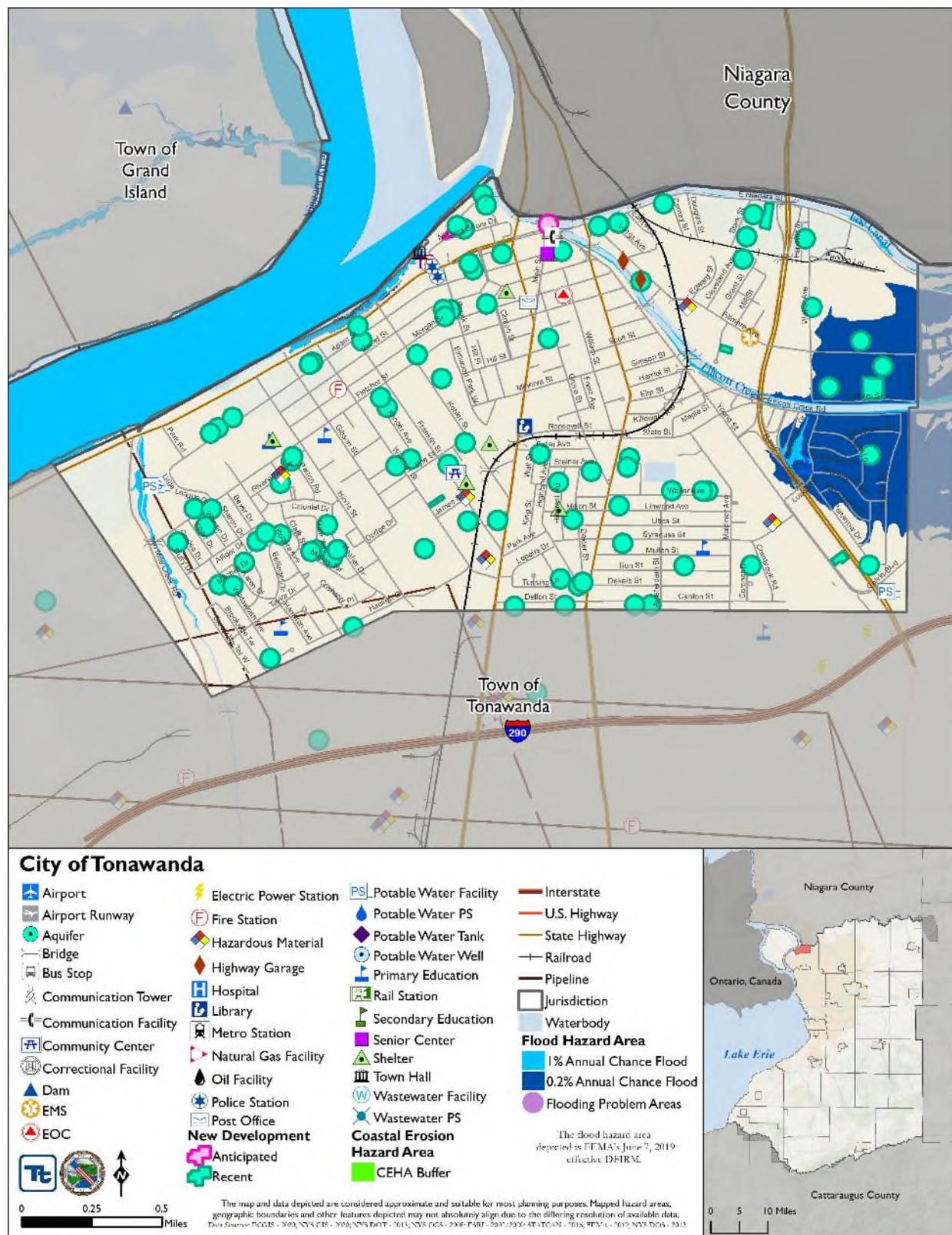




Figure 9.42-2. City of Tonawanda Hazard Area Extent and Location Map 2

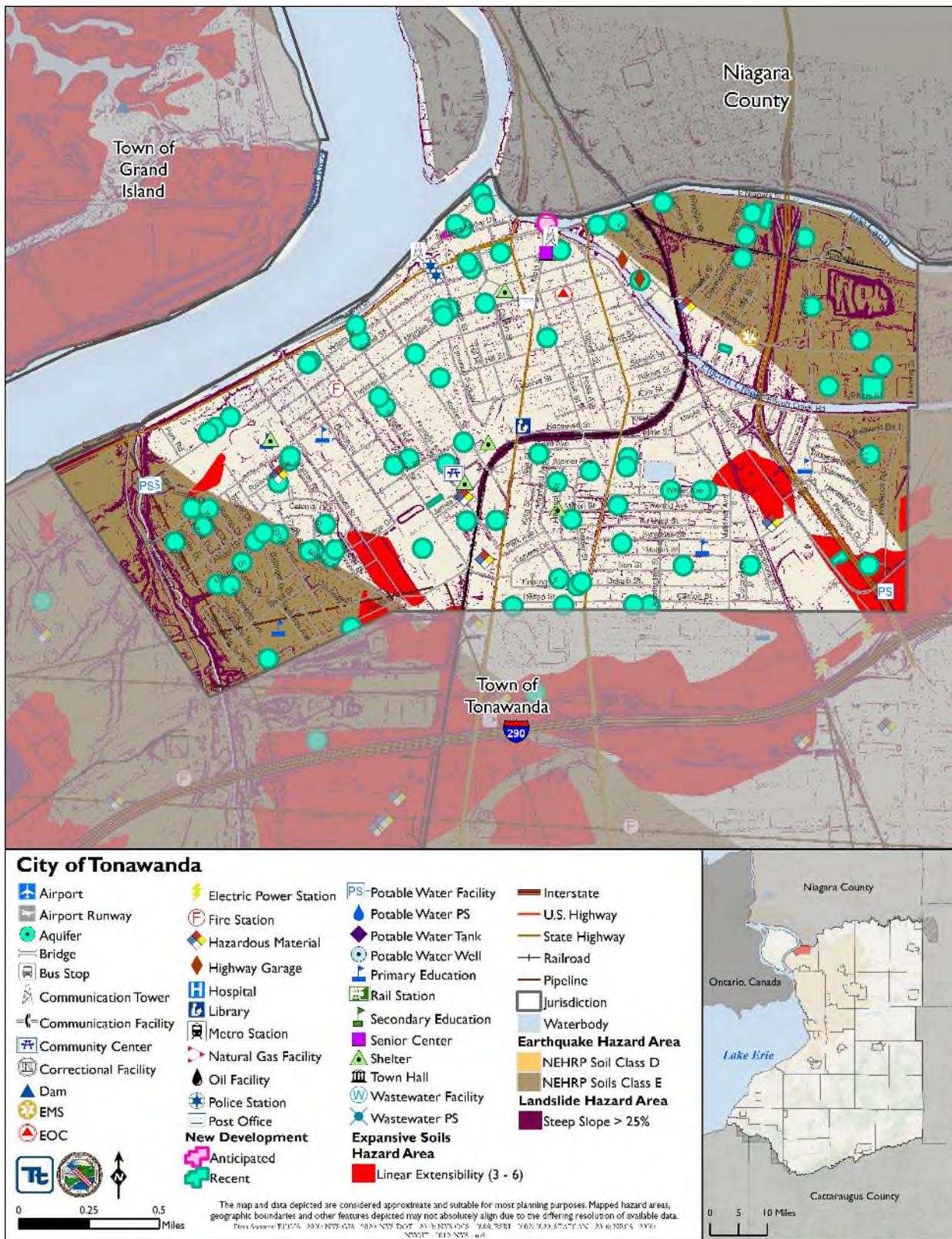
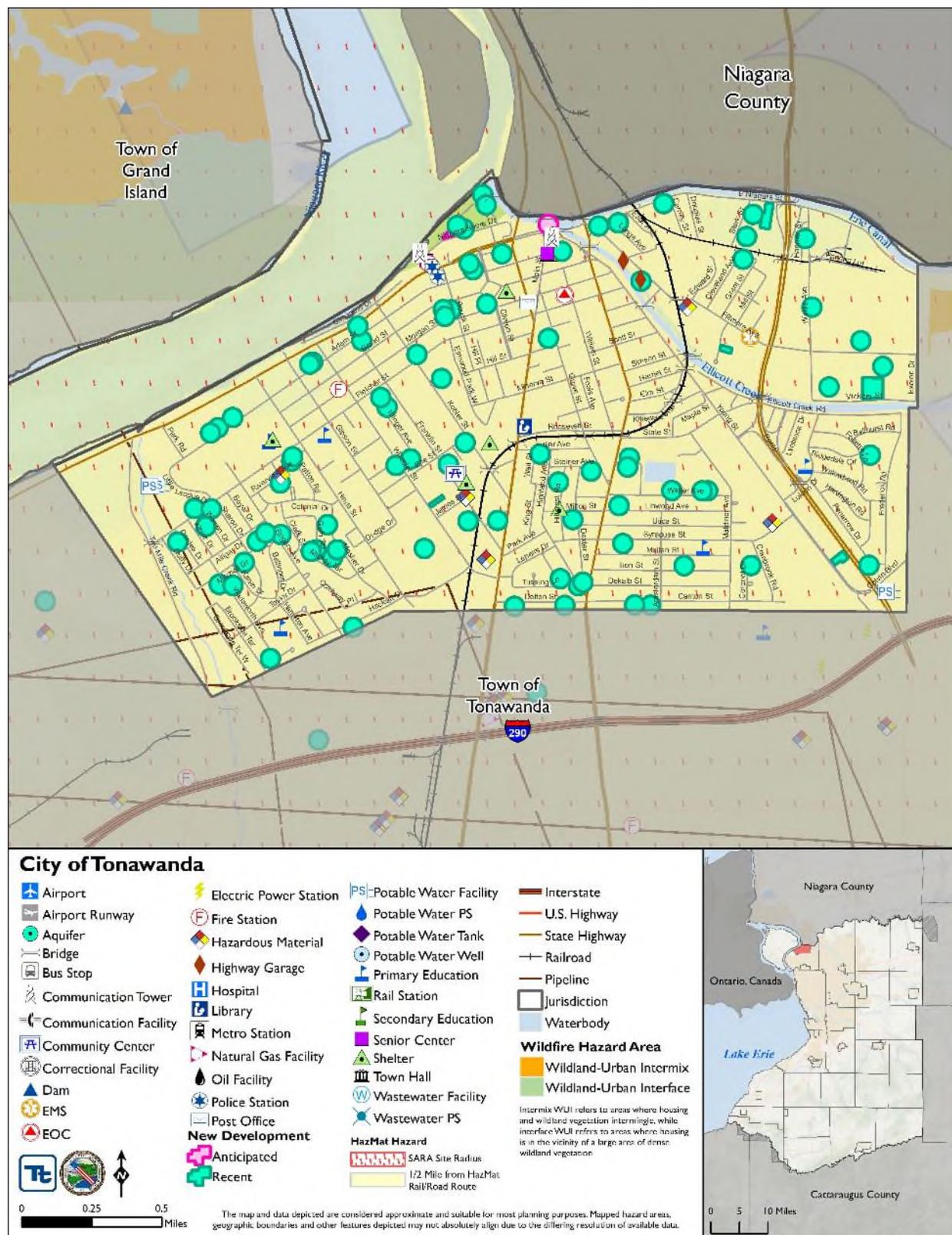




Figure 9.42-3. City of Tonawanda Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Tonawanda’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.42-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.42-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Though the county was impacted by this event, the city did not report any damages.
August 11-15, 2015	Flash Flood	No	Though the county was impacted by this event, the city did not report any damages.
October 28-29, 2015	High Wind	No	Though the county was impacted by this event, the city did not report any damages.
November 6, 2015	Thunderstorm Wind	No	- Though the county was impacted by this event, the city did not report any damages.
November 12, 2015	High Wind	No	Overtime for tree damage.
November 18, 2015	High Wind	No	Overtime for tree damage.
January 11, 2017	High Wind	No	Overtime for tree damage.
March 8, 2017	High Wind	No	Overtime for tree damage.
March 13, 2017	Winter Storm	No	Overtime for plowing and snow removal.
July 20, 2017	Tornado	No	Though the county was impacted by this event, the city did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Though the county was impacted by this event, the city did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Overtime for plowing.
December 24-29, 2017	Lake-effect Snow	No	Overtime for plowing.
January 2, 2018	Blizzard	No	Overtime for plowing and snow removal.
October 6, 2018	Lightning	No	Though the county was impacted by this event, the city did not report any damages.
February 24, 2019	High Wind	No	Overtime for tree damage.
February 24, 2019	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Overtime for tree damage.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Though the county was impacted by this event, the city did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
January 12, 2020	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the City of Tonawanda’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Tonawanda. The City of Tonawanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the city indicated concurrence with the derived Hazard Rankings shown below.

Table 9.42-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	High
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.42-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
City Hall	Public Facility	X	X	2022-City Tonawanda-004

Source: FEMA 2020a and 2020b

Identified Issues

After review of the City of Tonawanda’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Tonawanda has identified the following vulnerabilities within their community:

- Tonawanda Towers apartments at 5 Main Street and apartments at 284 Main Street are residential high-rise buildings that lack adequate backup power. Firefighters have carried residents down 11 flights of stairs in emergency events.
- The city lacks the full range of firefighting equipment to respond to all hazard events as they occur. This includes the ability to effectively respond to hazardous material releases.
- Rail lines within the city present hazardous materials risks
- The City DPW facility provides a range of critical operations and lacks backup power.
- City Hall is in the 0.2% annual chance flood zone. Note, that protection of the town hall is the ultimate responsibility of the town, not the city’s administration.
- Certain properties in the city may flood repetitively.
- Trees along public rights of way can damage power lines and other assets.
- Storm sewers backup up during rain events which can cause flooding
- The Floodplain Manager requires training to fully implement the NFIP program within the city.
- The shoreline of the Tonawanda Creek is eroded. The Canal Authority has control over mitigation efforts along the designated canal corridor.
- The City was not able to identify permanent housing locations
- The city lacks up to date emergency equipment.
- Emergency response along the Ellicott Creek, Niagara River and Barge Canal can be improved

9.42.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.



Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.42-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Threat of terrorist attacks at mass gatherings and/or along rail lines. Funding for increased security.	Man-Made Hazard	Not Identified	Police	Ongoing			<ol style="list-style-type: none"> Discontinue Ongoing capability
	Increase funding for updated firefighting equipment and training facilities.	Fire	Potential for a serious fire due to older construction, separation requirements, and infrastructure	Fire	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP.
	HAZMAT in transit: Increased funding for additional training of 1 st responders. Increase security along rail lines.	Man-Made Hazard	Not Identified	Office of Emergency Management	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP.
	Erosion control: Continuing natural erosion of the riverbed along the city shoreline.	Natural	Not Identified	City Engineer	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP.
	Tree Removal to reduce or avoid damage secondary to wind, ice, and storms.	Natural	Not Identified	Parks and Recreation	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP.
	Update/revise floodplain management ordinances to be consistent with	Flood	Not Identified	Building Dept.	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> 1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	potential future new FIRMs.					Evidence of Success		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Tonawanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The city maintains a Fire Prevention and Fire Training Program with personnel assigned to carry out and coordinate these efforts.
- The Comprehensive Emergency Management Plan was updated in 2018.
- The Railroad Emergency Plan developed and adopted in 2017.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Tonawanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.42-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	-	-	X	-	-	X
Cyber Attack	X	X	-	X	-	-	X	-	-	X
Earthquake	X	X	-	X	-	-	X	-	-	X
Expansive Soils	X	X	-	X	-	-	X	-	-	X
Extreme Temperature	X	X	-	X	-	-	X	-	-	X
Flood	X	X	X	X	X	X	X	X	X	X
Hazardous Materials	X	X	-	X	-	X	X	-	-	X
Landslide	X	X	-	X	-	-	X	-	-	X
Pandemic	X	X	-	X	-	-	X	-	-	X
Severe Storm	X	X	-	X	-	-	X	-	-	X
Severe Winter Storm	X	X	-	X	-	-	X	-	-	X
Utility Failure	X	X	X	X	X	-	X	-	-	X
Wildfire	X	X	-	X	-	-	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.42-19 summarizes the comprehensive range of specific mitigation initiatives the City of Tonawanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.42-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City Tonawanda-001	Protect the City DPW facility from loss of power	1	All Hazards, Utility Failure	<p>Problem: The City DPW facility provides a range of critical operations including snow plowing, ditch cleaning and road repair. The facility lacks backup power.</p> <p>Solution: The City DPW will conduct an engineering analysis to confirm the need for and determine the appropriate size of generator. City DPW will install and maintain backup power at the facility.</p>	Yes	No	Within 2 years	City Department of Public Works	~\$75,000	Continuity of critical services for all hazards	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, Municipal Budget	High	SIP	ES
2022-City Tonawanda-002	Backup power for Tonawanda Towers & 284 Main Street apartments	1	All Hazards	<p>Problem: Tonawanda Towers and the Kibler apartments at 284 Main Street are residential high-rise buildings that lack adequate backup power. Firefighters have had to carry residents multiple flights of stairs in emergency events.</p> <p>Solution: Assist owner of Tonawanda Towers and Kibler Apartments to apply for funding to purchase and install a backup generator at the residential high-rise.</p>	No	No	Within 3 years	Owner of Tonawanda Towers & 284 Main Street	~\$75,000 per generator installed	Ensure safety within and orderly evacuation of the high-rise building during an emergency	BRIC, HMGP, FEMA	High	EAP	PI
2022-City Tonawanda-003	Update firefighting equipment and training facilities.	1	Wildfire, All Hazards	<p>Problem: The City lacks the full range of firefighting equipment to respond to all hazard events as they occur. This includes the ability to effectively respond to</p>	No	No	Within 3 years	City Fire Department, City Board	\$1.3 million	Ensure Fire Department is fully capable of responding to emergencies cause by	USDA Community Facilities Grant Program, EMPG,	High	LPR	ES





Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				hazardous material releases. Solution: The City has assessed needs for firefighting equipment and training. City Fire Department will procure two new Fire Department Pumpers and a hazmat initial response trailer to contain hazmat situations.						different hazards	Municipal Budget			
2022-City Tonawanda-004	Protect City Hall to the 0.2% annual chance flood event	1	Flood	Problem: City Hall is in the Special Flood Hazard Area and is exposed to the flood hazard. Town Hall houses Emergency Management and Police services that are available on a cross-municipal basis Solution: The City will conduct an engineering analysis determine best methods to protect City Hall from flooding. City Engineer will implement appropriate mitigation measures.	Yes 💧	No	Within 3 years	City DPW	TBD by engineering analysis	Ensure continuity of operations at this critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-City Tonawanda-005	Support control of erosion along the Tonawanda Creek shoreline	1,2	Flood	Problem: The shoreline of the Tonawanda Creek is eroded. Solution: The City DPW will work with the State Canal Authority to reduce erosion along the Tonawanda Creek shoreline. The Canal Authority will oversee	No	No	Within 5 years	City Engineer	TBD by engineering feasibility analysis	Protect properties along the shore from the negative impacts on creek shoreline erosion.	FEMA HMGP, BRIC	High	NSP	NR



Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				implementation of the mitigation measures.										
2022-City Tonawanda-006	Identify permanent housing locations	1	All Hazards	<p>Problem: The city has not identified permanent housing locations to use during and after and emergency.</p> <p>Solution: The city will coordinate with the county and neighboring municipalities to identify permanent housing locations and will secure these locations as needed.</p>	No	No	Within 3 years	City Emergency Manager	Staff time	Ensure that locations for permanent housing are identified	Municipal budget	High	LPR	ES
2022-City Tonawanda-007	Residential Property Flood Mitigation	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims</p> <p>Solution: The city will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the city will collect required property-owner information and develop a FEMA grant application and BCA.</p>	No	No	Within 3 years	City Council, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, Homeowner cost-share	High	SIP	PP



Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City Tonawanda-008	Upgrade storm sewers	1	Flood, Severe Storm	<p>Problem: Specified storm sewers flood and overtop during heavy rain events.</p> <p>Solution: City DPW will determine correct sizing for storm sewers, and will then replace existing infrastructure as appropriate.</p>	No	No	Within 3 years	City Engineer	TBD by engineering analysis	Protect against flooding due to poor water drainage	BRIC, HMGP	High	SIP	SP
2022-City Tonawanda-009	Improve Fire Department emergency response on the Niagara River, Barge Canal, and Ellicott Creek	1	All Hazards	<p>Problem: The Fire Department provides All Hazard response to water emergencies on the Niagara River, State Barge Canal, Ellicott Creek as well as other areas of Western New York through mutual aid. The current inflatable boat with a 15 hp motor no long meets the needs of water rescue particularly on the Niagara River. The boat lacks power to work against the current. It limits the number of people that can be on the boat. It is difficult to perform EMS treatment to victims on the boat.</p> <p>Solution: Solution: Under the direction of the Fire Chief, the Boat would be replaced. The recommendation is 19'4" Rhibcraft Rescue Boat with trailer. This boat would have 115 hp outboard capable of close shore operations. The boat would</p>	No	No	2 years	Fire Department	\$75,000	Enhanced Emergency Response along busy waterways	EMPG, municipal budget	High	LPR	ES



Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				be equipped with LED search lights, emergency light bars, radios, control counsel, dive ladder, etc. The rigid hull will be less vulnerable to damage from rocks than the current inflatable and able to operate in waterways with ice flows.										
2022-City Tonawanda-010	Improve Hazmat response along rail lines	1	Hazmat	<p>Problem: Rail lines carry large amounts of hazardous materials through the city and expose residents to hazmat exposure.</p> <p>Solution: City will seek funding and/or provide training of 1st responders. Increase security along rail lines. Work with rail freight companies.</p>	No	No	Within 2 years	Fire Department	TBD by needs assessment	Protect residents and properties from hazardous materials releases	HMPG, BRIC, municipal budget	High	SIP	ES
2022-City Tonawanda-011	Remove trees that can cause damage	1	Utility Failure	<p>Problem: In different parts of the city, trees threaten to cut power lines by tree falls.</p> <p>Solution: The City Parks Department will conduct a complete tree trimming or remove trees to reduce the risk of power failure.</p>	No	No	Within 2 years	City Parks Department	\$20,000 per year	Ensure that power is not cut to residents, businesses, and emergency facilities	Municipal budget	Medium	NSP	PR
2022-City Tonawanda-012	Update/revise floodplain management ordinance and provide FPA training	1	Flood	<p>Problem: The Floodplain Management Ordinance may not accommodate information contained in future new FIRMs.</p> <p>Solution: The city FPA will update the flood management ordinance to</p>	No	No	Within 2 years	FPA	Staff time	Ensure that floodplain management in the city reflects most up to date info	Municipal budget	High	LPR	PR



Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				be consistent with future FIRMs. The FPA staff will be trained to effectively use these FIRMs and to administer the ordinance.										
2022-City Tonawanda-013	Emergency Communications equipment	1	All Hazards	<p>Problem: Most other town and city departments have switched to P25 communications equipment. Emergency Management equipment is outdated.</p> <p>Solution: The Director of Emergency Management will acquire approximately 75 portable Kenwood P25 units, 15 mobile radios and eight radio heads for use by the Fire Department and the Emergency Management staff during emergency events.</p>	No	No	1 year	Emergency Management Department	\$176,425	Enhanced communication during emergencies	EMPG, Municipal budget	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:





FPA Floodplain Administrator
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.42-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City Tonawanda-001	Protect the City DPW facility from loss of power	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-City Tonawanda-002	Backup power for Tonawanda Towers & 284 Main Street apartments	0	1	0	1	1	1	1	1	1	1	1	0	1	1	11	High
2022-City Tonawanda-003	Update firefighting equipment and training facilities.	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2022-City Tonawanda-004	Protect City Hall to the 0.2% annual chance flood event	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-005	Support control of erosion along the Tonawanda Creek shoreline	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-006	Identify permanent housing locations	0	1	0	1	1	1	0	1	1	1	1	0	1	1	10	High
2022-City Tonawanda-007	Residential Property Flood Mitigation	0	1	0	1	1	1	0	1	1	1	0	1	1	1	10	High
2022-City Tonawanda-008	Upgrade storm sewers	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-City Tonawanda-009	Improve Fire Department emergency response on the Niagara River, Barge Canal, and Ellicott Creek	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High



Table 9.42-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City Tonawanda-010	Improve Hazmat response along rail lines	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-011	Remove trees that can cause damage	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	Medium
2022-City Tonawanda-012	Update/revise floodplain management ordinance and provide FPA training	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-013	Emergency Communications equipment	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.42.9 Action Worksheets

The following action worksheets have been developed by the City of Tonawanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.



City of Tonawanda Action Worksheet			
Project Name:	Protect the City DPW facility from loss of power		
Project Number:	2022-City Tonawanda-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The City DPW facility provides a range of critical operations including snow plowing, ditch cleaning and road repair. The facility lacks backup power.		
Action or Project Intended for Implementation			
Description of the Solution:	The City DPW will conduct an engineering analysis to confirm the need for and determine the appropriate size of generator. City DPW will install backup power at the facility. The City DPW will maintain the backup generator.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect facility from power failure	Estimated Benefits (losses avoided):	Ensures continuity of flood protection services at the DPW facility
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	~\$75,000 estimate	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 2 years
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	FEMA HMGP, BRIC USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	City DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct a dedicated solar array	Very High	Variable power output
	Remove DPW facility	High	Lose the services provided by the facility.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the City DPW facility from loss of power	
Project Number:	2022-City Tonawanda-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the DPW
Property Protection	1	Project will protect the DPW facility from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 2 years
Agency Champion	1	City DPW
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



City of Tonawanda Action Worksheet			
Project Name:	Update firefighting equipment and training facilities.		
Project Number:	2022-City Tonawanda-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Currently 2 of 3 Fire Department Pumpers are substandard. In addition the lack of Foam equipment limits hazmat responses in some situations. Engine 1, a 1996 model, has a rotten frame which has been reinforced stop gap patch. The Pumper has a large amount of rust and corrosion which weaken the whole truck. The age of the pumper exceeds the NFPA 1901 age for reserve and front line equipment. Engine 2, a 2003 American LaFrance, has had tank, diesel engine and pump issues. In addition each year replacement parts become more limited due to the bankruptcy of American LaFrance and no new parts being manufactured. This engine exceeds the NFPA 1901 standards for first line firefighting equipment. These two Pumpers must be replaced to allow proper fire suppression and rescue operations for All Hazard Situations. This is a carryover item from the original plan. In addition the department needs a Hazmat initial response Trailer to help contain situations until mutual aid Hazmat Teams arrive		
Action or Project Intended for Implementation			
Description of the Solution:	Under the leadership of the Fire Chief, two Pumpers with 750 gal water tank, 30 gal foam tank, LED lighting, proper emergency lights and radio systems, etc. to be purchased. Cost would be \$1,200,000. The newer technologies, now as standard equipment on the new apparatus, will provide consistency of operations with other department apparatus. This provides for consistency of operation by the pump operators. A 6x12 hazmat utility trailer will be acquired by the City (with appropriate equipment) for initial responses to Hazmat incidents in the city. Cost approximately \$25,000.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect community from all hazards	Estimated Benefits (losses avoided):	Improves ability of Fire Department and Emergency Management to respond to emergency events
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	\$1.3 million	Mitigation Action Type:	Emergency Services
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	USDA Community Facilities Grant Program, EMPG, Municipal Budget
Responsible Organization:	Fire Department, City Board	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct a dedicated solar array	Very High	Variable power output
	Remove DPW facility	High	Lose the services provided by the facility.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Update firefighting equipment and training facilities.	
Project Number:	2022-City Tonawanda-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will improve emergency response to life threatening situations
Property Protection	1	Project will improve emergency response to property threatening situations
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	0	Within 3 years
Agency Champion	1	Fire Department
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



City of Tonawanda Action Worksheet			
Project Name:	Upgrade storm sewers		
Project Number:	2022-City Tonawanda-008		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Specified storm sewers flood and overtop during heavy rain events.		
Action or Project Intended for Implementation			
Description of the Solution:	City DPW will determine correct sizing for storm sewers, and will then replace existing infrastructure as appropriate.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering analysis	Estimated Benefits (losses avoided):	Protect against flooding due to poor water drainage
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by engineering analysis	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	BRIC, HMGP
Responsible Organization:	City Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Capital improvements, hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Close roadways that experience flooding	Low	Loss of access
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Upgrade storm sewers	
Project Number:	2022-City Tonawanda-008	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Within 3 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Improve Fire Department emergency response on the Niagara River, Barge Canal and Ellicott Creek		
Project Number:	2022-City Tonawanda-010		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Fire Department provides All Hazard response to water emergencies on the Niagara River, State Barge Canal, Ellicott Creek as well as other areas of Western New York through mutual aid. The current inflatable boat with a 15 hp motor no long meets the needs of water rescue particularly on the Niagara River. The boat lacks power to work against the current. It limits the number of people that can be on the boat. It is difficult to perform EMS treatment to victims on the boat. The Fire Department provides 24 hour manned emergency response on the area waterways, both in the city and through mutual aid. The Fire Department works in concert with the Police Department patrol boat. The Fire Department Boat can get into areas that the Police Boat is unable to access. The current boat lacks spotlights, has limited rescue equipment, and is vulnerable to ice.		
Action or Project Intended for Implementation			
Description of the Solution:	Under the direction of the Fire Chief, the Boat would be replaced. The recommendation is 19'4" Rhibcraft Rescue Boat with trailer. This boat would have 115 hp outboard capable of close shore operations. The boat would be equipped with LED search lights, emergency light bars, radios, control counsel, dive ladder, etc. The rigid hull will be less vulnerable to damage from rocks than the current inflatable and able to operate in waterways with ice flows.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	All Hazard Water Rescue	Estimated Benefits (losses avoided):	Improve emergency response on waterways
Useful Life:	10 years	Goals Met:	1
Estimated Cost:	\$74,788.00	Mitigation Action Type:	Emergency Services
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	EMPG, municipal budget
Responsible Organization:	Fire Department	Local Planning Mechanisms to be Used in Implementation if any:	Emergency Services
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Repair current boat	High cost	Will not be a permanent solution, infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



action and Prioritization		
Project Name:	Improve Fire Department emergency response on the Niagara River, Barge Canal and Ellicott Creek	
Project Number:	2022-City Tonawanda-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Improved Fire response to property emergencies
Cost-Effectiveness	0	
Technical	1	
Political	1	The community supports these investments
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	1	
Total	1	
Priority (High/Med/Low)	11	



City Tonawanda Action Worksheet			
Project Name:	Emergency Management equipment		
Project Number:	2022-City Tonawanda-015		
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Communications between agencies is critical in emergency situations. As Niagara County has moved to trunked P25 radios, the Fire Department and Police Department lacks communications with the City of North Tonawanda. Tonawanda and North Tonawanda back up each other in Police and Fire incidents. In addition Erie County is gradually migrating radios such as the Sheriff Department, fire ground etc to P25 non trunked. These changes make reduces the agencies the City of Tonawanda departments can communicate with on a daily bases or in an all hazard situation		
Action or Project Intended for Implementation			
Description of the Solution:	Under the direction of the Director of Emergency Management, The Police Department would acquire 15 Kenwood P25 portable radios under State Contract to complete the migration to P25 units. The cost would be \$28,125. The Fire Department would acquire 53 portables at \$99,375 and 12 mobile radios at \$22,800, Emergency Management 3 Mobile radios at \$5,700 and 3 portables at \$5625. 8 radio heads for updating the dispatch equipment at a cost of \$14,800. Install of all equipment is included in the State Contract Pricing. Installation and programming of the radios will be performed by FM Communications. Under State Contract. Total Project cost is \$176,425		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Ensure effective emergency communications	Estimated Benefits (losses avoided):	Protects residents during emergencies.
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	\$176,425	Mitigation Action Type:	Education and Awareness
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 1 year
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	City Emergency Management	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Purchase cell phones for all emergency staff	High	Not as effective as purchase of new P25 units
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Emergency Management equipment	
Project Number:	2022-City Tonawanda-015	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will enable improved emergency response
Property Protection	1	Project will protect resident's property via improved emergency response
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	Within 1 year
Agency Champion	1	City Emergency Management
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



9.43 Town of Tonawanda

This section presents the jurisdictional annex for the Town of Tonawanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Tonawanda’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.43.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Tonawanda’s hazard mitigation plan primary and alternate points of contact. The Town of Tonawanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Emergency Services and Police Department. The Emergency Services Director and the Chief of Police represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.43-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Robert Lutz, Emergency Services Address: 1835 Sheridan Drive, Buffalo, NY 14223 Phone Number: 716-440-9293 Email: rlutz@tonawanda.ny.us	Name/Title: James Stauffiger, Chief of Police Address: 1835 Sheridan Drive, Buffalo, NY 14223 Phone Number: 716-879-6607 Email: jstauffiger@tonawanda.ny.us
NFIP Floodplain Administrator	
Name/Title: Matt Sutton, Town Engineer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-877-8805 Email: msutton@tonawanda.ny.us	

9.43.2 Municipal Profile

The Town of Tonawanda is 30 square miles in size. The town incorporated in 1836, having been formed from the original Town of Buffalo. The town is bounded on the west by the Town of Grand Island, on the south by the Village of Kenmore and the City of Buffalo and on the east by the Town of Amherst. The City of Tonawanda parted from the Town of Tonawanda in 1903 and that municipality is entirely contained within the town.

The area’s original inhabitants, the Iroquois Indians, named this area after the Tonawanda Creek (Town of Tonawanda 2005). Tonawanda became an important crossroads in America’s westward expansion. French missionaries and explorers visited in the 1600s. The British secured the territory from the French in 1759 and yielded it to the United States in 1796. During the War of 1812, British soldiers burned the Village of





Tonawanda. The completion of the Erie Canal in the 1820s brought a new wave of workers and settlers and trade and traffic developed swiftly. The town prospered as an agricultural and trading center.

The town has a close relationship with the Village of Kenmore; collectively the two are known as "Ken-Ton". The town was established in 1836. In 1899, Kenmore incorporated as a village, and remained the town's primary residential and commercial district while the rest of the town was developed into suburban housing during the 1940s and 1950s (Town of Tonawanda 2020).

According to the U.S. Census, the 2010 population for the Town of Tonawanda was 58,144. The estimated 2019 population was 57,027, a 1.9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 20.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.43.3 Jurisdictional Capability Assessment and Integration

The Town of Tonawanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.43.3). The Town of Tonawanda’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Tonawanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.43-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 54, Building Code Administration	Local, State	Building Department
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code). The Code requires that that all roofs, paved					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
areas, yards, courts, and courtyards shall be drained into a storm sewer system. The building storm sewer shall be so constructed that no stormwater shall run over sidewalks and driveways, into streets or onto other properties.					
Zoning Code	Yes	No	Chapter 215, Zoning	Local	Building Department/Planning
<p>Comment: The regulations of the Zoning Local Law of the Town of Tonawanda, County of Erie, State of New York are made in accordance with a comprehensive plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to avoid undue concentration of population; to make provision for, so far as conditions may permit, the accommodations of solar energy systems and equipment and access to sunlight necessary therefor; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. The Zoning Code requires the following in relation to hazard mitigation:</p> <ul style="list-style-type: none"> • development must be sensitive to the physical and environmental limitations, such as limited space, floodplains, and wetlands, characterizing much of the land within the Waterfront Mixed Use District. • Where plans for improvements to the public space include adding or replacing sidewalk, the area between curb and sidewalk shall be landscaped to provide a minimum five-foot snow storage area. • Two Mile Creek and Rattlesnake Creek Buffers. Along the creeks or their tributaries shall be maintained in its natural state or as landscaped open space. The setback distance shall be measured from the average adjacent high-water line of the water body. 					
Subdivision Ordinance	Yes	No	Chapter 185, Subdivision	Local	Planning/Tech Support
<p>Comment: The purpose of this chapter is to provide for orderly, efficient growth within the community and to afford adequate facilities for the transportation, housing, comfort, convenience, safety, health, and welfare of its population. The subdivision ordinance requires that existing and proposed buildings, environmental features such as steep slopes, watercourses, waterbodies, wetlands, and wooded areas be protected from natural hazard exposure. Features to be retained or those to be removed should be so indicated. A preliminary plat for a major subdivision shall include grading, erosion control and landscaping plans.</p>					
Stormwater Management Ordinance	Yes	Yes	Chapter 73, Stormwater Management	Local	Town Engineer
<p>Comment: It is the intention of the Town Board of Tonawanda to protect the health and welfare of those residing in the Town of Tonawanda by preventing the dangers arising from improper drainage, unwise diversion, use and obstruction of streams and watercourses and to plan for the present and future use of natural drainage systems and watercourses. The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. This chapter seeks to meet those purposes by achieving the following objectives:</p> <p>A. Meet the requirements of minimum measures 4 and 5 of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;</p> <p>B. Require construction activities to conform to the substantive requirements of the NYS Department of Environmental Conservation SPDES General Permit for Construction Activities, Permit No. GP-02-01, or as amended or revised;</p> <p>C. Minimize increases in stormwater runoff from construction activities to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;</p> <p>D. Minimize increases in pollution caused by stormwater runoff from construction activities which would otherwise degrade local water quality;</p> <p>E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</p> <p>F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Chapter 185, Property Condition Disclosure Act	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 215-153, Zoning, Article XXIII	Local	Planning and Development
<p>Comment: Site Plan review is part of the town's development review and incorporates exposure to hazards. The purpose of this article is to define procedures for the Town Planning Board with assistance from the town's Development Services Staff for review of development</p>					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
proposed throughout the town to ensure that design elements follow the protection of the health, safety and overall welfare of the community. The intent of site plan review is to evaluate site plans and require changes consistent with minimizing conflicts which may result between the site layout and design of proposed uses and natural site conditions and features and/or existing or planned adjacent uses. Site plan review is also responsible for ensuring that development comply with clearly calculated planning goals and policies such as are provided in the town's Comprehensive Plan and other area-specific planning documents.					
Environmental Protection Ordinance	Yes	Yes	Chapter 76, Environmental Quality Review	Local/State	Planning and Development
Comment: The Environmental Quality Review incorporates consideration of hazard exposure.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 92, Flood Damage Prevention	Local	FPA
<p>Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (1) Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; (4) Control filling, grading, dredging and other development which may increase erosion or flood damages; (5) Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and (6) Qualify for and maintain participation in the National Flood Insurance Program. <p>The Chapter requires an elevation of BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 165 Sewers, Part 3 Nonstormwater Discharges to MS4, MS4 General Permit GP-0-15-003 – 5/1/2015	Local/State	Engineering
<p>Comment: MS4 regulations mandate that 1) It shall be unlawful for any person to place, deposit or cause to be deposited in any unsanitary manner on public or private property within the Town of Tonawanda, wherein a sanitary sewer district or drainage district has been created, any human excrement, garbage, or other objectionable waste. 2) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain, which in turn is connected directly or indirectly to a public sanitary sewer.</p>					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	Town of Tonawanda. December 2005. Town of Tonawanda Comprehensive Plan.	Local	Planning Board, Town Board



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The primary purpose of the Comprehensive Plan is to guide redevelopment in the eastern portion of the town and guide the development of significant vacant parcels in the western portion of the town to help the town ensure it remains a great place to live, work and play.					
Capital Improvement Plan	Yes	No	Capital Improvement Plan, 2020	Local	Town Board/Comptroller
Comment: The Capital Improvement Plan can contain needed mitigation projects.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	Town of Tonawanda Stormwater Management Plan	Local	Town Engineering
Comment: The Town of Tonawanda is classified by the U.S. Environmental Protection Agency (EPA) Phase II rule as an operator of a small municipal separate storm sewer systems (MS4s) based on our population and urban character. Subsequently, we are required to develop and implement a stormwater management program. Here in Western New York, similar communities have formed a WNY Stormwater Coalition which is coordinated by the Erie County Department of Environment and Planning, Environmental Compliance division.					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	Yes	No	Tonawanda Tomorrow Comprehensive Plan (2015)	Local	Planning and Development
Comment: Comprehensive Plans provide guidance on economic development strategy.					
Shoreline Management Plan	Yes	No	Local Waterfront Revitalization Plan (2008)	Local/State	Town Board, Planning Board, Building Department
Comment: The LWRP is integrated into the town's development review process and considers exposure to natural hazards. The LWRP aims to reduce flooding and erosion. The program extends the designated coastal boundary 1,000 feet inland from River Road to provide greater protection of waterfront resources. Buildings and other structures will be sited in the coastal area to minimize damage to property and the endangering of human lives caused by flooding and erosion. Buildings and other structures within special flood hazard areas, including areas identified as special flood hazards on the flood insurance study maps will be sited to minimize damage to property and human life. In the Tonawanda waterfront, any new development or substantial improvements shall be sited outside the flood hazard area or shall be raised above the base floodplain level. Any permitted uses built within the area designated as the 100-year floodplain shall be flood proof including according to guidelines on Anchoring, construction materials and methods, subdivision proposals, and specific standards.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Comprehensive Land Use Plan (2015) & Complete Streets Policy (2016)	Local	Planning and Development Technical Support



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Transportation planning is part of the town's comprehensive planning					
Climate Change /Resilience/ Sustainability Plan	No	Yes	Comprehensive Land Use Plan (2015)	Local	Town Board
Comment: The Town's Comprehensive Plan acknowledges the impact of climate change upon land use, development, and public safety within the Town.					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other:	-	-		-	
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Tonawanda. December 2021. Town of Tonawanda Comprehensive Emergency Management Plan.	Local, County	Town Emergency Manager
Comment: The CEMP establishes the following objectives: 1) Strategic investments in sewer infrastructure to address environmental concerns. 2) Ensure adequate protections against natural disasters through appropriate flood protection regulations and other disaster planning efforts.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	Pandemic Operation Plan, 2021	Local	TTPD - Emergency Services
Comment: The town recently developed a Pandemic Operations Plan, completed April 2021.					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Tonawanda to oversee and track development.

Table 9.43-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Development site plan review and Building Department issuance of building permits



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Separate Floodplain Development Permits are issued by the Town Engineer
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	The Office of Planning and Development maintains an inventory of vacant lands available for development. The town also has a Brownfield Opportunity Area Plan that showcases these properties: Tonawandaopportunity.com The lands East of Military Road are mainly built out (95%).

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Tonawanda and their current responsibilities which contribute to hazard mitigation.

Table 9.43-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	<p>The mission of the Department of Planning and Development is to help improve the quality of our neighborhoods through best practices in urban planning and the effective administration of U.S. Housing and Urban Development (HUD) programs. This includes the Residential Rehabilitation Program and our First Time Homebuyer Program for income-qualified households as well as our Micro-Enterprise Loan Program for small businesses.</p> <p>The Office of Planning and Development administers several local initiatives that provide decent housing, sound infrastructure investment, economic opportunities, and many public services that improve the quality of town neighborhoods.</p> <p>The Department is in the process of implementing several long-term planning objectives outlined in the town's Comprehensive Plan including a comprehensive zoning law update, neighborhood revitalization plans, cleanup efforts along River Road, and several public infrastructure investments.</p>
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Commission preserves and improves the quality of the natural and man-made environment within the Town of Tonawanda, in the face of population growth, urbanization and technological change with their accompanying demands on natural resources, are found to be of increasing and vital importance to the health, welfare and economic well-being of present and future inhabitants and to require forthright action by the governing body of the Town of Tonawanda.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Department of Planning and Development forwards economic development efforts for the town.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	<p>Highway Department staff ensure safe passage over town roads and regularly maintain a variety of facilities.</p> <p>The Forestry Department is responsible for:</p> <ul style="list-style-type: none"> • Planting and maintaining 31,000 trees in the public rights of way • Pruning and removing dead trees and trees that are endangering public health or property • Identifying the sites where there are few trees and planting new trees, so our town continues to enjoy the benefits of an urban forestry <p>The Forestry Department also includes information about Emerald Ash Borer on their webpage.</p> <p>The Highway Department is responsible for ensuring the safety and maintaining the condition of all town streets and rights of way. Services provided include:</p> <ul style="list-style-type: none"> • Facility maintenance • Issuing permits for work to be performed in the town highway rights of way • Curb cut permits • Street cut permits • Storm receiver cleaning • Road maintenance and repair • Snow plowing and salting of streets • Street sign maintenance and repair • Street sweeping • Tree planting • Tree removal / tree trimming
Construction/Building/Code Enforcement Department	Yes	<p>Tom Duncan, Building Department. The Building Department is responsible for the following activities:</p> <ul style="list-style-type: none"> • Reviewing plans for new residential construction and issuance of permits for new houses and additions, garages, swimming pools and storage sheds and restrictions on fence installations • Reviewing site proposals for development of vacant property and redevelopment of existing land uses and coordinating the review process with all town departments, Erie County and other interested parties • Reviewing building plans for new commercial buildings and renovations to existing structures • Reviewing plans and issuance of permits for electrical work, plumbing and sump pumps • Issuing permits for temporary shelters and temporary structures, signs, communication towers and antennae, above ground and underground tank installations and removals, operating permits, Christmas tree sales and outdoor dining permits • Issuing contractor’s licenses and licenses for Master Plumbers and Master Electricians • Issuing zoning compliance decisions and the submittal of Zoning Board of Appeals applications. • Coordinating reviews for rezone applications, special use permits, street cut permits and backflow prevention device applications • Performing fire safety inspections



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Emergency Management/Public Safety Department	Yes	<p>The Town of Tonawanda Police Department’s Emergency Services Bureau mission is to assure the safety and health of all its employees and residents before, during and after natural or man-made large-scale emergencies. This is done through continuous evaluation of emergency plans, training and education, outreach and establishing public and private partnerships with both the business sector as well as community organizations. The main responsibility of this bureau is to conduct a hazard analysis of the town to develop a plan identifying resources to address any hazard or emergency which might occur. The Bureau works very closely with the Department of Homeland Security, the New York State Department of Homeland Security and Emergency Services, the Erie County Department of Emergency Services, and the United States Coast Guard.</p>
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	<p>TTPD – James Stauffiger, Chief Police</p> <p>Integrated Public Alert and Warning System - FEMA</p> <p>The town uses a special needs registry form, an online form for business and commercial property emergency notification form, and the Ready Erie preparedness mobile app.</p>
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	<p>Highway/Technical Support. Town Highway Department staff trim tree branches and keep floodways clear.</p>
Mutual aid agreements	Yes	<p>Fire, Police, Snow, School, Highway – mutual aid agreements increase capacity</p>
Other	Yes	<p>The Water and Sewer Maintenance Division operates and maintains the town’s water distribution, sanitary sewer and storm sewer systems from its facility located at 525 Belmont Avenue. The water distribution system consists of roughly 375 miles of water mains, 2,200 hydrants and 5,000 valves, providing water to over 65,000 persons with over 23,000 accounts. The water system provides bulk water to the Village of Kenmore.</p> <p>The town’s sewer systems consist of 300 miles of sanitary sewer and 270 miles of storm sewer. Water and Sewer Maintenance manages rehabilitation programs and coordinates with federal and state regulatory agencies and consulting engineering firms working on sewer system projects. This division also coordinates cleaning, maintenance and replacements for sewer system elements using sewer construction, maintenance, and rehabilitation techniques.</p> <p>The Information Technology (IT) Department is responsible for the delivery and management of information technology resources supporting town departments and the community. The IT Department actively works to streamline processes as well as promote compliance with Federal and State cybersecurity standards. Key responsibilities relating to hazard mitigation include:</p> <ul style="list-style-type: none"> • Data center and server management • Cybersecurity and disaster recovery • Contract and project management • Strategic planning



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		The Town of Tonawanda Department of Youth, Parks and Recreation is responsible for maintenance of Park facilities, buildings, and grounds.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning and Development, Technical Support, Town Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Three engineers on staff: Matt Sutton, Randy Pekarski
Planners or engineers with an understanding of natural hazards	Yes	Planning and Development and Technical Support staff at Town Hall
Staff with expertise or training in benefit/cost analysis	Yes	Planning and Development
Professionals trained in conducting damage assessments	Yes	FPA
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	GIS Consultant, Planning and Development, Technical Support
Scientist familiar with natural hazards	No	Rely on local universities or NYS
NFIP Floodplain Administrator (FPA)	Yes	FPA
Surveyor(s)	No	-
Emergency Manager	Yes	TTPD – Emergency Services Bureau Robert Lutz
Grant writer(s)	Yes	Contracted – O’Connell Assoc, Community Planning and Development office
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Stormwater reporting, Tech Support – Engineer Assistant

Fiscal Capability

The table below summarizes financial resources available to the Town of Tonawanda.

Table 9.43-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Tonawanda.

Table 9.43-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Public Information Office, Town Police Department, Supervisors Office, Town Clerk – Freedom of Information Law Officer
Personnel skilled or trained in website development	Yes	Tech Support Office – Chuck Schultz
Hazard mitigation information available on your website	Yes	Community Emergency Response Team volunteer force of residents prepared to assist with emergency response efforts.
Social media for hazard mitigation education and outreach	Yes	The Town Police Department uses Facebook and Twitter to broadcast natural hazard related information.
Citizen boards or commissions that address issues related to hazard mitigation	No	The town provides free training for the Community Emergency Response Team.
Other programs already in place that could be used to communicate hazard-related information	Yes	Emergency Services Bureau / PSD: “I Am Responding” communications platform which generates mass text and email notification to Industry and safety managers
Warning systems for hazard events	Yes	Town Police Department – James Stauffiger, Chief; Emergency Services Bureau / PSD: IPAWS – FEMA the town uses a special needs registry form, an online form for business and commercial property emergency notification form, and the Ready Erie preparedness mobile app.
Natural disaster/safety programs in place for schools	No	-
Other	Yes	Fire Prevention Programs

Community Classifications

The table below summarizes classifications for community programs available to the Town of Tonawanda.

Table 9.43-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Average for all five Fire Districts is “4”	2017
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.43-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.43.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Matt Sutton, Town Engineer, is the designated Floodplain Administrator.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Tonawanda.



Table 9.43-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Tonawanda	32	56	\$8,514,400	8	6

Source:

Notes: FEMA 2020a and FEMA 2020b

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the Town of Tonawanda that are prone to flooding include along the town’s northern boundary in low lying areas near Tonawanda Creek and Ellicott Creek are in the 1 percent annual flood boundary, zone AE and along the town’s west boundary along the Niagara River in the 1 percent annual flood boundary, zone A and AE. These areas are sometimes subject to wave action. The town does not maintain a list of homeowners interested in flood mitigation. As a mitigation measure, the town maintains a list of all Letters of Map Change (LOMA/LOMR-F). There are no known RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town’s flood hazard maps were updated in 2019 and adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Town of Tonawanda does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in September 2017. The Engineering Department and the FPA are responsible for floodplain administration. One staff member in the Building Department is a Certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. Training has typically been provided by the NYS Floodplain and Stormwater Manager’s Association. The town has not made any Substantial Damage determinations can use permit data to make such determinations. The town’s floodplain management program meets minimum requirements. NFIP Administration services provided by the town include permit review, development review, GIS and inspection and the town aims to put more effort into hazards informational outreach. The town does not participate in the Community Rating System and feels it does not have the available resources to do so. There is a current NFIP violation at one location where work has been stopped.

9.43.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Tonawanda has identified the following routes and procedures to evacuate residents prior to and during an event. Note that these routes are owned/maintained by the NYSDOT, Erie County and the town respectively.

- The Grand Island Bridge is a west bound avenue of egress that can potentially be impacted by hazardous materials spills,
- Major eastbound evacuation routes include I-290, Sheridan Drive, Brighton Road, and Kenmore Avenue.





- Major N/S routes are River Road, Military Road, Delaware Avenue and Colvin Boulevard

With the complex nature and unpredictability of weather and location for potential hazardous material release evacuation routes would be decided at the time of incident. This information would be broadcast to the public by local officials thru mass media: Radio and TV, social media, twitter, and if needed IPAWS.

Sheltering

The town states that primary contact for shelter operations would be the Erie County Department of Homeland Security and Emergency Services as well as the American Red Cross. The Town of Tonawanda has identified the following emergency shelters within the town boundary:

Table 9.43-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Hoover School	249 Thorncliff	300	Unknown	Yes	Yes	Unknown	Unknown
Multiple Schools	Ken-Ton School District	5000	Unknown	Yes	Yes	Unknown	Unknown

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Tonawanda has identified the following sites suitable for placing temporary housing units.

Table 9.43-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town of Tonawanda Aquatic Center	1 Pool Plaza	100	Parking lot and one building	Parking lot does not have utilities but inside the building has utilities.	None
Town of Tonawanda Senior Center	291 Ensminger	25	Parking lot and building	Parking lot does not have utilities but inside the building has utilities.	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Tonawanda did not identify any locations for relocating homes away from the floodplain.



Table 9.43-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work the county to identify permanent housing locations, per Proposed Action #2022-Town Tonawanda-010					

9.43.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.43-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.43-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	2	0	4	0	3	0	3	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	10	0	11	0	13	0	1	0	12	0	7	0
Total Permits Issued	11	0	13	0	17	0	4	0	15	0	9	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development						
Recent Major Development and Infrastructure from 2015 to Present												
Unifrax	Manufacturing	2		55 Pirson Parkway	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Project is expanding again						
Pine Pharmaceuticals	Manufacturing	1		355 Riverwalk Parkway	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer	Project is expanding again						



Type of Development	2015	2016	2017	2018	2019	2020
				from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		
Amazon Delivery	Warehouse and distribution	1	800 Riverwalk Parkway	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Complete	
Solar Farms	Energy production	Several	Various	Unknown	Complete and more projects are pending	
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
Pine Pharmaceuticals	Manufacturing	1	355 Riverwalk Parkway	Unknown	Unknown	

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.43.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Tonawanda’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Tonawanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.43-1. Town of Tonawanda Hazard Area Extent and Location Map 1

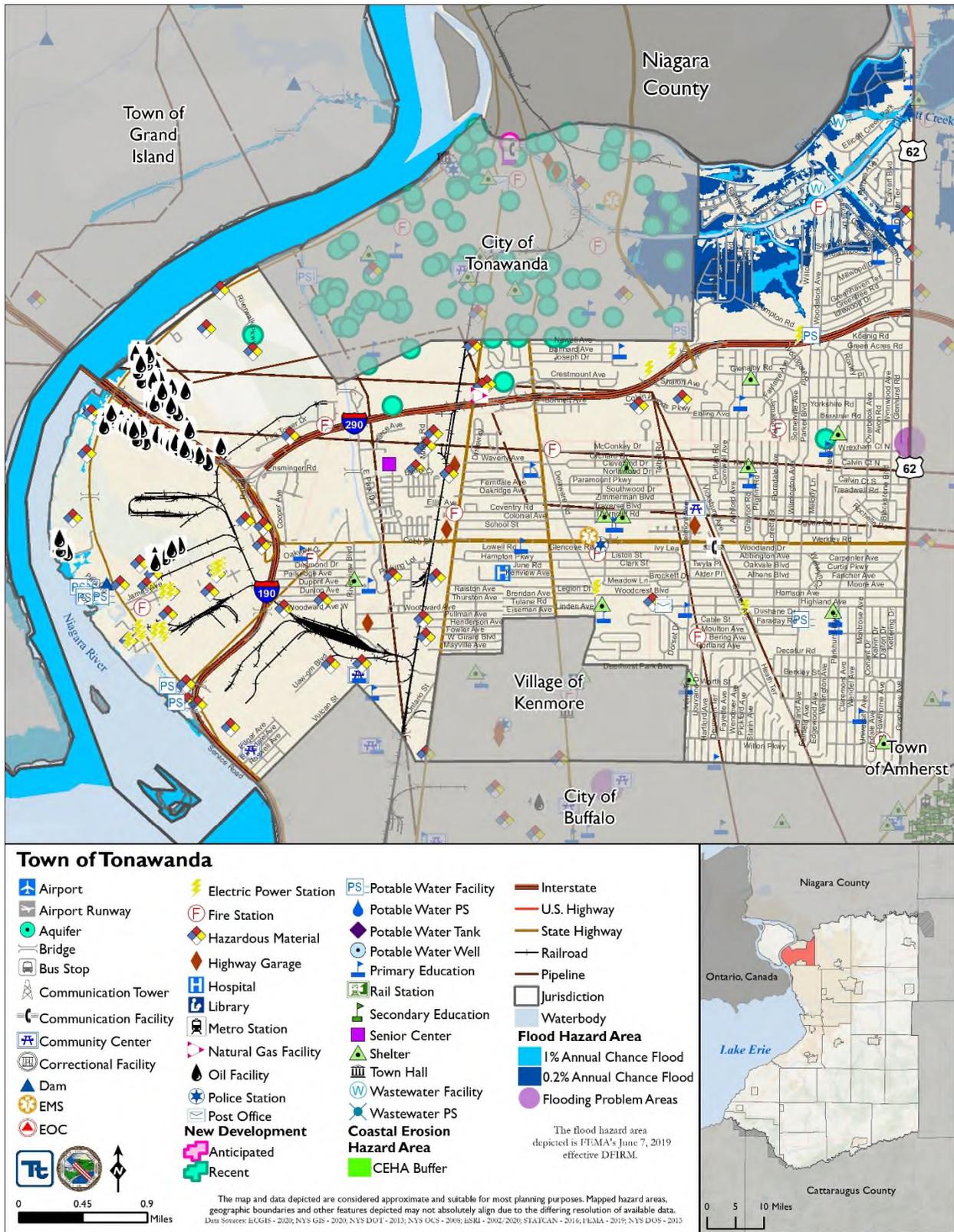




Figure 9.43-2. Town of Tonawanda Hazard Area Extent and Location Map 2

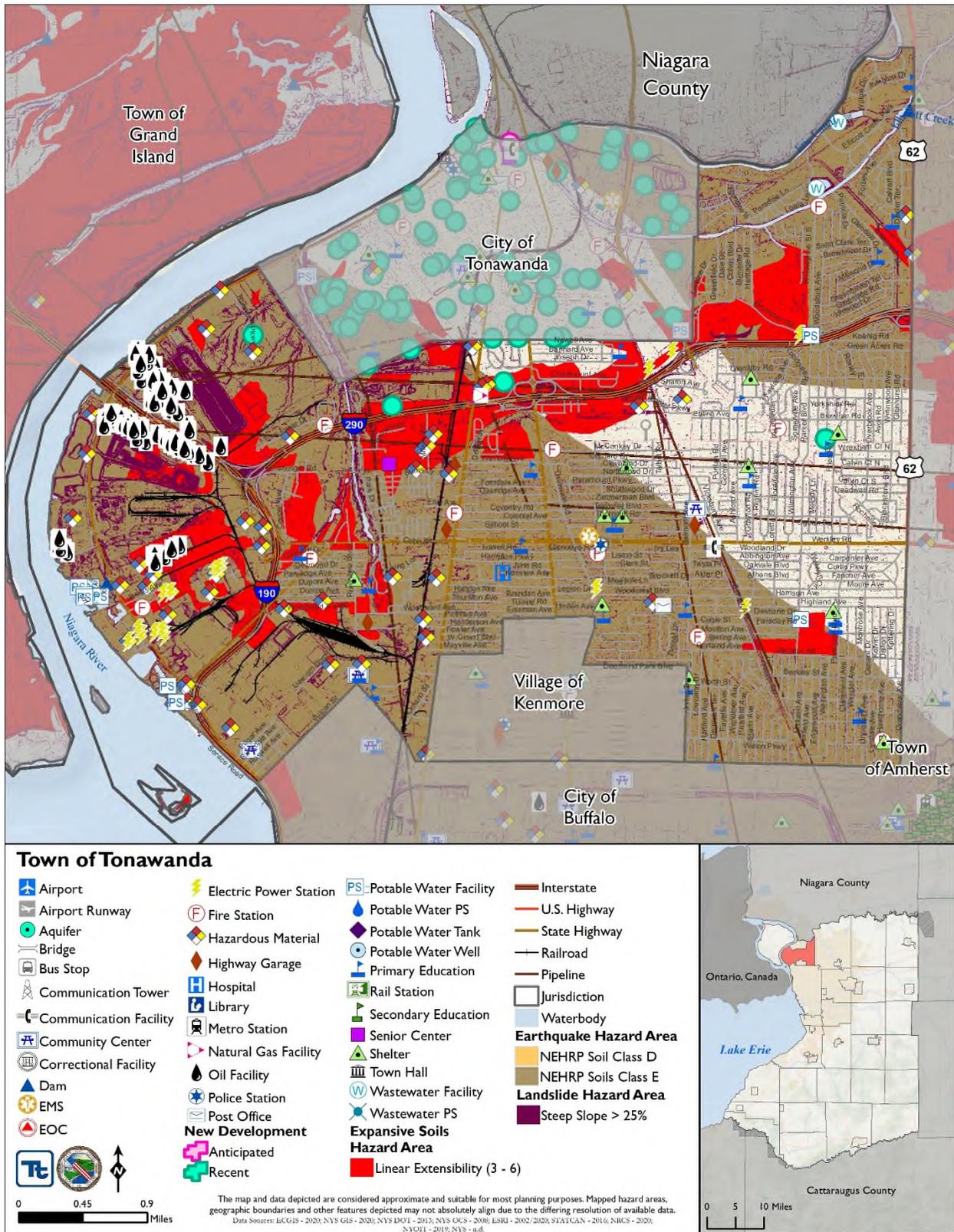




Figure 9.43-3. Town of Tonawanda Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Tonawanda’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.43-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.43-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
August 11-15, 2015	Flash Flood	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 28-29, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 6, 2015	Thunderstorm Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 12, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 18, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 11, 2017	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 8, 2017	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 13, 2017	Winter Storm	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
July 20, 2017	Tornado	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
August 4, 2017	Thunderstorm Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
December 10-15, 2017	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
December 24-29, 2017	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 2, 2018	Blizzard	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 6, 2018	Lightning	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
February 24, 2019	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
February 24, 2019	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 27, 2019	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 12, 2020	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 18, 2020	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of Tonawanda’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability





rankings of potential natural hazards for the Town of Tonawanda. The Town of Tonawanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following change due to relative rates of occurrence:

- Change the Hazardous Materials risk from Low to High.

Table 9.43-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	High
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	High	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.43-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
United Refining Company	Oil Facility	X	X	2022-Town Tonawanda-012

Identified Issues

After review of the Town of Tonawanda’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Tonawanda has identified the following vulnerabilities within their community:

- There is a lack of backup power for the Town of Tonawanda Municipal building.
- There are several industrial areas with single point of entry/egress that may experience evacuation issues during a hazard event. This includes the most recently developing areas in the category are the Riverwalk Parkway/Solar Park which now is home to an Amazon distribution hub and Pirson Parkway.



- Emergency operators/responders in the town do not all use the same communications platforms.
- The Public Safety building at 1835 Sheridan Drive has an old and unreliable backup generator which has failed in the past. The building houses the Police Department, EMS, Public Safety dispatch and primary computer servers for the town.
- The Town Highway facility provides a range of critical operations and lacks backup power.
- The Park Fire Station at 2 Military Road and the Sheridan Park Fire Station lack a backup generator and is thus vulnerable to interruption of services caused by utility failure.
- The town's pumping station lacks backup power and is vulnerable to utility failure.
- The town's Water Resources facilities contain vulnerable outdoor storage of chlorine. A leak could impact local homes and businesses. This issue needs to be addressed at both the water and the wastewater treatment plants.
- Existing storm sewers need to be rebuilt.
- Floodplain managers require training to carry out their functions most effectively.
- The town does not participate in the Community Rating System.
- The United Refining Company is in the 0.2 percent annual chance flood.
- Residential properties have flooded repeatedly.
- The town was unable to identify permanent housing locations.

9.43.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.43-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	All Hazards	Not Identified	Technical Support/Town Board Action	In Progress.			<ol style="list-style-type: none"> Include in 2022 HMP Partial progress: Tech Support has proposed via 2021 Capital Improvement Program to implement a generator backup for the data center located within the Municipal Building
	Adopt the new FIRM's and replace our local law with DEC's model floodplain management law. They will also assist us with preparing policies and procedures to administer the program. Have personnel attend Flood Plain Managers training.	Flooding	Not Identified	Technical Support/Town Board Action	Complete			<ol style="list-style-type: none"> Discontinue Completed
	Work with local homeowners of repetitively flooded properties to determine interest in inclusion in a grant application to FEMA for mitigation project funding (floodproof/elevate/acquire) and apply to FEMA on homeowner behalf.	Flooding	Not Identified	Technical Support/Town Board	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP
	Cleaning of existing storm sewer. The Town of Tonawanda Water Department will flush existing storm sewer	Flooding	Not Identified	Water Resources	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP Purchasing new equipment to better facilitate cleaning of storm sewers and sanitary lines on a five-year cycle.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	systems of silt and debris to correct flooding problems. Currently this is done over a five-year period.					Damages Avoided; Evidence of Success		3.
	Rebuild existing storm catch basins. The Town of Tonawanda Highway Department will rebuild existing storm catch basins to alleviate restriction caused by broken concrete in catch basin. This is done on an as needed basis.	Flooding	Not Identified	Highway Dept.	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flooding	Not Identified	Technical Support	Complete	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Completed
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Require staff involved in floodplain management and ordinance enforcement to	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	become Certified Floodplain Managers (CFMs).					Damages Avoided; Evidence of Success		3.
	Join the Community Rating System (CRS).	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Install creek gauging stations. Conduct annual flood channel inspections/clearing.	Flood	Not Identified	Technical Support	In Progress	Cost		1. Do not Include
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Tonawanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Town Police Department has identified the need for emergency equipment and quotes for equipment costs have been procured. The town aims to acquire the following; upgraded police/EMS radio systems to be P25 compliant; includes dispatch radio, mobile radios, and portables.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Tonawanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.43-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	X	X	X	-	-	X
Cyber Attack	X	X	-	X	X	X	X	-	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Expansive Soils	X	X	-	X	X	X	X	-	-	X
Extreme Temperature	X	X	-	X	X	X	X	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	X	X	-	X	X	X	X	-	-	X
Landslide	X	X	-	X	X	X	X	-	-	X
Pandemic	X	X	-	X	X	X	X	-	-	X
Severe Storm	X	X	-	X	X	X	X	-	-	X
Severe Winter Storm	X	X	-	X	X	X	X	-	-	X
Utility Failure	X	X	-	X	X	X	X	-	-	X
Wildfire	X	X	-	X	X	X	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.43-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Tonawanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.43-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.





Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Tonawanda-001	Improve emergency communications so that systems are interoperable	2	All Hazards	<p>Problem: Emergency operators/responders in the town do not all use the same communications platforms.</p> <p>Solution: Upgrade to emergency communications for police/EMS radio system to be P25 compliant. This is to include dispatch radio, mobile radio, and portables.</p>	No	No	Within 2 years	Town Police Department	TBD by feasibility analysis	Improved emergency response	EMPG	High	SIP	ES
2022-Town Tonawanda-002	Replace backup power generator at the Public Safety building	1	All Hazards , Utility Failure	<p>Problem: The Public Safety building at 1835 Sheridan Drive has an old and unreliable backup generator which has failed in the past. The building houses the Police Department, EMS, Public Safety dispatch and primary computer servers for the town.</p> <p>Solution: Town staff will conduct an engineering analysis to determine the appropriate size backup generator to purchase. The Fire Department will ensure that the generator is installed and maintained.</p>	Yes	No	Within 2 years	Town Engineer and Emergency Services/Police Department	TBD by feasibility analysis	Continuity of emergency services during hazard events	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, town budget	High	SIP	ES



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Tonawanda-003	Establish evacuation routes from specified locations	1	All Hazards	<p>Problem: There are several industrial areas with single point of entry/egress that may experience evacuation issues during a hazard event. This includes the most recently developing areas in the category are the Riverwalk Parkway/Solar Park which now is home to an Amazon distribution hub and Pirson Parkway.</p> <p>Solution: The town will work with property owners to establish safe evacuation routes.</p>	No	No	Within 3 years	FPA, Emergency Management, Fire Department	Staff time	Secure safe passage out of specified facilities by providing clear evacuation routing	Municipal budget	High	LPR	ES
2022-Town Tonawanda-004	Protect the Sheridan Park Fire District #4 – Station #2 facility from power failure	1, 2	All Hazards, Utility Failure	<p>Problem: The Sheridan Park Fire Station facilities lacks a backup generator and is thus vulnerable to interruption of services caused by utility failure. Many emergency services are provided through the facility.</p> <p>Solution: The town will encourage the Fire District to conduct an engineering analysis to determine the most appropriate generator to install. The Fire</p>	Yes	No	Within 1 year	Sheridan Park Fire District #4	Staff time	Continuity of services during emergencies	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Department will oversee installation and maintenance of the generator.										
2022-Town Tonawanda-005	Protect the town's pump stations and elevated water towers from utility failure	1	All Hazards , Utility Failure	<p>Problem: The town's pumping stations, and elevated water towers lack backup power and are vulnerable to utility failure.</p> <p>Solution: The town will conduct an engineering analysis to determine the most appropriate generators to install. The Town Water Resources Department will oversee installation of the generators and maintenance thereafter.</p>	Yes	No	Within 3 years	Town Tonawanda Water Resources Department	TBD by engineering analysis	Continuity of services during emergencies	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-Town Tonawanda-006	Secure chlorine storage at Town Water Resources facilities	1	HazMat	<p>Problem: The town's Water Resources facilities contain vulnerable outdoor storage of chlorine. A leak could impact local homes and businesses. This issue needs to be addressed at both the water and the wastewater treatment plants.</p> <p>Solution: The town will conduct an analysis to determine the best ways to mitigate the chlorine</p>	Yes	No	Within 3 years	Town Tonawanda Water Resources	TBD during engineering analysis	Protect community from potential impact of leaks from the chlorine tanks.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				HazMat threat at the two facilities. The Highway Department will implement this solution.										
2022-Town Tonawanda-007	Clean existing storm sewers to protect portions of the town from flood hazard	1, 2	Flood	<p>Problem: Storm sewers backup up due to clogs during rain events which can cause flooding.</p> <p>Solution: Purchase new equipment to clean storm sewers and sanitary lines on a regular cycle. Some pipes are also undersized. Alternately, purchase new equipment to repair/replace stormwater systems.</p>	No	No	Within 2 years	Town Tonawanda Water Resources	TBD per engineering analysis	Reduce flood risk	Municipal budget	High	SIP	SP
2022-Town Tonawanda-008	Floodplain Administrator to attend training on floodplain management. Require these staff to become Certified Floodplain Managers. Also require staff to examine the Flood Damage Prevention Ordinance to ensure that it meets requirements.	3	Flood	<p>Problem: Floodplain Managers require training and certification to fully implement the NFIP program within the town. The staff should also ensure that the Flood Damage Prevention Ordinance meets required standards.</p> <p>Solution: Obtain/host training and certification for floodplain managers in part so they can determine the status of</p>	No	No	Within 2 years	ECDHSES, FPA	\$3,000	Certified floodplain managers are trained to implement an effective floodplain management program	County and town budgets	High	LPR	PR



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the Flood Damage Prevention Ordinance.										
2022-Town Tonawanda-009	Consider joining the Community Rating System	3	Flood	<p>Problem: The town does not participate in the important CRS program.</p> <p>Solution: The town will carefully consider the value of joining the CRS. If joining the program is determined to be worthwhile, the town will apply to join the program.</p>	No	No	Within 2 years	Town Emergency Manager, FPA	Staff time	Reduce flood insurance rates	Town budget	High	LPR	PR
2022-Town Tonawanda-010	Identify locations and capacity for permanent housing and shelters	1	All Hazards	<p>Problem: The town is not able to identify locations for permanent housing to be used after a natural disaster.</p> <p>Solution: The town will work with the county to identify locations and permanent housing for use after a natural disaster.</p>	No	No	Within 2 years	FPA, Town Highway Department	Staff time	Ensure that residents have a potential option for permanent housing	Municipal budget	High	LPR	ES
2022-Town Tonawanda-011	Protect United Refining Company facility to the 0.2% annual chance flood	1, 2	Flood	<p>Problem: The United Refining Company is in the Special Flood Hazard Area.</p> <p>Solution: The town will contact the facility</p>	Yes <input type="checkbox"/>	Yes	Within 5 years	Town Board, Town Engineer	TBD by engineering feasibility analysis	Ensure continued services at this critical facility	FEMA HMGP, BRIC, USDA Community Facilities	High	EAP	PI



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				managers of the privately owned dam and discuss options for protecting the dam to the 0.2% annual chance flood event.							Grant Program, EMPG			
2022-Town Tonawanda-012	Acquire emergency popup shelters	1, 2	All Hazards, HazMat	<p>Problem: Need for sheltering locations in case of hazmat or terrorist event.</p> <p>Solution: Town Emergency Management will acquire and deploy emergency popup shelters. These will supplement fixed site shelters and can potentially be available for use very quickly after a disaster.</p>	No	No	Within 3 years,	Town Emergency Management	TBD by engineering feasibility	Immediate set up of popup mobile shelters after hazard event	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-Town Tonawanda-013	Expand Fire Training Facility	1	Wildfire, All Hazards	<p>Problem: The current fire training facility has a small, structurally deteriorating block building that was modified as a maze training building.</p> <p>Solution: Demolish current structure and replace with a larger multi-functional facility</p>	No	No	Within 3 years	Town Emergency Management	TBD by engineering feasibility	Increase fire training options and response effectiveness	EMPG, BRIC, Assistance to Firefighters Grant Program	High	SIP	PP
2022-Town Tonawanda-014	Residential Property Flood Mitigation	1	Flood	<p>Problem: Frequent flooding events have resulted in damages to residential properties.</p>	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to	Remove residents and homes from the flood	BRIC, HMGP, FMA, cost-share with	High	SIP	PP





Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.</p>					be purchased.	threatened homes	homeowners			
2022-Town Tonawanda-015	Protect Senior Center and 169 Sheridan Parkside from power failure	1	All Hazards	<p>Problem: The town's Senior Center is located at 291 Ensminger Road. Meals on Wheels deliveries are dispatched from the town building at 169 Sheridan Parkway. Both are subject to frequent power outages. Increasing summertime temperatures make this more important. The town has an aging</p>	Yes	No	Within 1 year	Parks and Recreation Department	\$150,000	Protect Senior residents from impacts of power failure and loss of air conditioning	FEMA, BRIC, HMPG, USDA Community Facilities Grant Program, EMPG, and municipal budget	High	SIP	ES



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>population and low incomes.</p> <p>Solution: The Town Engineer will procure and install at the Senior Center a 3 phase 120/208 v 600-amp main backup generator and will then maintain the generator. The Town will also consider outfitting a cooling center within the Senior Center.</p>										
2022-Town Tonawanda-016	Implement Long-term Planning Objectives	1	All Hazards	<p>Problem: The Department is in the process of implementing several long-term planning objectives outlined in the town's Comprehensive Plan including a comprehensive zoning law update, neighborhood revitalization plans, cleanup efforts along River Road, and several public infrastructure investments.</p> <p>Solution: The Town will complete the long-term planning</p>	No	No	3 years	Town Board, Planning Board	Staff Time, consultant costs	Through long-term planning efforts protect residents from hazard impact	Municipal budget	High	LPR	PR



Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				processes that support hazard mitigation										
2022-Town Tonawanda-017	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	1	All Hazards	<p>Problem: The Town Hall municipal building lacks backup power</p> <p>Solution: The Town engineer will determine the correct generator to install at Town Hall. The Town Youth, Parks and Recreation Department will then procure and install this generator and maintain it.</p>	No	No	1 year	Town Engineer, Town Department of Youth, Parks and Recreation	TBD by engineer's feasibility study	Ensure continuity of emergency services during a hazard event	FEMA, HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-Town Tonawanda-018	Rebuild existing storm catch basins.	1	Flood	<p>Problem: Specified storm catch basins require rebuilding</p> <p>Solution: The Town Highway Department will rebuild and maintain specified catch basins to alleviate restriction caused by broken concrete in catch basin. This is done on an as needed basis.</p>	No	No	1 year	Town Highway Department	TBD by engineering analysis	Ensure continuity of access over important town roads	FEMA, BRIC, HMGP, municipal budget	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.





Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Tonawanda-001	Improve emergency communications so that systems are interoperable	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Town Tonawanda-003	Establish evacuation routes from specified locations	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2022-Town Tonawanda-004	Protect the Sheridan Park Fire District #4 – Station #2 facility from power failure	1	0	1	1	1	1	0	1	1	0	1	1	1	1	11	High
2022-Town Tonawanda-005	Protect the town’s pump stations and elevated water towers from utility failure	1	0	0	1	1	1	0	1	1	1	1	1	1	1	11	High
2022-Town Tonawanda-006	Secure chlorine storage at Town Water Resources facilities	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Tonawanda-007	Clean existing storm sewers to protect portions of the town from flood hazard	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-008	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-009	Consider joining the Community Rating System	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High



Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Tonawanda-010	Identify locations and capacity for permanent housing	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-Town Tonawanda-011	Protect United Refining Company facility to the 0.2% annual chance flood	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-Town Tonawanda-012	Acquire emergency popup shelters	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-013	Expand Fire Training Facility	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-014	Residential Property Flood Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Tonawanda-015	Protect Senior Center from power failure	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-015	Protect Senior Center and 169 Sheridan Parkway from power failure	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-016	Implement Long-term Planning Objectives	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-017	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High



Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
functions																	
2022-Town Tonawanda-018	Rebuild existing storm catch basins.	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.43.9 Action Worksheets

The following action worksheets have been developed by the Town of Tonawanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Town of Tonawanda Action Worksheet			
Project Name:	Expand the Fire Training Facility		
Project Number:	2022-Town Tonawanda-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Wildfire, All Hazards		
Description of the Problem:	The current fire training facility has a small, structurally deteriorating block building that was modified as a maze training building.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Fire Department and Highway Departments will collaborate to demolish the current structure and replace with a larger, multi-functional facility		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Improve fire and emergency response	Estimated Benefits (losses avoided):	Increase fire training options and response effectiveness
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by engineering analysis	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation1			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	3 years	Potential Funding Sources:	EMPG, BRIC, Assistance to Firefighters grant program.
Responsible Organization:	Town Emergency Manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Rent fire training facility from another town	High	No such facilities available
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the town's pump stations and elevated water towers from utility failure.	
Project Number:	2022-Town Tonawanda-013	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the water infrastructure
Property Protection	1	Project will improve emergency response for all properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Wildfire
Timeline	1	Within 3 years
Agency Champion	1	Town Emergency Management
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



Town of Tonawanda Action Worksheet			
Project Name:	Protect town Senior Center located at 291 Ensminger Drive (Senior Center) and 169 Sheridan Parkway from utility failure		
Project Number:	2022-Town Tonawanda-015		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The town's Senior Center located at 291 Ensminger Road is subject to frequent power outages. The same is true for 169 Sheridan Parkway a town building from where Meals on Wheels are distributed. Increasing summertime temperatures make this more important. The town has an aging population and low incomes.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Engineer procure and install at the Senior Center and 169 Sheridan Parkway potentially a 3 phase 120/208 v 600-amp main backup generator. Outfit a cooling center at the Senior Center.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of flood protection services at the Highway Department facility. Shelter services for seniors
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD by engineering analysis	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	BRIC, HMPG, municipal budget
Responsible Organization:	Parks and Recreation Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct a dedicated solar array to supply backup power	High	Variable power output.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect town Municipal facility located at 291 Ensminger Drive (Senior Center) from utility failure	
Project Number:	2022-Town Tonawanda-015	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the town
Property Protection	1	Project will protect the town facility from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 2 years
Agency Champion	1	Parks and Recreation Department
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	



9.44 Town of Wales

This section presents the jurisdictional annex for the Town of Wales. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the municipality risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.44.1 Hazard Mitigation Planning Team

The following individuals have been identified as the municipality hazard mitigation plan primary and alternate points of contact. The Town of Wales followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Emergency Manager, and Deputy Emergency Manager. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.44-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Walter Raichel – Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-860-5691 Email: wraichel@gmail.com	Name/Title: Ellen M. Bapst – Deputy Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-457-4151 Email: bapst14139@gmail.com
NFIP Floodplain Administrator	
Name/Title: Walter Raichel – Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-860-5691 Email: wraichel@gmail.com	

9.44.2 Municipal Profile

The Town of Wales is situated in the eastern part of Erie County is located southeast of the City of Buffalo. The town is 36 square miles in area. The Town of Aurora makes up the western boundary, the Town of Holland is to the south, the Town of Marilla on the north and Wyoming county on the east.

Wales is one of the earliest towns formed in Erie County. It was created from the large original town of Willink. The area was named for Wales (of Britain) which this pastoral town resembles. The first white settlers arrived in the Town of Wales in 1804. NYS Route 400 runs through the town. The Buffalo Creek flows northward through the town.



According to the U.S. Census, the 2010 population for the Town of Wales was 3,005. The estimated 2019 population was 3,020, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.9 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.44.3 Jurisdictional Capability Assessment and Integration

The Town of Wales performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.44.3). The municipality identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Wales. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.44-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 84 - Building Construction Enforcement, Adopted 1993	Local	Code & Building Enforcement
Comment: For the purpose of promoting the general welfare of the Town of Wales, the Town Board does hereby enact this article to regulate the use and occupation of property within the Town of Wales in accordance with the powers and authority granted it under the New York Town Law. This article contains provisions for building zoning permits, certificates of occupancy and inspections.					
Zoning Code	Yes	No	Chapter 200 – Zoning; Adopted 1956, Zoning	Local	Code & Building Enforcement
Comment: The municipal zoning ordinance includes the following guideline: A special use permit application must include a written description of and plans for water supply, sewage disposal and storm drainage with evidence of acceptability by the Erie County Health Department. The town is divided into four zoning districts – agricultural, residential, business, and manufacturing.					
Subdivision Ordinance	Yes	No	Chapter 181 – Subdivision of Land; approved 8/2/1971	Local	Code & Building Enforcement
Comment: The Subdivision ordinance has been developed with, but not limited to the following guidelines: 1) An easement shall be provided for all natural drainageways with more than two-hundred-acre watersheds and all utility lines when such utility line or lines do not fall within a dedicated right-of-way. All easements shall be plotted on the preliminary plat and subdivision plat. A clause shall be inserted in the deed of					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p><i>each lot affected by an easement indicating that the easement exists and its purpose. Except as further required in this section, easements shall have a minimum width of 10 feet. Where a subdivision is traversed by a drainageway, channel or stream, a drainageway easement conforming substantially to the lines of such watercourse shall be provided. The easement shall be 20 feet wide or such width as will be adequate to preserve natural drainage and to provide sufficient width for maintenance. 2) The subdivider shall not be permitted to leave any surface depressions which will collect pools of water. 3) Preliminary plats must include proposed provision of water supply, fire protection, disposal of sanitary waste, stormwater drainage, street trees, streetlighting fixtures, street signs, sidewalks and other data.</i></p>					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
Comment:					
Post-Disaster Recovery Ordinance	Yes	No	Chapter 103	Local	Emergency Manager and Code & Building Enforcement
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: <i>Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".</i></p>					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 200, Adopted 1956, Zoning	Local and State	Planning Board
<p>Comment: <i>Site plan review is intended to reduce the potential for development that might pose a threat to the community and or the environment within the Town of Wales.</i></p>					
Environmental Protection Ordinance	Yes	Yes	Chapter 200, Adopted 1956, Zoning	Local	Planning Board
<p>Comment: <i>Environmental Protection is incorporated into zoning. These are meant to promote sustainable development to increase resilience and safety for the community.</i></p>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 103 – updated 2019, Flood Damage Prevention.	Local	Code Enforcement Officer
<p>Comment: <i>It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</i></p> <ul style="list-style-type: none"> <i>(1) Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;</i> <i>(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</i> <i>(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;</i> <i>(4) Control filling, grading, dredging and other development which may increase erosion or flood damages;</i> <i>(5) Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands;</i> <i>and (6) Qualify and maintain for participation in the National Flood Insurance Program.</i> <p><i>An enclosed area beneath the lowest elevated floor, 18 inches or more in height, which is used to service the underside of the lowest elevated floor. The elevation of the floor of this enclosed area, which may be of soil, gravel, concrete or other material, must be equal to or above the lowest adjacent exterior grade. The enclosed crawl space area shall be properly vented to allow for the equalization of hydrostatic forces which would be experienced during periods of flooding.</i></p> <p><i>The Code Enforcement Officer is appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.</i></p>					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	In various sections of Chapter 103, 104, 203, 120, and 100.	Local	Various
Comment: <i>The sections discuss the coordination between municipal agencies, county, and state during and after a disaster as well as any preparation needed prior to the disaster event. Each chapter has its own area of concern during a hazard event including housing, emergency evacuation, communication, municipal services, and transportation.</i>					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Regional Comprehensive Plan, 2004	Local	Planning Board
Comment: <i>In accordance with Section 272-a of Town and Section 7-722 of Village law, this plan is intended to help promote the health, safety and general welfare of the Town or Village and to give due consideration to the needs of the people of the region of which the Town or Village is a part.</i>					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Economic Development Plan	Yes	No	2012	Local	Multi-jurisdictional
Comment: <i>The goals and intent of the plan includes: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control for all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems.</i>					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Disaster Response Plan, 2009	Local	Emergency Management
Comment: <i>The intent of the comprehensive emergency management plan (especially the evacuation annex) is meant to provide municipalities and community members the necessary means to prepare for and coordinate during hazard events and minimize avoidable damage.</i>					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Wales to oversee and track development.

Table 9.44-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code & Building Enforcement, Town Board Special Use Permit
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	None – the town is relatively rural and sparsely populated

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Wales and their current responsibilities which contribute to hazard mitigation.

Table 9.44-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board has full approval authority, and binding jurisdictional authority regarding all residential subdivision developments, on which the Town Board may make recommendations. This Board is also charged with generating and reviewing proposed ordinances intended to become part of Wales Town Law, review and recommendation on proposed zoning changes and review from time to time of existing zoning codes with recommendations for updating and appropriate changes.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals hears and deliberates on cases from citizens seeking relief from the Town ordinances. Decisions of this Board are based on strict criteria defined by the State and may be appealed by court action.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – conducts maintenance on roads, and various other infrastructure systems across the town.
Construction/Building/Code Enforcement Department	Yes	Code & Building Enforcement – reviews and issues permits for residential and non-residential property development.
Emergency Management/Public Safety Department	Yes	Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Roads
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Wales.

Table 9.44-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, with board approval
Capital improvements project funding	Yes, with board approval
Authority to levy taxes for specific purposes	Yes, with board approval
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, with board approval
Incur debt through special tax bonds	Yes, with board approval
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes, with board approval
Other federal or state Funding Programs	Yes, with board approval
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Wales.

Table 9.44-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Emergency Manager
Personnel skilled or trained in website development	Yes	Code Official Clerk and town clerk
Hazard mitigation information available on your website	Yes	The town maintains a municipal website where they post news and upcoming events and meetings.
Social media for hazard mitigation education and outreach	Yes	The town has a Facebook page where they post community events and announcements
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Town website, social media, radio, and TV
Warning systems for hazard events	Yes	Town website and social media; CodeRED



Outreach Resources	Available? (Yes/No)	Comment:
Natural disaster/safety programs in place for schools	Yes	School Superintendent
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Wales.

Table 9.44-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	TBD	2021
Public Protection (ISO Fire Protection Classes 1 to 10)	No	No public water	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.44-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Moderate
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement



9.44.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Walter Raichel, Town Emergency Manager and Building Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Wales.

Table 9.44-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Wales	1	4	\$2,133	1	1

Source: FEMA 2020a, FEMA 2020b

Notes: Data from 2020-21

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town describes flood-prone areas to be along creeks and farmland within the town. The town does not maintain a list of property owners interested in flood mitigation. There are currently no RiskMAP projects within the jurisdiction. As the building inspector makes substantial damage determinations, there are no specific guidelines established and are determined on a case to case basis. There are no properties that have been mitigated within the town and the current flood maps adequately address the existing sites that have flooding.

NFIP Compliance

The building inspector is in charge of floodplain management, and there are no certified floodplain managers on staff. Given the town’s size the town does not have adequate resources to determine future flooding conditions from climate change, nor given the part time and volunteer staff, training is not required nor relevant to increase the town’s capabilities. The building officer provides permit and site plan review, and inspection of whether site is located in a floodplain. The town does not have specific guidelines to determine substantial improvement measures at the same time does not have any outstanding violation issues. The municipality is also no aware of any barriers to increasing the effectiveness of the NFIP program.

The town’s most recent CAV date on record is 07/17/1997 and is due for a new one. The town has documented that the local chapter for the flood damage prevention ordinance is number 103 titles “Flood Damage Prevention B-26-2008”. The town National Flood Insurance Program meets the requirements of the program through the minimum 2 fee freeboard requirement, for example, and local ordinances, plans, and programs, also meet and support the NFIP requirements. The town is not interested in joining the FEMA Community Rating System.

9.44.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.



Evacuation Routes and Procedures

The Town of Wales has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 20A (East/West)
- Route 78 (South)
- Interstate 400 (North/South)

Sheltering

The Town of Wales has identified the following designated emergency shelters within the town.

Table 9.44-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	12345 Big Tree Rd, Wales Center, NY 14169	50	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Wales has identified the following sites suitable for placing temporary housing units.

Table 9.44-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Open Land	12345 Big Tree Road	20-25 Acres	Flat Land	Available on demand.	None
Town Park	Rt 20A	30 Acres	Open Space	Available on demand.	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Wales has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.44-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Park	Route 20A	30 Acres	Land	None	Would need to draw water and sewer lines



9.44.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.44-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.44-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	5	0	3	0	1	0	4	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	1	0	5	0	3	0	1	0	4	0	2	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
No Recent Development to Report												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
No Future Development Planned												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.44.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the municipality risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Wales has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.44-1. Town of Wales Hazard Area Extent and Location Map 1

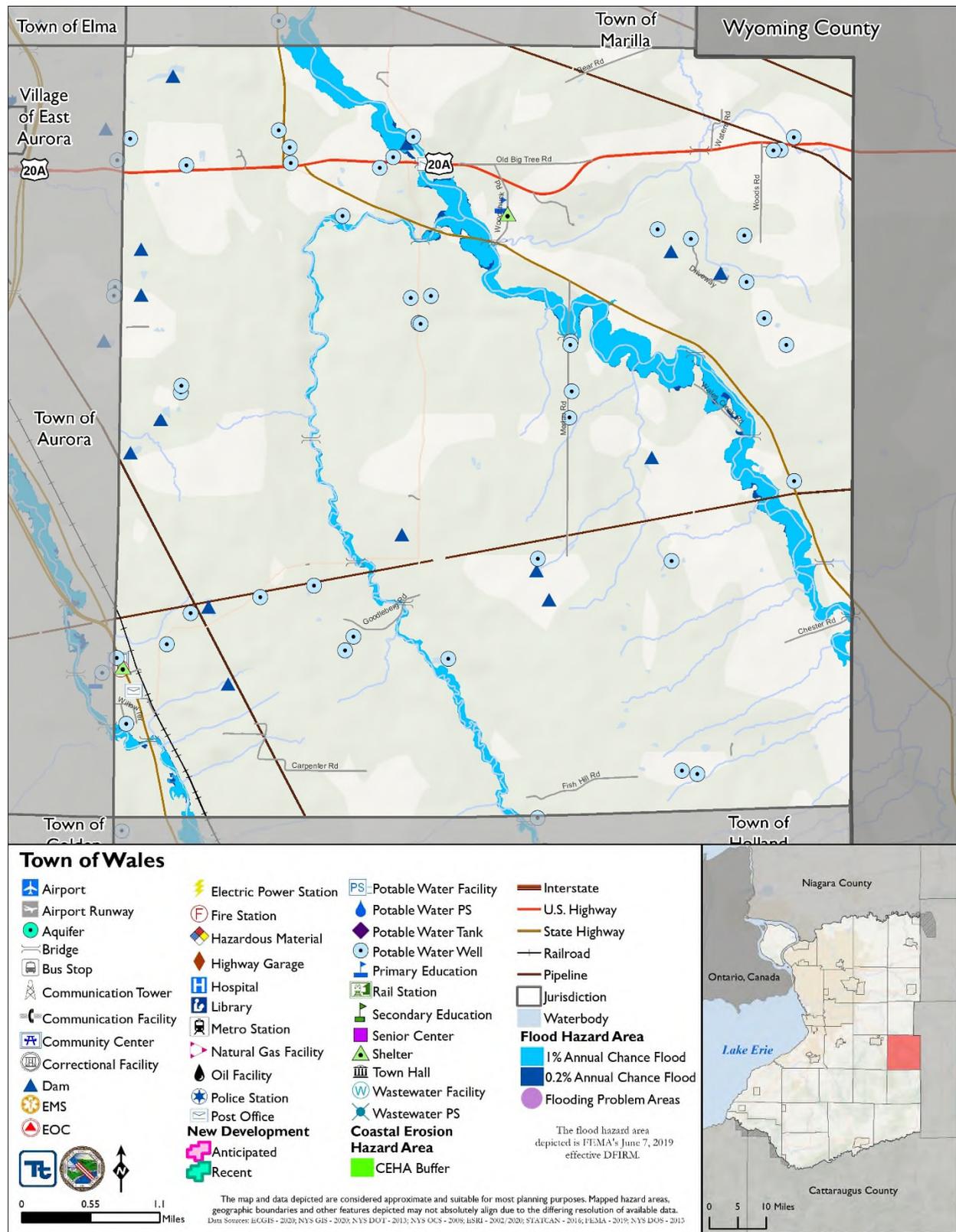




Figure 9.44-2. Town of Wales Hazard Area Extent and Location Map 2

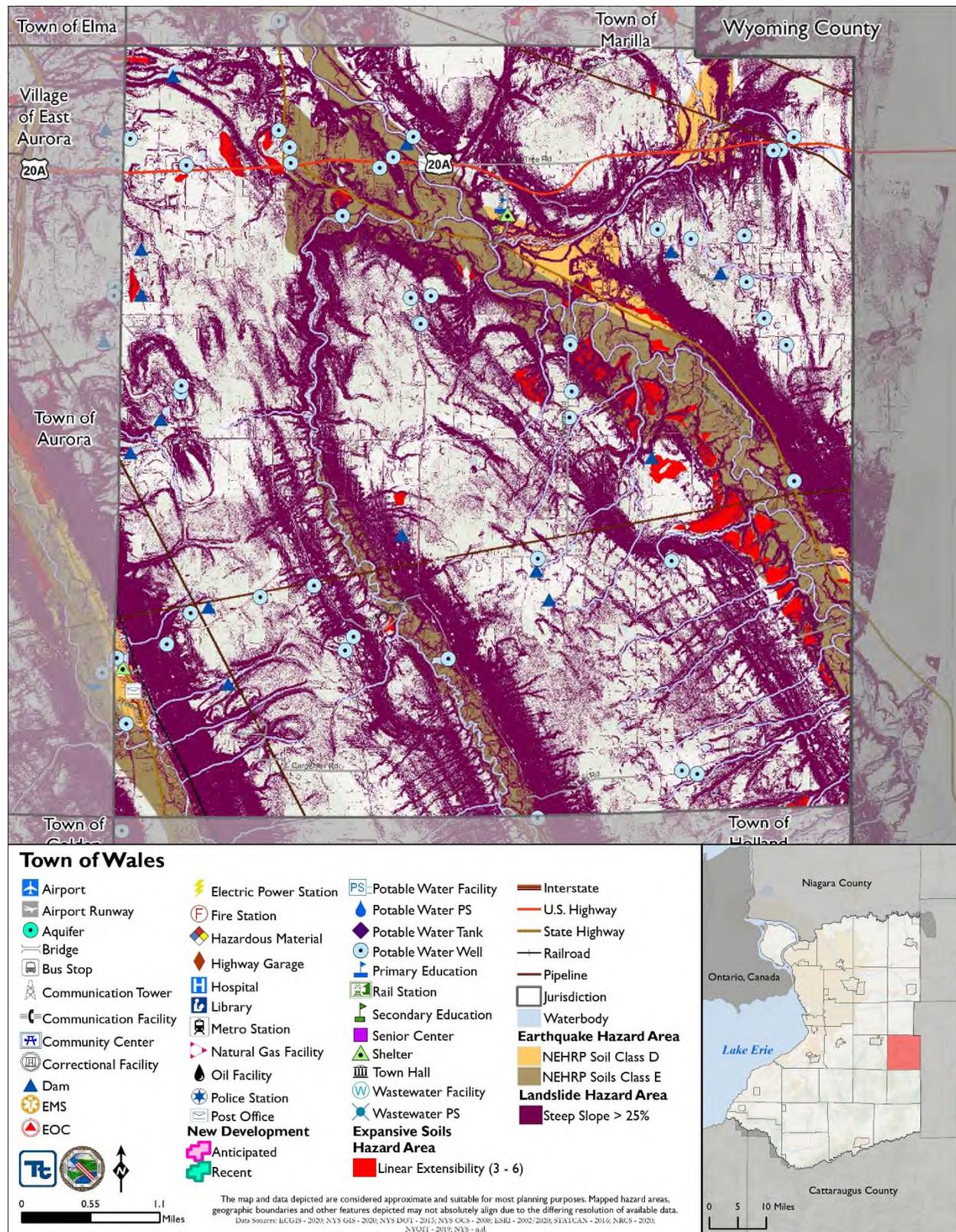
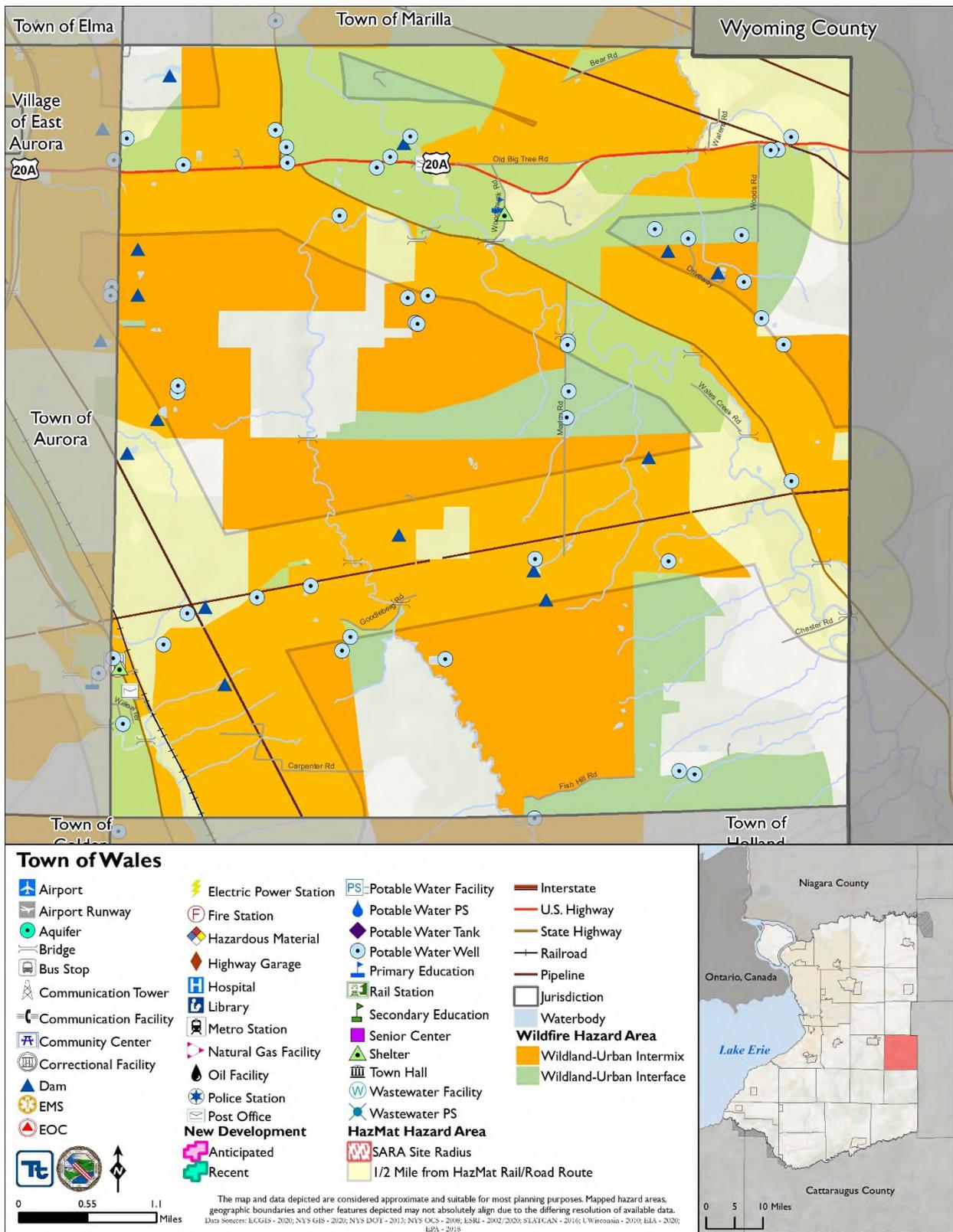




Figure 9.44-3. Town of Wales Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The municipality history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.44-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.44-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency





DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the municipality risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Wales. The Town of Wales has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- Cyber attack is not a threat to the community and thus has been re ranked from medium to low.
- Earthquakes have not occurred in the past and thus the ranking has changed from high to low.
- Given the amount of traffic along Route 20 carrying hazardous materials on a daily basis, the town believes it poses a threat and would like to increase the HazMat rating from low to medium.
- Wildfires have never occurred and thus would like to reduce the ranking from high to low.

Table 9.44-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Low	Low	Low	Medium	Low	Medium
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	Medium	Medium	Medium	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance





flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.44-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Erdman Dam	Dam	Yes	Yes	003

Source: GIS 2021

Identified Issues

After review of the municipality hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Wales has identified the following vulnerabilities within their community:

- The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standards and needs to increase overall capacity.
- The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year.
- The Erdman Dam is located within the 100-year floodplain. Given the ownership is private, the town does not have authority to conduct an assessment and make improvements.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.44.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.44-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	-	
No Previous Projects for the Town of Wales	-	-	-	-	-	Cost	-	
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Wales has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Fire hall recently installed a new diesel generator to power the entire building in 2021
- The town recently developed a heating shelter on Route 20, in 2018. The facility is used for severe winter storms.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Wales participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.44-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X							X	
Expansive Soils		X							X	
Extreme Temperature		X							X	
Flood		X		X		X	X		X	
Hazardous Materials		X							X	
Landslide		X							X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X							X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.44-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Wales would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.44-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.44-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Wales -001	Fire Hall Expansion and Retrofitting	1,2	All	<p>Problem: The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standardbreds and needs to increase overall capacity. In addition, the current facility also has issues around flooding and erosion due to surrounding stormwater related issues. The facility operation is thus compromised during extreme weather events when the facility needs to be in full operation.</p> <p>Solution: The fire company is looking to purchase the adjacent property that is currently an abandoned property. The fire hall would like to build an additional building and or an extension that could be used as storage and facility expand existing capabilities. The town might need additional backup power but would determine once the facility design phase is complete. To mitigate flooding, the existing facility would also need to retrofitted to mitigate and or eliminate flooding in the facility. An additional study might also need to be</p>	Yes	Yes	5 years	Fire District for the Town of Wales	\$2 million	Expanded capabilities for the region.	HMGP, FMA, Firefighters Assistance grant	High	SIP	SP, ES



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				conducted to better understand the issues pertaining to flooding, since it is not located in the floodplain.										
2022-Town of Wales -002	Develop Public Water Supply	1,2	Utility Failure	<p>Problem: The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year.</p> <p>Solution: The town would like to create a public water supply system for the northern portion of the town that has continuous water shortages. The town would need to work with the Town of Aurora to connect Erie County public utilities and have access to continuous water supplies. The project has previously been proposed, but the Town of Aurora and Village of East Aurora determined the project to be infeasible due to financial constraints. Thus the Town of Wales would need to apply for FEMA grant funding to expand county utilities to the northern portion of the town. This project would also need to include the Erie County Water Department.</p>	No	New	5 years	Town of Wales Public Works Department/ Erie County water Department	\$7 million	Water Supply Met	HMGP, BRIC, WQIP	High	SIP	SP
2022-Town of	Dam Examination/ Outreach	1,4	Flood	<p>Problem: The Erdman Dam is located within the 100-year floodplain. Given the</p>	Yes	No	5 years	Town Board	Low	Flood Mitigation	Municipal Budget	High	EAP	PI





Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Wales-003				ownership is private, the town does not have authority to conduct an assessment and make improvements. Solution: The town would need to conduct outreach to the dam owner and provide mitigation recommendations as well as guidance on potential grant funding opportunities through FEMA. The town shall conduct outreach within the 5 years before the upcoming hazard mitigation plan update.										
2022-Town of Wales-004	Residential Property Flood Mitigation.	1	Flood	Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood-prone areas that experience	No	No	Within 3 years	Code Enforcement Officer	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes ◆ Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.





- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.44-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Wales -001	Fire Hall Expansion and Retrofitting	1	1	1	1	1	-1	-1	1	1	1	1	1	1	1	10	High
2022-Town of Wales -002	Develop Public Water Supply	1	1	1	1	1	0	-1	1	1	1	0	1	1	1	10	High
2022-Town of Wales -003	Dam Examination/ Outreach	1	1	1	1	0	0	1	1	1	1	0	1	1	1	11	High
2022-Town of Wales -004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.44.9 Action Worksheets

The following action worksheets have been developed by the Town of Wales to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Fire Hall Expansion and Retrofitting		
Project Number:	2022-Town of Wales -001		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standards and needs to increase overall capacity. In addition, the current facility also has issues around flooding and erosion due to surrounding stormwater related issues. The facility operation is thus compromised during extreme weather events when the facility needs to be in full operation.		
Action or Project Intended for Implementation			
Description of the Solution:	The fire company is looking to purchase the adjacent property that is currently an abandoned property. The fire hall would like to build an additional building and or an extension that could be used as storage and facility expand existing capabilities. The town might need additional backup power but would determine once the facility design phase is complete. To mitigate flooding, the existing facility would also need to be retrofitted to mitigate and or eliminate flooding in the facility. An additional study might also need to be conducted to better understand the issues pertaining to flooding, since it is not located in the floodplain.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worst case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	Estimated Benefits (losses avoided):	Expanded Fire and Emergency Services/ State Compliance
Useful Life:	25 years	Goals Met:	1,2
Estimated Cost:	\$2 Million	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	3 years once funding secured
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	HMGP, BRIC, Assistance to Firefighters Grant Program
Responsible Organization:	Wales Fire District	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build New/ additional facility	High	Potentially higher cost
	Expand existing facility	High	Most cost effective
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Fire Hall Expansion and Retrofitting	
Project Number:	2022-Town of Wales -001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	This is most cost effective after detailed analysis
Technical	1	This project is technically feasible
Political	1	This has no political opposition
Legal	-1	There are land purchase complications
Fiscal	-1	This project requires funding
Environmental	1	This has positive impact on environment
Social	1	There are positive impacts produced from this project
Administrative	1	This has administrative support
Multi-Hazard	1	This project addresses multiple hazards the timeline is feasible
Timeline	1	The timeline is feasible
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Develop Public Water Supply		
Project Number:	2022-Town of Wales -002		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure		
Description of the Problem:	The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to create a public water supply system for the northern portion of the town that has continuous water shortages. The town would need to work with the town of Aurora to connect Erie County public utilities and have access to continuous water supplies. The project has previously been proposed, but the town of Aurora and Village of East Aurora determined the project to be infeasible due to financial constraints. Thus the town of Wales would need to apply for FEMA grant funding to expand county utilities to the northern portion of the town. This project would also need to include the Erie County Water Department.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Drought/ Water quality	Estimated Benefits (losses avoided):	Stable water supply for all residents
Useful Life:	30 years	Goals Met:	1,2
Estimated Cost:	\$7 million	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years once funding secured
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	HMGP, BRIC, WQIP, CSC Grant
Responsible Organization:	Town DPW, Erie County Water Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build Emergency Water Supply Tank	Low	Problem continues but emergency supply available – less ideal
	Expand Public Water Supply	High	Best option in the long run.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Develop Public Water Supply	
Project Number:	2022-Town of Wales -002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property value
Cost-Effectiveness	1	This is the most cost effective measure in the long run
Technical	1	The technical issues have not been identified
Political	1	The political climate is positive
Legal	0	The legal issues are complex but solvable
Fiscal	-1	The town needs resources
Environmental	1	This has a positive environmental impact
Social	1	This has a positive social impact
Administrative	1	The administration is supportive of project if funding is available
Multi-Hazard	0	This only addresses a single hazard
Timeline	1	The timeline is feasible
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Residential Property Flood Mitigation		
Project Number:	2022-Town of Wales -004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	100-year	Estimated Benefits (losses avoided):	Remove residents and homes from the flood threatened homes
Useful Life:	10 years	Goals Met:	1
Estimated Cost:	TBD per cost and number of properties to be purchased	Mitigation Action Type:	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	3 years once funding secured
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	BRIC, HMGP, FMA, cost share by homeowners
Responsible Organization:	Code Enforcement Officer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Elevate all roadways	\$1 million+	Not feasible; roads won't flood but homes will remain vulnerable
	Install floodwalls around neighborhoods	\$500,000+	Can reduce accessibility to these areas during an emergency
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Residential Property Flood Mitigation	
Project Number:	2022-Town of Wales -004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	This project protects life
Property Protection	1	This project protects property value
Cost-Effectiveness	1	This is the most cost effective measure in the long run
Technical	1	
Political	1	
Legal	1	
Fiscal	1	The town has the capabilities to conduct the outreach portion of the project
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	To be completed within 5 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	



9.45 Town of West Seneca

This section presents the jurisdictional annex for the Town of West Seneca. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of West Seneca’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.45.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of West Seneca’s hazard mitigation plan primary and alternate points of contact. The Town of West Seneca followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager, Captain of WSPD/WSOEM, and Engineer. The Captain of Administration / Liaison to WS OEM represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.45-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eric Conley, Emergency Manager Phone Number: (716) 352-1994 Email: conleye@westsenecapolice.org	Name/Title: James Unger, Captain West Seneca Police Department/ OEM Phone Number: (716) 558-3142 Email: ungerj@westsenecapolice.org
NFIP Floodplain Administrator	
Name/Title: Steve Tanner, Engineer, West Seneca Engineering Department Phone Number: (716) 558-3220	
Additional Contributors	
Name/Title: David Johnson, Engineer Method of Participation: Provided data and information.	

9.45.2 Municipal Profile

The town is 21 square miles in area and incorporated in 1851. Four hamlets are situated in the town; Middle Ebenezer, Upper Ebenezer, Lower Ebenezer and New Ebenezer. The Seneca Indians were the original inhabitants of the town. In 1851 parts of Cheektowaga, Hamburg, and East Hamburg were organized to form the town of Seneca which later was renamed West Seneca. Many Germans immigrated to the town in the 1840s. Some of these new residents took up residence in original Seneca structures. The Buffalo Creek runs through the town. The New York State Thruway, US Routes 20 and 219, and NYS Routes 16, 78, 240, 277, 354 and 400 traverse the town.



The Town of West Seneca is an established first-ring suburban community of Buffalo with residential, retail, commercial and industrial sectors. According to the U.S. Census, the 2010 population for the Town of West Seneca was 44,711. The estimated 2019 population was 45,344, a 1.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.4 percent of the population is 5 years of age or younger and 21.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.45.3 Jurisdictional Capability Assessment and Integration

The Town of West Seneca performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.45.3). The Town of West Seneca’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of West Seneca. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.45-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Building Code NYS 2020; Town Code Ch. 55	State	Department of State
Comment: NYS Uniform and Energy Code 2020; This chapter shall provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (Uniform Code) in the Town of West Seneca. This chapter is adopted pursuant to § 10 of Article 2 of the Municipal Home Rule Law. Except as otherwise provided within this chapter, state law, or within the Uniform Code, all premises, regardless of use, are subject to the provisions which follow.					
Zoning Code	Yes	Yes	Town of West Seneca Zoning Ordinance	Local	Town Board
Comment: As part of the Comprehensive Development Plan for the Town of West Seneca, this Zoning Ordinance, set forth in the text and maps which constitute this chapter, is adopted in order to promote public health, safety, morality and the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent overcrowding of the land and undue concentration of population; to secure safety from fire, flood, panic and other dangers; to lessen congestion in the streets and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; to encourage the most					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
appropriate use of land in order to protect and conserve property values throughout the town; and to bring about the gradual conformity of land and buildings to the Comprehensive Master Plan.					
Subdivision Ordinance	Yes	Yes	Town Code Chapter 103	Local	Town Board
Comment: The regulations herein contained are adopted for the purpose of providing for the sound growth and development of the town, of affording adequate sites and facilities for the distribution, transportation, safety, health and welfare of its population, and of providing reasonable and equitable requirements in the interest of developers, investors and home owners so as to ensure stable property values.					
Stormwater Management Ordinance	Yes	Yes	Town of West Seneca Zoning ordinance Chapter 102-A	Local	Town Board
<p>Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 102A-1 hereof. This chapter seeks to meet those purposes by achieving the following objectives:</p> <ul style="list-style-type: none"> • Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS45), Permit No. GP-02-02, or as amended or revised; • Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised; • Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature and stream bank erosion and maintain the integrity of stream channels; • Minimize the total annual volume of stormwater runoff which flows from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. 					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Town of West Seneca Zoning Code Chapter 102	Local	Town Board
Comment: It is the intention of this chapter to promote the efficient use and layout of land, and take into consideration the health, safety and general welfare of the public and of the residents and users of the proposed development. This will be accomplished through sound site planning that includes standards in the design, layout, landscaping and construction of development.					
Environmental Protection Ordinance	Yes	Yes	Town Code Chapter 10	Local	Town
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019					
Flood Damage Prevention Ordinance	Yes	Yes	Building Code & Town Code Chapter 77	Local	Floodplain Administrator
<p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. Meets state requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential)</p> <p>It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-</p>					



Section 9.45: Town of West Seneca

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Town Code Chapter 78B	Local	Not Identified
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Adopted by resolution 4/25/2016 Town of West Seneca Board	Local	Town Board
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	Yes	No	Included in Town Comprehensive Plan	Local	Town Board
Comment: Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses.					
Urban Water Management Plan	No	-	-	-	-
Comment: None					



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of West Seneca Disaster Plan	Local	WS OEM
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-



	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Continuity of Operations Plan	Yes	No	Town of West Seneca Disaster Plan WSPD GOP O 58.3	Local	WS OEM WSPD Town Board
Comment: According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations.					
Public Health Plan	Yes	Yes	Due to NYS on 4/1/2021	Local	Town Board
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of West Seneca to oversee and track development.

Table 9.45-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction.	No	There are few residential development areas left, the town industrial park is about 50 percent built out

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of West Seneca and their current responsibilities which contribute to hazard mitigation.

Table 9.45-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven members
Zoning Board of Adjustments	Yes	Five members
Planning Department	Yes	One Staff through Code Enforcement Office
Mitigation Planning Committee	No	The town is looking to establish one
Environmental Board/Commission	Yes	Town Environmental Conservation Commission
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	Staff of approx. 100, tasked with all road work and maintenance, town parks, buildings, and grounds maintenance, sewers
Construction/Building/Code Enforcement Department	Yes	Six staff
Emergency Management/Public Safety Department	Yes	One Emergency Manager, police liaison, integrated with other town officials
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red, Social Media
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Sewer crew of three under the Highway Department. Tree Maintenance Plan
Mutual aid agreements	Yes	Erie County Emergency Management Aid Plan/Fire Mutual Aid Plan/Police Mutual Aid Plan
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering/CPL
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering/ Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Engineering/CPL
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Engineering/Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Engineering/CPL
Surveyor(s)	Yes	Engineering/CPL
Emergency Manager	Yes	One EM, two deputies, police liaison
Grant writer(s)	Yes	Private Contractor
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of West Seneca.



Table 9.45-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes, CARES/FEMA DR
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of West Seneca.

Table 9.45-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Supervisor/WSPD and OEM PIO
Personnel skilled or trained in website development	Yes	Private Contractor
Hazard mitigation information available on your website	Yes	Westseneca.net
Social media for hazard mitigation education and outreach	Yes	Town of West Seneca/WSPD/OEM Facebook and Twitter
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red/Facebook and Twitter
Warning systems for hazard events	Yes	Code Red/Facebook and Twitter
Natural disaster/safety programs in place for schools	Yes	WSCSD
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of West Seneca.



Table 9.45-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.45-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

- *Strong Capacity exists and is in use
- Moderate Capacity may exist; but is not used or could use some improvement
- Weak Capacity does not exist or could use substantial improvement

9.45.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Steve Tanner, Town Engineer





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of West Seneca.

Table 9.45-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of West Seneca	123	186	\$786,473	18	67

Source: FEMA 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The areas prone to flooding in the Town of West Seneca include Lexington Green, areas along Buffalo Creek, Cazenovia Creek, Buffalo River, and Ebenezer Brook. The Building Department maintains a list of flood damaged properties. The town does not maintain a list of property owners interested in flood mitigation, but they do offer assistance with determine preliminary floodplain elevations for all residents who inquire. No RiskMAP projects are currently underway. The town makes Substantial Damage determination by in person inspections. In 2014, Lexington Green flooding: approximately 75 single family homes and a second flooding happened a few months later and affected the 75 homes again were declared damaged from flooding. The other flood was on School Street in 2019, where 10 residential buildings were declared damaged from flooding. No properties have been mitigated in the town. The town’s flood hazard maps do not adequately address the flood risk. Ice damming occurs regularly along Cazenovia Creek and Buffalo Creek. It is impossible to determine where snags will occur, and water will back up. Ice dam flooding is not always contained within mapped floodplains.

NFIP Compliance

The Engineering department is responsible for floodplain management. There are not any certified floodplain management on staff. The town has access to resources to determine possible future flooding conditions from climate change. The town has identified that the floodplain management staff needs training on emerging technologies, and climate change effects on flooding and correlation between Great Lake elevation rise and flooding in upstream municipalities. The town’s NFIP administration provides permit review, preliminary elevation determination, and inspections. In order to determine if proposed development on an existing structure would qualify as a substantial improvement is through a coordinated review effort between the Consulting Town Engineer and the Town Code Enforcement Officer.

There have not been any major barriers to running an effective NFIP program. The town has outstanding NFIP compliance violations that need to be addressed. The town has been monitoring items such as campers, trailers, and RVs placed in the floodplain by property owners. The most recent Community Assistance Visit (CAV) was on September 10, 2018. The town’s flood damage prevention ordinance is Chapter 77- Flood Damage Prevention, last amended 1992. The town’s floodplain management does not meet the minimum requirements because the ordinance does not include the required 2’ freeboard. Other plans that support the floodplain management include the Site Plan Review, Stormwater Pollution Prevention Plan reviews and MS4 reviews for new projects. The Planning Board limits development in the floodplain to none, as best as possible.



9.45.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of West Seneca has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation routes will be situational dependent. The county/state maintain an evacuation route system during a natural disaster (i.e. snow event). The Town of West Seneca is part of the NITECC (County/State) emergency action plan for closure of the RT 400, RT 219, and I-90.

Sheltering

The Town of West Seneca has identified the following designated emergency shelters within the town.

Table 9.45-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Union Fire Co	1845 Union Rd West Seneca, NY 14224	100	Yes	Yes	Yes	Basic EMS & Paramedics as needed	Red Cross trailer on site.

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of West Seneca has identified the following sites suitable for placing temporary housing units.

Table 9.45-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify temporary housing locations (2022-T. West Seneca-014).					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of West Seneca has identified the following areas suitable for relocating homes outside of the floodplain.



Table 9.45-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify permanent housing locations (2022-T. West Seneca-014).					

9.45.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.45-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.45-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	56	0	54	0	38	0	15	0	27	0	38	0
Multi-Family	4	0	4	0	0	0	1	0	6	0	9	0
Other (commercial, mixed-use, etc.)	15	0	8	0	12	0	12	0	16	0	6	0
Total Permits Issued	75	0	66	0	50	0	28	0	77	0	53	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
965 Center Road – Townhouses	Residential	28		965 Center Road		NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area		Completed				
Crystal Creek	Residential	60		299 Leydecker Road		Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area		In Progress				
Rosina Foods	Commercial	1 building 100,000 SF+		3100 Clinton Street		NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area		In Progress				
Ebenezer Rail Car	Commercial	1building 100,000 SF+		1005 Indian Church Road		None		Completed				



Type of Development	2015	2016	2017	2018	2019	2020
Beam Mack Truck Center	Commercial	1 building	1500 North America Drive	None		Completed
CPI Process	Commercial	1 building	2800 North America Drive	None		Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.45.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of West Seneca’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of West Seneca has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.45-1. Town of West Seneca Hazard Area Extent and Location Map 1

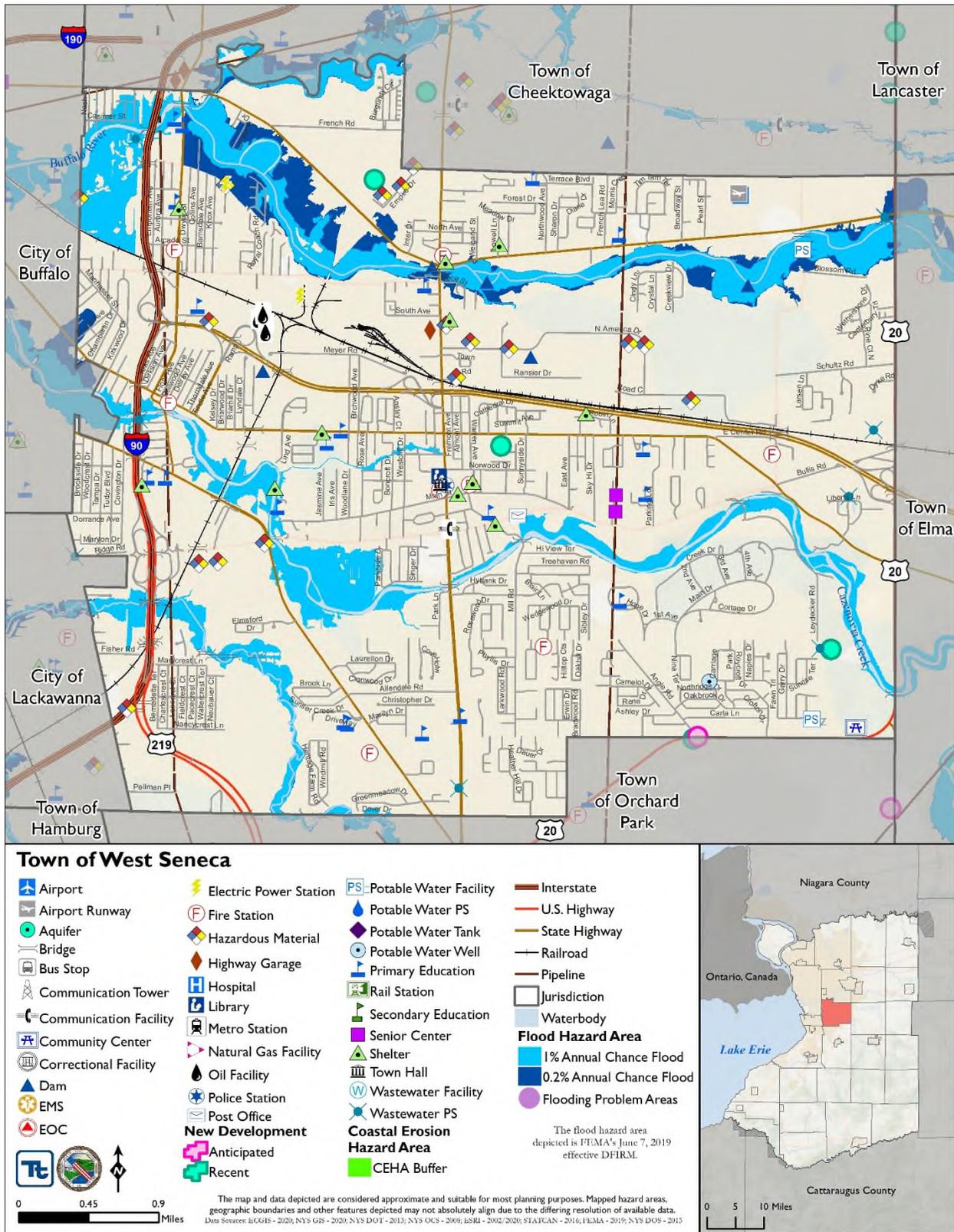




Figure 9.45-2. Town of West Seneca Hazard Area Extent and Location Map 2

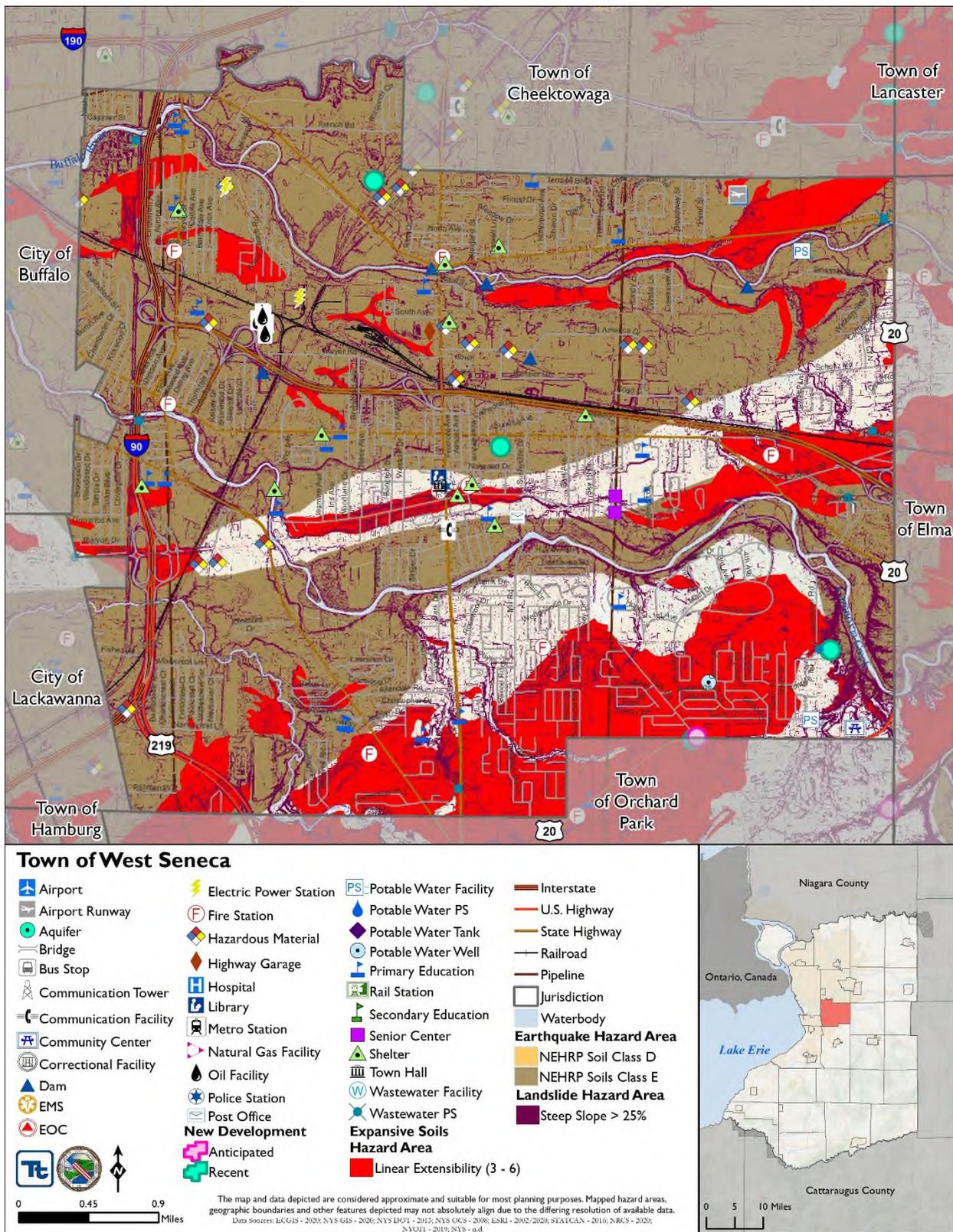
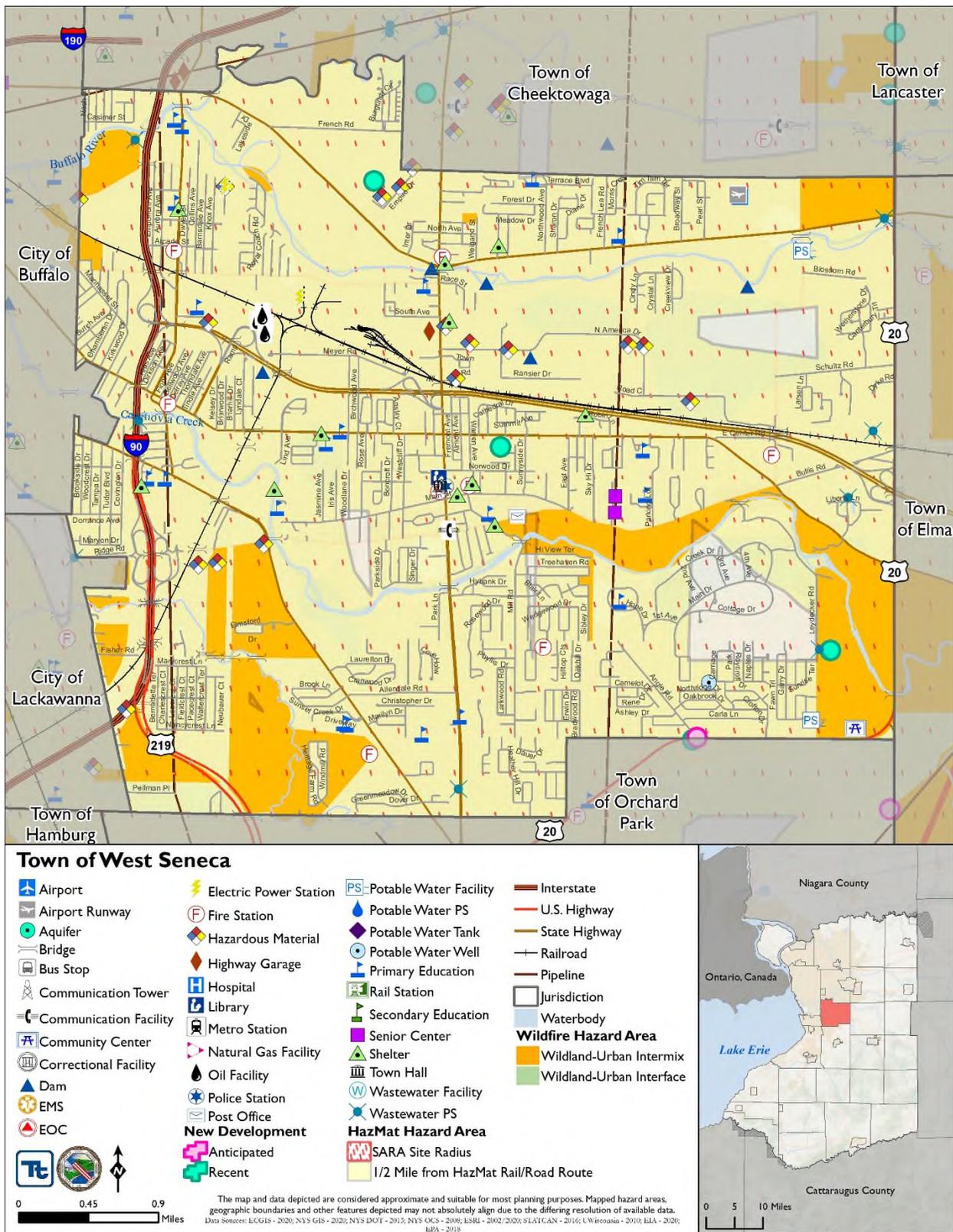




Figure 9.45-3. Town of West Seneca Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of West Seneca’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.45-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.45-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	No losses/costs from damages identified
August 11-15, 2015	Flash Flood	No	No losses/costs from damages identified
October 28-29, 2015	High Wind	No	No losses/costs from damages identified
November 6, 2015	Thunderstorm Wind	No	No losses/costs from damages identified
November 12, 2015	High Wind	No	No losses/costs from damages identified
November 18, 2015	High Wind	No	No losses/costs from damages identified
January 11, 2017	High Wind	No	No losses/costs from damages identified
March 8, 2017	High Wind	No	No losses/costs from damages identified
March 13, 2017	Winter Storm	No	No losses/costs from damages identified
July 20, 2017	Tornado	No	No losses/costs from damages identified
August 4, 2017	Thunderstorm Wind	No	No losses/costs from damages identified
December 10-15, 2017	Lake-effect Snow	No	No losses/costs from damages identified
December 24-29, 2017	Lake-effect Snow	No	No losses/costs from damages identified
January 2, 2018	Blizzard	No	No losses/costs from damages identified
October 6, 2018	Lightning	No	No losses/costs from damages identified
February 4, 2019	Ice Jam Flooding	No	Municipality identified – Several residences evacuated on School Street
February 24, 2019	High Wind	No	No losses/costs from damages identified
February 24, 2019	Lakeshore Flooding	No	Sewer backup pumping at sewer lift stations, salting of ice covered roads
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	No losses/costs from damages identified
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Road flooding due to heavy rains
November 27, 2019	Lakeshore Flooding	No	No losses/costs from damages identified
January 12, 2020	Lakeshore Flooding	No	Wind caused trees down, stop signs down. Removed tree debris and placed portable stop signs.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 18, 2020	Lakeshore Flooding	No	Salting and plowing of roads
June 2, 2020	Flood, Heavy rain flooding	No	Municipality identified – highway pumps, barricades for roads
July 17, 2020	Flood	No	Municipality identified – road closure/barricades. Pumping at sewer lift stations
November 15, 2020	High Wind	No	Municipality identified – Trees down, power outage

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Town of West Seneca’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of West Seneca. The Town of West Seneca has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town increased the flood ranking from low to high due to reoccurring ice jam flooding and creek bed erosion.
- The town increased the Hazardous Materials Incidents ranking from low to medium because the town has a large volume of commercial traffic on I-90, Routes 400, and 219. There is also the North America Industrial Park within the town that houses several commercial industries using hazardous materials.
- The town increased the wildfire ranking from low to medium because the old Lehigh Valley line along I-90 is under-maintained and has the potential to threaten homes.





Table 9.45-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood*	Hazardous Materials*
Low	Medium	High	Medium	Medium	High	Medium
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire*	
Low	High	High	High	High	Medium	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.45-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Ebenzer Dam	Dam	X	X	2022-T. West Seneca-002
Ferrand Manufacturing Co Dam	Dam	X	X	2022-T. West Seneca-003
Gardenville 230 Station	Hazardous Material	-	X	2022-T. West Seneca-004
Borden Rd Potable Water Facility	Potable Water Facility	X	X	2022-T. West Seneca-005
Promise House	Primary Education	X	X	2022-T. West Seneca-006
West Seneca West Senior High School	Primary Education	X	X	2022-T. West Seneca-007
Borden Clinton Pump Station	Wastewater Pump Station	X	X	2022-T. West Seneca-008
Clinton Transit Pump Station	Wastewater Pump Station	-	X	2022-T. West Seneca-008
Ashmund Road Wastewater Pump Station	Wastewater Pump Station	X	X	2022-T. West Seneca-009
Wastewater Pump Station near the Buffalo River	Wastewater Pump Station	X	X	2022-T. West Seneca-010

Source: HAZUS-MH 4.2

Identified Issues

After review of the Town of West Seneca’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of West Seneca has identified the following vulnerabilities within their community:





- During the last two major rain events in June and July 2020, there have been flooding issues in the area of 945 Center Road. Other areas of repeated roadway flooding during heavy rains include:
 - 550 Orchard Park Road; 3300 Seneca St; 160 Lein Road (Viaduct); Fisher Court. Neighborhood, Molnar Avenue, Jasmine Ave
- Throughout the past five years, there has been a number of generalized heavy rainfalls resulting in road flooding.
- Ice jam flooding continues to be a yearly concern during the spring thaw. There was one significant event on February 4, 2019 in the School Street neighborhood on Buffalo Creek. Several residences were evacuated and suffered significant structural damage. This flooding event also disrupted power to the pump station at Fairfax & Ashmund resulting in additional pumps being rented to assist the neighboring community's sewer needs.

9.45.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.45-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost		
1	Continue mitigation efforts in area streams	Stream Flooding	Highway, WSOEM, Engineering Dept	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. See 2022-Town of West Seneca-016 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Create Public Education Program for Residents	Stream Flooding	Highway, WSOEM, Engineering Dept.	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability of public education efforts for residents in Floodprone areas
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Secure funding to buyout properties in floodplain	Stream flooding	Highway, WSOEM, Engineering Dept., Town Govt	Yearly Ice Jam flooding in Buffalo and Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. See 2022-Town of West Seneca-015 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Continue support of the NWS and Storm Watchers Program	Severe Storm, Severe Winter Storm	WSOEM	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks, Severe Snow and Wind Events	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability, WSOEM trains in this area
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Create legislation that will promote "Best Practices" and provide ongoing funding	Stream Flooding	Highway, WSOEM, Engineering Dept	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	No Progress	Cost	-	1. Discontinue 2. 3. WSOEM does not create legislation. Any legislation regarding flooding is taken care of on the Town Government level with input from Engineering
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
6	Complete various construction &	Stream Flooding	Highway, WSOEM,	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. A shared file will be created to maintain a list of all mitigation and maintenance efforts and a schedule
						Level of Protection	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	_maintenance projects; Create a schedule for ongoing maintenance of completed projects		Engineering Dept			Damages Avoided; Evidence of Success	-	maintained for same. See 2022-Town of West Seneca-016 3.
7	Create a Weather Awareness & Discount Purchase Plan	Severe Storm, Severe Winter Storm	Office of Disaster Preparedness	Raise public awareness for severe weather events	No Progress	Cost	-	1. Discontinue 2. 3. Not relevant
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
8	Create a cooperative that maintains program with Town and National Grid, NYSEG	Severe Storm, Severe Winter Storm	Highway Dept.	Power and other utility loss during significant weather events	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability, ongoing efforts in collaboration with utility companies help in the event of wind and snow events to maintain power and other critical utilities
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
9	Residential cooperative buying & storage of de-icing materials	Severe Storm, Severe Winter Storm	Highway Dept.	Provide residents with de-icing materials	Complete	Cost	-	1. Do not include in 2022 HMP 2. 3. WS Highway maintains a shared services agreement with surrounding jurisdictions through mutual aid plans
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
10	Lobby for stringent hazardous materials release laws, enforcement & penalties	Hazardous Materials	Office of Disaster Preparedness	Increase HazMat release laws, enforcement, & penalties to decrease spills and releases	No Progress	Cost	-	1. Discontinue 2. 3. WSOEM is not a lobbying agency
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
11	Educate public on proper procedures to take if a hazardous material is	Hazardous Materials	WSOEM	Educate the public on HazMat in the event of a release near their location to prevent injuries or death	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing capability - WSOEM will continue public education efforts in all facets of residents disaster planning
						Level of Protection	-	
						Damages Avoided;	-	



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	released near their locations					Evidence of Success		
12	Establish a radio system that allows interagency communication	Terrorism	Police & Fire Departments	Lack of Interop Comms	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Ongoing capability – the county has significantly upgraded interop communications countywide. WSPD now carries Fire Mobiles in the supervisors’ vehicles in the even of unified command situations and has access to the same interop channels
13	Establish a radio-based travel advisory system, possibly in cooperation with Amber Alert System and/or various message signs	Transportation Accidents	Police Dept.	Travel advisories could potentially decrease transportation accidents and traffic jams	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. WSPD cannot “establish” a radio system, yet works within the NYS DOT and NITTEC frameworks with their capabilities for advisories
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Engineering Dept.	Yearly ice jam flooding in Buffalo and Cazenovia Creeks	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Engineering will continue to comply with latest FEMA guidelines and update the WS Town Code as appropriate
15	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Engineering Dept.	Yearly Ice Jam flooding in Buffalo and Cazenovia Creeks	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Engineering will continue to comply with latest FEMA guidelines and update the West Seneca Town Code as appropriate
16	Join the Community Rating System (CRS)	Flood	Highway, WSOEM, Engineering Dept., Town Govt	Decrease cost of flood insurance for businesses and residents in the floodplain	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of West Seneca has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Cayuga creek mitigation efforts

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of West Seneca participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.45-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X								X
Cyber Attack	X	X								X
Earthquake	X	X		X			X			X
Expansive Soils	X	X								X
Extreme Temperature	X	X								X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X	X		X			X			X
Landslide	X	X								X
Pandemic	X	X								X
Severe Storm	X	X								X
Severe Winter Storm	X	X	X					X	X	X
Utility Failure	X	X								X
Wildfire	X	X		X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.45-19 summarizes the comprehensive range of specific mitigation initiatives the Town of West Seneca would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.45-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-West Seneca -001	Flood mitigation for 945 Center Road	1, 2	Flood	<p>Problem: During the last two major rain events in June and July 2020, there have been flooding issues in the area of 945 Center Road. The town has been in contact with Erie County DPW and the local developer of the property to try and come up with a solution to help alleviate the problem in the future.</p> <p>Solution: Continue to work with DPW and the local developer to minimize the impact of flooding problems. Conduct engineering studies when drainage issues are identified to determine the best project to mitigate flooding.</p>	No	None	Within 5 years	Town, Erie County DPW, local developer	TBD on projects	Flooding mitigated on 945 Center Road	County budget, BRIC, FEMA HMGP	High	SIP, LPR	PR
2022-Town of West Seneca -002	Work with the Ebenzer Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2, 3	Flood	<p>Problem: The Ebenzer Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of West Seneca -003	Work with the Ferrand Manufacturing Co Dam owner on how they can protect their dam to the 0.2% annual	1, 2, 3	Flood	<p>Problem: The Ferrand Manufacturing Co Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and discuss options for protecting the</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach	The dam owner will be aware of options to protect the dam to the 0.2% annual chance	Town Budget	High	EAP	PI



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	chance flood event			facility to the 0.2% annual chance flood event.						flood event.				
2022-Town of West Seneca -004	Assess the flood risk at the Gardenville 230 Station	1, 2, 3	Flood	<p>Problem: The Gardenville 230 Station is in the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and assess the flood risk at the facility.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI
2022-Town of West Seneca -005	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	1, 2	Flood	<p>Problem: The Borden Road Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Borden Road Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes 💧	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP
2022-Town of West Seneca -006	Protect the Promise House to the 0.2% annual chance flood event	1, 2	Flood	<p>Problem: The Promise House is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Promise House to protect it to the 0.2% annual</p>	Yes 💧	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				chance flood event. Options include: <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-Town of West Seneca -007	Protect the West Seneca West Senior High School to the 0.2% annual chance flood event	1, 2	Flood	<p>Problem: The West Seneca West Senior High School is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the West Seneca West Senior High School to protect it to the 0.2% annual chance flood event. Options include: <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes 💧	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP
2022-Town of West Seneca -008	Assess the flood risk at the Clinton Transit and Borden Clinton Pump Stations	1, 2, 3	Flood	<p>Problem: The Clinton Transit Pump Station and Borden Clinton Pump Station are in the 0.2% annual chance flood event.</p> <p>Solution: The FPA will contact the facility owner and assess the flood risk at the facility.</p>	Yes 💧	None	Within 6 months for outreach	FPA	<\$100 for outreach	Ensures continuity of operations of the facility	Town Budget	High	LPR, SIP	PP
2022-Town	Protect the Ashmund	1, 2, 3	Flood	<p>Problem: The Ashmund Road Wastewater Pump Station is in</p>	Yes	None	Within 5 years			Ensures continuity	FEMA HMGP,	High	LPR, SIP	PP





Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
of West Seneca -009	Road Wastewater Pump Station to the 0.2% annual chance flood event			<p>the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Ashmund Road Wastewater Pump Station to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>	Yes			Engineer, facility manager	TBD by feasibility assessment	of operations of the facility	BRIC, USDA Community Facilities Grant Program, EMPG			
2022-Town of West Seneca -010	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	1, 2, 3	Flood	<p>Problem: The Wastewater Pump Station near the Buffalo River is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.</p> <p>Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater Pump Station near the Buffalo River to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers 	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Once the most cost-effective option is identified, the town will carry out the option.										
2022-Town of West Seneca -011	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	<p>Problem: The Verizon facility, several dams, electric power stations, hazardous material facilities, oil facilities, and the West Seneca Post Office are in the city are in the earthquake hazard area.</p> <p>Solution: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes</p>	Yes	None	Within 6 months for outreach	Town of West Seneca	<\$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of West Seneca -012	Work with the private facility owner to protect the facility from wildfires	1, 2, 3	Wildfire	<p>Problem: Speedway 9976 is located in the wildfire hazard area.</p> <p>Solution: Work with the property owner to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facility.</p>	Yes	None	Within 6 months for outreach	Town of West Seneca	<\$100 for outreach	The facility owner is aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of West Seneca -013	Protect the critical facilities on the Town of West Seneca from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	<p>Problem: All of the critical facilities in the Town of West Seneca may be at risk of being exposed to hazardous materials incidents.</p> <p>Solution: Develop and maintain a plan or procedures to ensure that the facilities can safely</p>	Yes	None	Within 6 months for outreach	Town of West Seneca	<\$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	LPR	ES



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.										
2022-Town of West Seneca -014	Permanent and Temporary Housing	1, 2, 3	All Hazards	<p>Problem: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.</p> <p>Solution: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the County to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.</p>	No	None	Short	Town of West Seneca	Medium	High	Town Budget	High	LPR	ES
2022-Town of West Seneca -015	Repetitive Loss Owner Outreach	1, 2, 3	Flood	<p>Problem: There are 18 Repetitive Loss properties within the town, and 67 NFIP policy holders living within the 1% SFHA.</p>	No	No	6 months	Town of West Seneca Engineering	Low	High	Municipal Budget	High	EAP	PI



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>Solution: The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.</p>										
2022-Town of West Seneca -016	Lexington Green Berm	1, 2, 3	Severe Winter Storm, Flood	<p>Problem: The Town experiences yearly Ice Jam flooding in Buffalo and Cazenovia Creeks.</p> <p>Solution: The number one priority for the Town of West Seneca is to pursue a long term and more permanent solution to mitigate yearly ice jam flooding in the Buffalo and Cazenovia creeks. Each year the Town takes mitigation efforts such as creek bed and ice retention structure maintenance, ice cutting and breaking efforts in collaboration with the City of Buffalo Engineering. The Town also pre-stages pumps in the event of potential flooding and have a plan to monitor flooding and respond accordingly. The problem the Town faces is finding a more permanent solution to the yearly potential flooding in the Buffalo Creek between Union Rd. and Harlem Rd. Historically there have been</p>	No	No	2 years	Town of West Seneca	High	High	FEMA BRIC, HMGP, USACE	High	NSP, SIP	NR, SP



Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				several serious flooding events in the School St and Lexington Green neighborhoods. In fact, in the Lexington Green neighborhood, a temporary berm was created using large bags filled with stone and concrete. That temporary berm is nearing its shelf life and has begun to deteriorate beyond usefulness. Additionally, the berm was placed on a utility easement and is now being requested to be moved by said utility company. The Town will seek assistance in the financial and technical areas to assist in developing a more permanent solution to the ice jam flooding, with an emphasis on green infrastructure and natural solutions.										
2022-Town of West Seneca -017	Maryon Rd. and Ashmund Rd. Wastewater Pump Stations Generator	1, 2, 3	All Hazards	<p>Problem: The Wastewater Pump Stations on Maryon Rd. and Ashmund Rd. do not have adequate backup power to maintain operations during utility failures.</p> <p>Solution: The Town will seek funding to purchase and install adequate, permanent and automatic backup generators at the above locations. The Town will ensure that the generators are protected from additional hazard events and damages.</p>	Yes	No	6 months	Town of West Seneca	\$50,000 each	High, ensures continuity of operations of critical facilities	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES



Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.45-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-West Seneca -001	Flood mitigation for 945 Center Road	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -002	Work with the Ebenzer Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -003	Work with the Ferrand Manufacturing Co Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -004	Assess the flood risk at the Gardenville 230 Station	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -005	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	0	0	11	High
2022- Town of West Seneca -006	Protect the Promise House to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022- Town of West Seneca -007	Protect the West Seneca West Senior High School to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-008	Assess the flood risk at the Clinton Transit and Borden Clinton Pump Stations	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022- Town of West Seneca -009	Protect the Ashmund Road Wastewater	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High



Table 9.45-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	Pump Station to the 0.2% annual chance flood event																
2022- Town of West Seneca -010	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	1	1	1	1	1	0	0	1	1	1	0	0	0	0	10	High
2022-Town of West Seneca-011	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-Town of West Seneca-012	Work with the private facility owner to protect the facility from wildfires	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-Town of West Seneca-013	Protect the critical facilities on the Town of West Seneca from HazMat incidents	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-T. West Seneca-014	Permanent and Temporary Housing	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-015	Repetitive Loss Owner Outreach	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-016	Lexington Green Berm	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Town of West Seneca-017	Maryon Rd. and Ashmund Rd. Wastewater Pump Stations Generator	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).





9.45.9 Action Worksheets

The following action worksheets have been developed by the Town of West Seneca to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event		
Project Number:	2022- Town of West Seneca -005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Borden Road Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Borden Road Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the facility
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High, TBD by feasibility assessment	Mitigation Action Type:	EAP, SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate facility	N/A	Not cost effective, may not be necessary after vulnerability assessment
	Decommission facility	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	
Project Number:	2022- Town of West Seneca -005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at facility
Cost-Effectiveness	1	
Technical	1	Town engineering can complete study
Political	1	
Legal	1	
Fiscal	0	Town will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event		
Project Number:	2022- Town of West Seneca-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Wastewater Pump Station near the Buffalo River is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater Pump Station near the Buffalo River to protect it to the 0.2% annual chance flood event. Options include:</p> <ul style="list-style-type: none"> •Elevation of facility •Floodproofing of facility •Mobile flood barriers <p>Once the most cost-effective option is identified, the town will carry out the option.</p>		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	Estimated Benefits (losses avoided):	Ensures continuity of operations of the facility
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High, TBD by feasibility assessment	Mitigation Action Type:	EAP, SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on funding
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Alternatives:	Action	Estimated Cost
	No Action	No Action	\$0
	Relocate facility	N/A	Not cost effective, may not be necessary after vulnerability assessment
	Decommission facility	N/A	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	
Project Number:	2022- Town of West Seneca-010	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at facility
Cost-Effectiveness	1	
Technical	1	Town engineering can complete study
Political	1	
Legal	1	
Fiscal	0	Town will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



9.46 Village of Williamsville

This section presents the jurisdictional annex for the Village of Williamsville. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Williamsville’s risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.46.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Williamsville’s hazard mitigation plan primary and alternate points of contact. The Village of Williamsville followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Emergency Services and Public Works. The Director of Emergency Services represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.46-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Zymanek, Amherst Emergency Services Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-839-6707 Email: jzymanek@apdny.org	Name/Title: Dominic Creamer, Amherst Emergency Services Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-839-6707 Email: dcream@apdny.org
NFIP Floodplain Administrator	
Name/Title: Tim Master, Code Enforcement Officer Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-570-2473 Email: Tmasters@village.williamsville.ny.us	
Additional Contributors	
Name/Title: Tim Bivonen, DPW Crew Chief Method of Participation: Provided capabilities information via worksheets	

9.46.2 Municipal Profile

The Village of Williamsville is in the northeast quadrant of Erie County. It is one square mile in size and lies mainly within the Town of Amherst with a small portion in the Town of Cheektowaga. Interstate 90 runs through the southern part of the village. The community developed where the major road between Batavia and Buffalo crossed Ellicott Creek. The available waterpower from the Creek attracted millers. The first mill was built by Jonas Williams in 1811. The village was named for Mr. Williams when the town incorporation in 1850. During the War of 1812, American troops stationed within the Village of Williamsville. Williamsville has several parks. Glen Park which offers views of Ellicott Creek as it falls over the Onondaga



Escarpment. Island Park has a large pavilion and is the site of Old Home Days and the Taste of Williamsville events during the summer. The Williamsville Central School District includes the village, the eastern part of the Town of Amherst, and a small portion the Town of Clarence (Village of Williamsville 2020).

According to the U.S. Census, the 2010 population for the Village of Williamsville was 5,300. The estimated 2019 population was 5,233, a 1.3 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.1 percent of the population is 5 years of age or younger and 23.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.46.3 Jurisdictional Capability Assessment and Integration

The Village of Williamsville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.46.3). The Village of Williamsville’s identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Williamsville. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.46-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 28, Fire Prevention and Building Code Administration	Local	Building Department
Comment: The Building Code establishes that a permit for development in flood hazard areas shall be required if the proposed construction or any other development is within the area of special flood hazard. Unsafe buildings are addressed in accordance with the procedures established by Chapter 15 of the Village Code					
Zoning Code	Yes	No	Chapter 112, Village of Williamsville Zoning	Local	Planning Board, Building Department
Comment: The Chapter’s purpose is to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare by providing adequate light, air and convenience of access; preventing undue concentration of population and overcrowding of land; preventing congestion in the streets; securing safety from fire, flood, panic and other dangers; and facilitating adequate provision for					



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
transportation, water, sewerage, schools, parks and other public requirements. These regulations are made with reasonable consideration, among other things, to the peculiar suitability of each district for uses, with a view to encouraging the most appropriate use of land throughout the village and conserving the value of buildings and lands therein.					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	Yes	Chapter 112-28 Stormwater Management, 2018	Local	Building Department
<p>Comment: The purpose of this section is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 112-28A of this chapter. This section seeks to meet those purposes by achieving the following objectives:</p> <p>(1) Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-15-003, as amended or revised; [Amended 11-26-2018 by L.L. No. 13-2018]</p> <p>(2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-0-15-003, as amended or revised; [Amended 11-26-2018 by L.L. No. 13-2018]</p> <p>(3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;</p> <p>(4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;</p> <p>(5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and</p> <p>(6) Reduce stormwater runoff rate sand volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.</p>					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<p>Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p>					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 112, Zoning	Local	Building and Planning Department
<p>Comment: Site plan review is part of the village’s land development review process. Site plan approval shall only be granted when increases in stormwater runoff shall be minimized from land development activities to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.</p>					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 31, Flood Damage Prevention ordinance, 2019	Local	FPA



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
<p>Comment: The Flood Damage Prevention ordinance enforces regulations that reduce flood exposure and risk. It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program. <p>The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).</p>					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 81, 2003, Sewer Uses	Local, county	Village Engineer
<p>Comment: This chapter sets forth requirements for users of the Sanitary Sewer Facilities of the Village of Williamsville and enables the Village to comply with all applicable state and federal laws, including the Clean Water Act (United States Code 33 U.S.C. § 1251 et seq.) and the General Pretreatment Regulations (Code of Federal Regulations 40 CFR 403). It is further the explicit purpose of this chapter to achieve the following:</p> <ul style="list-style-type: none"> A. To prevent the introduction of pollutants into the Sanitary Sewer Facilities that will interfere with its operation. B. To prevent the introduction of pollutants into the Sanitary Sewer Facilities that will pass through the Sanitary Sewer Facilities inadequately treated, into receiving waters, or otherwise be incompatible with the Sanitary Sewer Facilities. C. To protect Sanitary Sewer Facilities personnel who may be affected by wastewater and sludge in the course of their employment and the public. D. To promote reuse and recycling of industrial wastewater and sludge from the Sanitary Sewer Facilities. E. To establish fees for the equitable distribution of the cost of operation, maintenance, treatment, and improvement of the Sanitary Sewer Facilities. F. To enable the Village of Williamsville to comply with all contractual, environmental, and legal discharge elimination system conditions, and any other federal or state laws to which the Sanitary Sewer Facilities are subject. G. To eliminate the discharge of unpolluted waters into the Sanitary Sewer Facilities. H. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02 or as amended or revised. <p>[Added 12-17-2007 by L.L. No. 5-2007]</p> <ul style="list-style-type: none"> I. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process, or discharge non-stormwater wastes. [Added 12-17-2007 by L.L. No. 5-2007] J. To prohibit illicit connections, activities, and discharges to the MS4. [Added 12-17-2007 by L.L. No. 5-2007] K. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, water containing pollutants, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment, and other pollutants into the MS4. [Added 12-17-2007 by L.L. No. 5-2007] 					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					



Section 9.46: Village of Williamsville

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	No	Village of Williamsville Community Plan & Draft Generic Environmental Impact Statement, 2015	Local	Planning Board, Village Board
Comment: The Plan contains a map of the floodplain area surrounding Ellicott Creek.					
Capital Improvement Plan	Yes	No	5-year CIP released annually	Local	Village Board
Comment: The Village Capital Improvement Program can include hazard mitigation projects.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-



	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Joint CEMP with Town of Amherst and Village Williamsville, 2019	Local	Village Emergency Manager
Comment: The CEMP provides guidance for emergency response to hazard events.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Williamsville to oversee and track development.

Table 9.46-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning Board approval required for site plan. Building permit required.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is an urban environment and is almost entirely built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Williamsville and their current responsibilities which contribute to hazard mitigation.

Table 9.46-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Village planning staff administer and implement planning solutions to natural hazard issues.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Advisory Commission is composed of six members and they advise the Planning Board and Town Board on natural assets as well as natural hazard exposure.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Community Development Department
Public Works/Highway Department	Yes	The Department of Public Works conducts paving, wastewater drainage facilities clearance, roadway maintenance and tree trimming, all with the effect of reducing natural hazard exposure. The department consists of a General Crew Chief, Working Crew Chief, and eight Motor Equipment Operators. The General Crew Chief oversees the department.
Construction/Building/Code Enforcement Department	Yes	The Building Department is responsible for regulating building construction and adherence to the building and fire codes. Building Department responsibilities include: <ul style="list-style-type: none"> Reviewing construction plans and building permit applications for conformance with the Codes of the Village of Williamsville and New York State Reviewing Site Plans (including grading, utility, parking, etc.) and related documentation for compliance with the Code of the Village of Williamsville Referring all applicable plans to various Village of Williamsville committees including Traffic & Safety, Environmental, Historic Preservation, etc. Reviewing and referring as applicable all Zoning Board of Appeals applications and documentation and serving as liaison to the ZBA Reviewing and referring as applicable all exterior plans, site plans, sign permits, etc. to the Planning & Architectural Review Board (P&ARB) and serving as liaison to the P&ARB



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		<ul style="list-style-type: none"> Reviewing and processing all plumbing plans and permit applications for conformance with the Codes of the Village of Williamsville and New York State. This also includes conducting sump pump inspections required for real estate transfers Reviewing and processing all sign permit applications for conformance with the Code of the Village of Williamsville Conducting field inspections of all required elements of construction for conformance with the Codes of the Village of Williamsville and New York State and the submitted building permit Conducting field inspections of all required elements of plumbing for conformance with the Codes of the Village of Williamsville and New York State and the submitted plumbing permit Investigating all property complaints and issuing citations as applicable. Conducting follow up inspections of violations. Where required, issuing court summons for violations and participate in the court process through resolution Conducting annual fire inspections of all public buildings including offices, mercantile, public assembly, apartments, and mixed-use buildings for conformance with the Codes of the Village of Williamsville and New York State and the submitted building permit
Emergency Management/Public Safety Department	Yes	Emergency response staff are shared among the village and the Town of Amherst and results in collaboration.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Village DPW monitors need for hazard mitigation and the Department conducts paving, water drainage facilities clearance, roadway maintenance and tree trimming, all with the effect of reducing natural hazard exposure.
Mutual aid agreements	No	-
Other	No	<p>Traffic and Safety Committee makes recommendations to the Village Board and Planning Board regarding traffic signs and speed limits to ensure the safety of Village residents and those who use the Village streets</p> <p>Tree Board works with the Village Forester assesses present municipal tree population, and works to improve and stabilize the village urban forest through future plantings that enhance the beauty of the greenspace</p> <p>Parks Committee- functions of this committee includes overseeing Garrison Park, Island Park, South Long Park, and Lehigh Memory Trail. The panel plans for park improvements and makes recommendations to the Village Board</p>
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	With the Town of Amherst
Grant writer(s)	Yes	Contracted grant writer is used for grant application preparation
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Engineer on Contract

Fiscal Capability

The table below summarizes financial resources available to the Village of Williamsville.

Table 9.46-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, Village Board
User fees for water, sewer, gas, or electric service	Yes, Tax Bill Assessment
Impact fees for homebuyers or developers of new development/homes	Yes, Sewer Infrastructure during redevelopment
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes, Village Board
Other federal or state Funding Programs	Yes, Village Board
Open Space Acquisition funding programs	Yes, Village Board
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Williamsville.



Table 9.46-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk, public communications support is provided by the county's Lake Erie Watershed Planning Association.
Personnel skilled or trained in website development	Yes	Village Staff
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Lake Erie Watershed Alliance,
Other programs already in place that could be used to communicate hazard-related information	Yes	Village website
Warning systems for hazard events	Yes	The village Police Department broadcasts public emergency notices
Natural disaster/safety programs in place for schools	No	-
Other	Yes	See Table 9.46-4 above

Community Classifications

The table below summarizes classifications for community programs available to the Village of Williamsville.

Table 9.46-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	Unknown
NYSDEC Climate Smart Community	No	Registered for 2021-22	2021-22
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.



Table 9.46-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Weak
Landslide	Weak
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.46.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Tim Masters, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Williamsville.

Table 9.46-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Williamsville	26	134	\$518,994	5	16

Source: FEMA 2020a and 2020b
 Notes:
 RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The south eastern end of the village has been impacted by flooding from Ellicott Creek. The village does not maintain a list of property owners’ interest in flood mitigation. There are no RiskMAP projects currently underway in the village. The village indicated that no properties have been mitigated. The village’s flood hazard maps adequately address the flood risk within the jurisdiction. The village does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The most recent Community Assistance Visit (CAV) was in December 2009. The Building Department is responsible for floodplain administration staff and one of the staff members is a certified floodplain



administrator. The village does have access to resources to determine possible future flooding conditions from climate change and support enforcement via permit review and inspections. The village stated that its floodplain management staff are not in need of assistance or training to support its floodplain management program. The village does not make Substantial Damage determinations and no elevations or acquisitions have been completed. The village’s floodplain management meets minimum requirements. The community does not participate in the CRS.

9.46.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Williamsville did not identify routes and procedures to evacuate residents prior to and during an event. The Village will coordinate with the Town of Amherst and county officials during a hazard event.

Sheltering

The Village of Williamsville did not identify any designated emergency shelters within the village.

Table 9.46-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The village will collaborate with the county to identify emergency shelter locations, per Proposed Action # 2022-Village Williamsville-006							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Williamsville has identified the following sites suitable for placing temporary housing units.

Table 9.46-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will collaborate with the county to identify temporary housing locations, per Proposed Action #2022-Village Williamsville-006					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Williamsville did not identify areas suitable for relocating homes outside of the floodplain.



Table 9.46-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will collaborate with the county to identify permanent housing locations, per Proposed Action # 2022-Village Williamsville-005					

9.46.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.46-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.46-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	0	0	1	0	4	0	2	0	1	0
Multi-Family	1	0	20	0	1	0	1	0	0	0	46	0
Other (commercial, mixed-use, etc.)	0	0	4	0	0	0	0	0	0	0	0	0
Total Permits Issued	2	0	24	0	2	0	5	0	2	0	47	0
Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)				Known Hazard Zone(s)*		Description / Status of Development			
Recent Major Development and Infrastructure from 2015 to Present												
Limestone Lofts	Residential	13	5933 Main Street				0.2% annual chance floodplain area		Approved			
The Williams	Residential	unknown	Unknown				Unknown		Site Plan			
Asher Crossing	Residential	unknown	Ward Road				Earthquake		Site Plan			
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Asher Phase 2	Residential	60	Ward Road				Earthquake		In development			
Blocher Homes	Residential	90	135 Evans Street				1% annual chance flood area		In development			

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.46.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Williamsville’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are





adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Williamsville has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.



Figure 9.46-1. Village of Williamsville Hazard Area Extent and Location Map 1

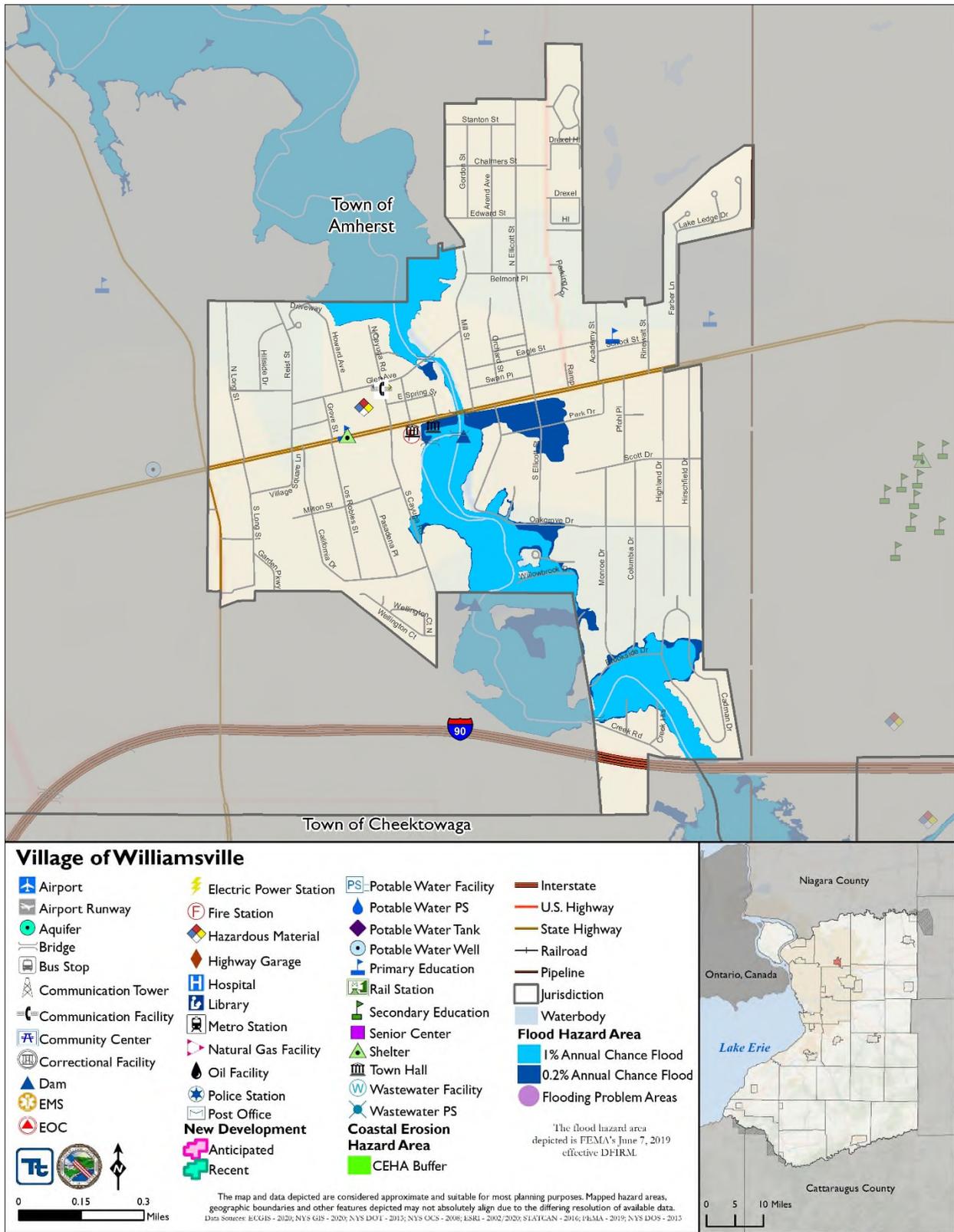




Figure 9.46-2. Village of Williamsville Hazard Area Extent and Location Map 2

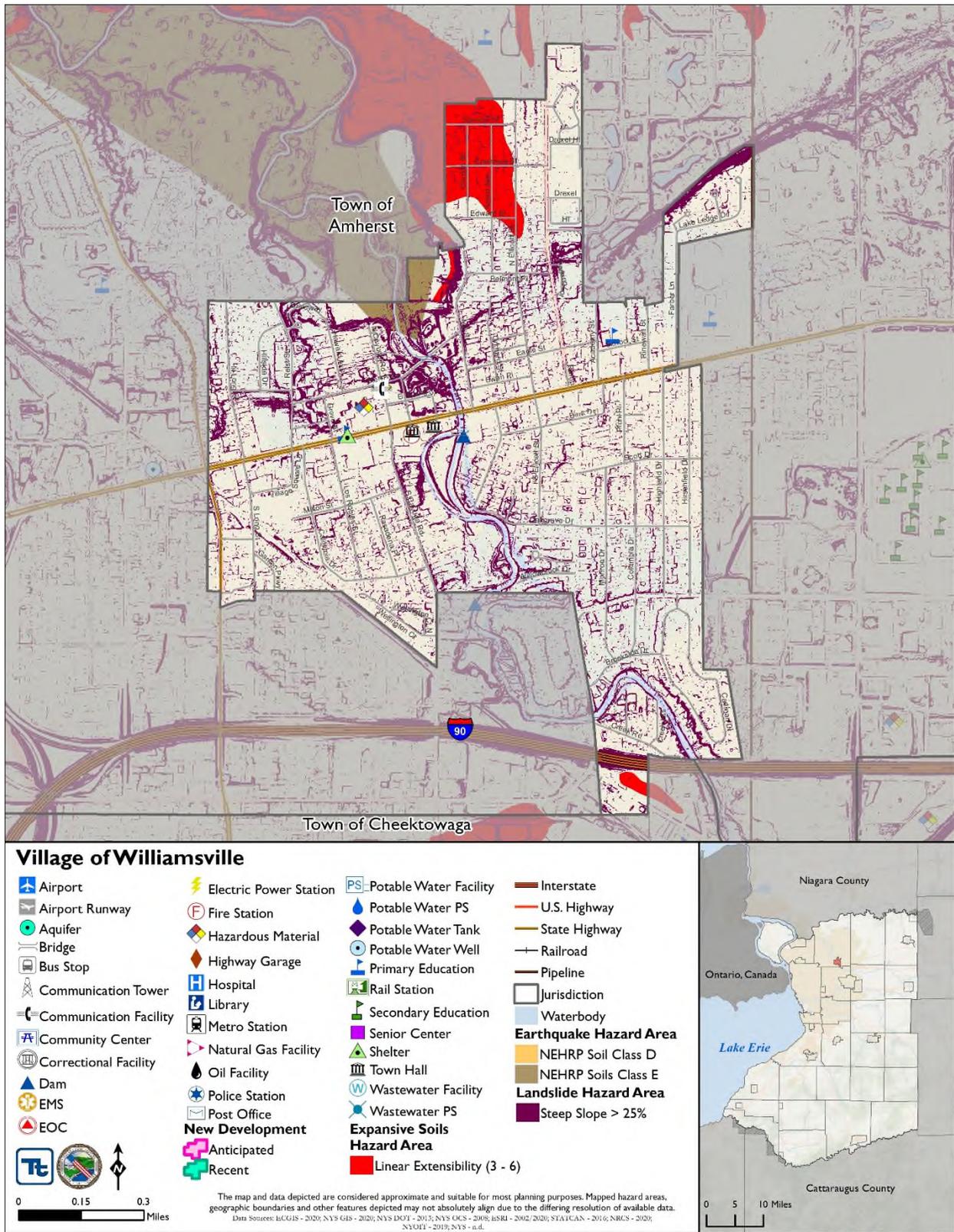
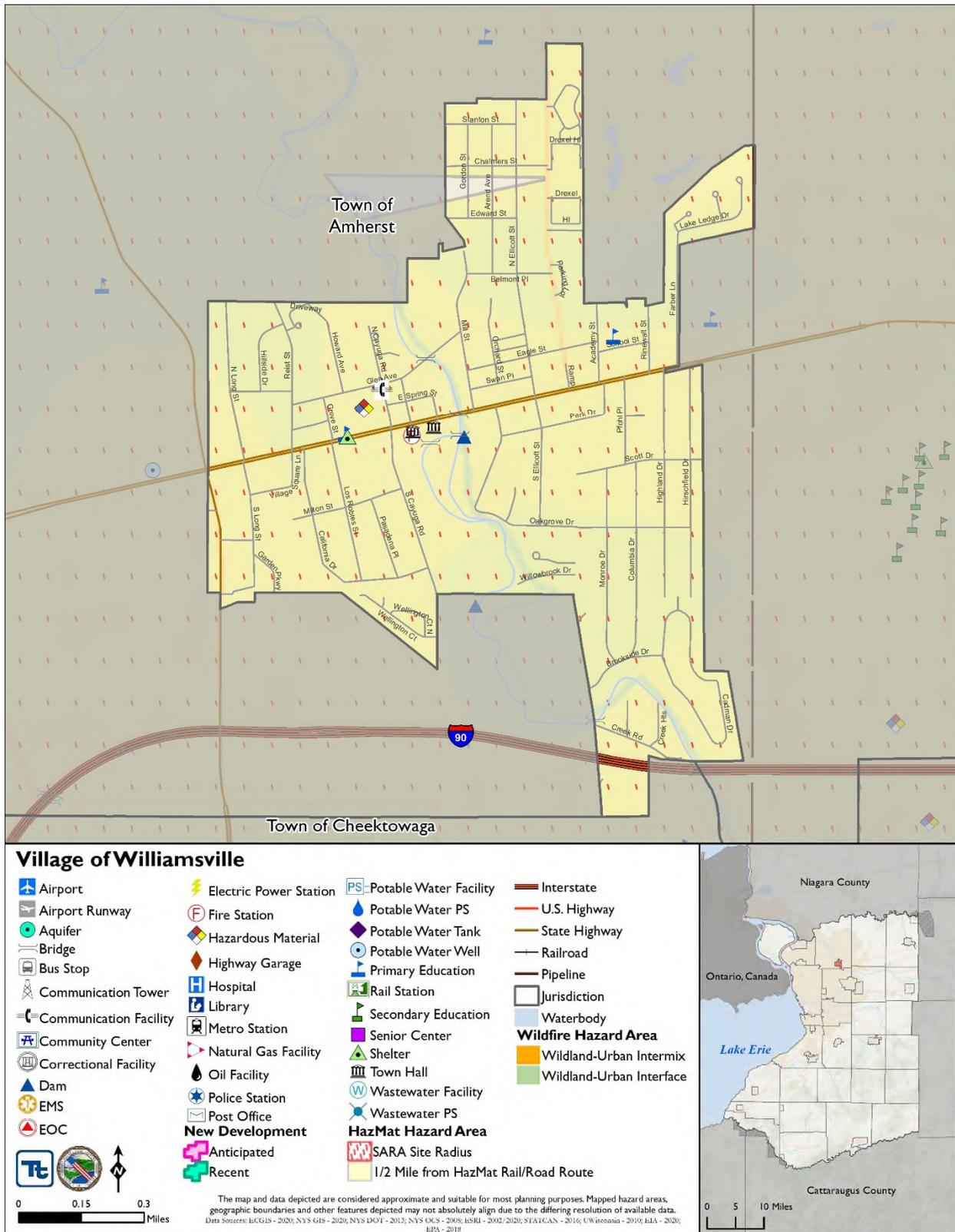




Figure 9.46-3. Village of Williamsville Hazard Area Extent and Location Map 3





Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Williamsville’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.46-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.46-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
October 27- November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
October 31- November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Village of Williamsville’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Williamsville. The Village of Williamsville has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village consented with the following:

Table 9.46-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low
Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire	
Low	Medium	High	High	High	Low	

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such





projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.46-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Ellicott Creek Dam	Dam	X	X	2022-Village Williamsville-001
Williamsville Dam	Dam	X	X	2022-Village Williamsville-002

Source: FEMA 2021

Identified Issues

After review of the Village of Williamsville’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Williamsville has identified the following vulnerabilities within their community:

- The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk.
- The Williamsville Dam is in the Special Flood Hazard Area.
- Floodplain Managers require training to fully implement the NFIP program within the village.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.
- Certain village roadways are impacted by poor drainage facilities.
- Certain residential properties have been repeatedly flooded
- Drainage is inadequate in specified locations in the village
- The village is not able to identify locations for temporary housing
- The village is not able to identify locations for permanent housing

9.46.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.





Table 9.46-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
						Cost	Level of Protection	
	Flood Mitigation Efforts to include the creek mitigation debris removal program that has been implemented. The Department of Public Works has crews out year-round performing mitigation activities as they see appropriate along the creek removing debris as necessary in accordance with State and federal regulations. This will also continue our program of working with Erie County Public works personnel.	Flooding	Not Identified	Dept. of Public Works	Complete			<ol style="list-style-type: none"> Discontinue Complete
	The Village will continue to provide roadside drainage improvements in low lying areas where the drains have proven to be minor problem areas during heavy rainfalls.	Flooding	Not Identified	Dept. of Public Works	In Progress			<ol style="list-style-type: none"> Include in 2022 HMP Addressed by Proposed Action 2022-Village Williamsville-007
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flooding	Not Identified	Building Dept.	Complete			<ol style="list-style-type: none"> Discontinue Complete



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Williamsville has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Village connected roadside catch basins which eliminated ponding on certain roadways. The work was completed by the Department of Public Works.
- The Village DPW installed drainage on roadsides and rebuilt Cadman Drive Road.
- The Village retained a contractor to install permeable pavement and bioswales along Spring Street.
- The Village DPW upsized drainage pipes on California Drive to accommodate new development.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Williamsville participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.46-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	-	-	-	-	-	-	X
Cyber Attack	X	X	-	-	-	-	-	-	-	X
Earthquake	X	X	-	-	-	-	-	-	-	X
Expansive Soils	X	X	-	-	-	-	-	-	-	X
Extreme Temperature	X	X	-	-	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	X	X	-	-	-	-	-	-	-	X
Landslide	X	X	-	-	-	-	-	-	-	X
Pandemic	X	X	-	-	-	-	-	-	-	X
Severe Storm	X	X	-	-	-	-	-	-	X	X
Severe Winter Storm	X	X	-	-	-	-	-	-	-	X
Utility Failure	X	X	-	-	-	-	-	-	-	X
Wildfire	X	X	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.46-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Williamsville would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.46-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village Williamsville-001	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	1	Flood	<p>Problem: The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk.</p> <p>Solution: The village will conduct a feasibility analysis to determine the best mitigation actions to implement. The village DPW will then implement these measures.</p>	Yes ●	No	Within 5 years	Village DPW	TBD per feasibility analysis	Ensure continued operation of this critical flood control facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, village budget	High	SIP	SP
2022-Village Williamsville-002	Protect the Williamsville Dam to the 0.2% annual chance flood	1	Flood	<p>Problem: The Williamsville Dam is in the Special Flood Hazard Area.</p> <p>Solution: The village will contact the facility manager of the privately owned dam and discuss options for protecting the dam to the 500-year flood level.</p>	Yes ●	No	Within 5 years	Village DPW	Staff time for outreach	Ensure continued operation of this critical flood control facility	Municipal budget	High	EAP	PI
2022-Village Williamsville-003	Floodplain Administrator to attend training on	1	Flood	<p>Problem: Floodplain Managers require training to fully implement the</p>	No	No	Within 2 years	Village Board, FPA	\$3,000	Certified floodplain managers are trained to	County and village budgets	High	EAP	PR



Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	floodplain management			NFIP program within the village. Solution: Obtain/host training and certification for floodplain managers.						implement an effective floodplain management program				
2022-Village Williamsville-004	Address needs of Repetitive Loss Properties	1	Flood	Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. Solution: The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased/mitigated.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share by homeowners	High	SIP	PP



Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				identified, the village will collect required property-owner information and develop a FEMA grant application and BCA										
2022-Village Williamsville-005	Identify locations for permanent housing	1,2	All Hazards	<p>Problem: There are no identified locations for permanent housing in the village for use in case of disaster.</p> <p>Solution: The village will work with the county to identify locations for permanent housing and then seek to acquire these properties.</p>	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	SIP	PR
2022-Village Williamsville-006	Identify locations for temporary housing	1,2	All Hazards	<p>Problem: There are no identified locations for permanent housing in the village for use in case of disaster.</p> <p>Solution: The village will work with the county to identify locations for permanent housing and then</p>	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	LPR	ES,



Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				seek to acquire these properties.										
2022-Village Williamsville-007	Drainage improvements	1	Flood, Severe Storm	<p>Problem: There are locations within the village that become inundated during heavy rains.</p> <p>Solution: The village will provide roadside drainage improvements in low lying areas where the drains have proven to be minor problem areas during heavy rainfalls.</p>	No	No	Within 2 years	Village DPW	TBD by engineering study	Protect structures and roadways from the impacts of flooding	Municipal budget, BRIC, HMGP	High	SIP	SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.46-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village Williamsville-001	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-Village Williamsville-002	Protect the Williamsville Dam to the 0.2% annual chance flood	1	1	1	1	1	1	1	1	1	1	0	0	1	0	11	High
2022-Village Williamsville-003	Floodplain Administrator to attend training on floodplain management	1	1	1	1	0	1	1	0	0	1	0	1	1	1	10	High
2022-Village Williamsville-004	Repetitive Loss Properties	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Village Williamsville-005	Identify locations for permanent housing	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2022-Village Williamsville-006	Identify locations for permanent housing	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2022-Village Williamsville-007	Drainage improvements	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.46.9 Action Worksheets

The following action worksheets have been developed by the Village of Williamsville to aid in the submittal of grant applications to support the funding of high priority proposed actions.



Action Worksheet			
Project Name:	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk		
Project Number:	2022-Village Williamsville-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk. The dam provides critical flood control services.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will conduct a feasibility analysis to determine the best mitigation actions to implement. The Village DPW will implement these measures.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity flood prevention services at the Ellicott Creek Dam
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD per feasibility analysis	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Construct new dam	Very High	Prohibitively expensive
	Remove dam	High	Lose the flood services provided by the facility.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	
Project Number:	2022-Village Williamsville-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services provided by the dam
Property Protection	1	Project will protect the dam from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	1	Within 2 years
Agency Champion	1	Village DPW
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Town of Tonawanda Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Village Williamsville-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the village will collect required property-owner information and develop a FEMA grant application and BCA.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	BFE+2'	Estimated Benefits (losses avoided):	Provides residents the opportunity to remove themselves from flooding risk
Useful Life:	20 years	Goals Met:	1
Estimated Cost:	TBD per cost and number of properties to be purchased/mitigated	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation ¹			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	Potential Funding Sources:	FEMA HMGP and PDM, cost share with homeowners
Responsible Organization:	Village Board, FPA	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Require residents to leave their homes without compensation	High	Infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Village Williamsville-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provides residents the opportunity to remove themselves from flooding risk
Property Protection	1	Project will protect town residents
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 3 years
Agency Champion	1	Village Board, FPA
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	