



# Pesticide and Fertilizer Resource Sheet

## Background

### Problem

Pesticide usage plays a significant role in shaping water quality across the United States. The use of fertilizers and pesticides in farming and homes can have unintended consequences. Agriculture pesticide usage stands as the leading source of impairment in the nation's rivers and lakes. As a result, pesticides have been detected in 94% of water samples nationally, 90% of fish samples from streams, and 60% of shallow wells. New York's nutrient runoff law restricts phosphorus lawn fertilizers to new lawns or those with low phosphorus levels, as excess phosphorus can pollute water bodies, leading to algae bloom.

### Solution

Municipalities can significantly improve water quality by enforcing regulations to limit the use of harmful fertilizers and pesticides near water bodies, and provide education programs to inform farmers and home owners about sustainable farming and pesticide usage.

## Pesticide Ingredients

### Active Ingredients:

These components prevent, destroy, repel, or mitigate pests. They must be identified by name and percentage on the pesticide label.

### Categories include:

- Conventional: All ingredients except biological and antimicrobial pesticides
- Antimicrobial: Used to suppress harmful microorganisms
- Biopesticides: Derived from natural materials

### Inert Ingredients:

Serve performance or usability purposes (e.g., solvents, shelf-life extension).

Not inherently non-toxic.

## EPA Nitrogen and Phosphorus Pollution Series

Primary sources of nitrogen and phosphorus pollution:

- Row crop agriculture
- Agricultural livestock
- Lawn fertilizer
- Urban and suburban stormwater runoff
- Municipal wastewater treatment systems, including onsite systems
- Atmospheric deposition
- Sediment erosion



Farmer Spraying Pesticides By: SKT Studio  
Source: Adobe Stock



Tractor Spraying Pesticides By: Dusan Kostic  
Source: Adobe Stock



### Introduction

In 2011, the Town of Queensbury, located in Warren County, instituted a lawn fertilizer and pesticide runoff control ordinance. The intent was to regulate land use management practices, specifically by limiting water body exposure to nitrates, phosphorous compounds, and pesticide-related chemicals, to reduce water body contamination, improve water body ecosystem integrity, and assure healthier human, animal, and plant habitats.

### Use and Application of Lawn Fertilizer

- Do not apply lawn fertilizer within 50 feet of any regulated water body
- Do not apply lawn fertilizer on any impermeable surface that directs stormwater into a regulated water body
- Only use phosphorus-free lawn fertilizer 50 feet or more from any regulated water body
- Follow NYS Environmental Conservation Law regulations
- Do not apply lawn fertilizer to impermeable surfaces like parking lots, roadways, and sidewalks

If fertilizer is accidentally applied to an impermeable surface, it must be immediately contained and either:

- Legally applied to turf or vegetation
- Placed in an appropriate container and properly disposed of

### Use and Application of Pesticides

**Applicability:** For residential lawn applications treating areas greater than 100 sq ft.

**Marker Placement:**

- Affix markers within or along the perimeter of the treated area
- Markers must be at least 12 inches above the ground
- Markers must be at least 4 inches by 5 inches in size
- Markers must be clearly visible to persons immediately outside the perimeter
- Markers must be in place on the day of pesticide application

### Exemptions

- Newly established turf or lawn areas during their first growing season
- Emergency situations as confirmed by the code enforcement officer
- Situations in which a reliable soil test performed by a qualified agency indicates a need for the addition of phosphorous fertilizer
- Application of lawn fertilizer where a continuous natural vegetative buffer of at least 15 feet wide exists between the turf or lawn area of application and any regulated water body or impermeable surface
- Including vegetable and flower gardens or the application to trees or shrubs
- Natural and chemical free pesticides and herbicides labelled as environmentally safe and not harmful to plants, animals and humans
- USDA approved organic herbicides, pesticides and repellants
- Application of pesticides for invasive plant control
- Impermeable surfaces that discharge to approved treatment devices that are a part of an approved stormwater management plan

# Case Studies

## BLUE HILL, ME



### Introduction

Blue Hill, Maine is a town located on Blue Hill Bay in Hancock County. As of the 2020 census, Blue Hill has a population of 2,792. In 2021, Blue Hill instituted its Healthy Ecosystem Ordinance. This ordinance establishes the policy of the Town to eliminate toxic pesticide use in and on public and private property.

### Permitted Pest Management Activities and Materials

- Organic pest management
- Synthetic substances specifically listed as “allowed” under USDA National List of Allowed and Prohibited Substances, except for “petroleum-based plastic mulch”
- Pesticides determined to be “minimum risk pesticides” pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

### Prohibited Pest Management Activities and Materials

- Any pesticide classified as “carcinogenic to humans” or “likely to be carcinogenic to humans” by the EPA as a “restricted use product”
- Any pesticide classified as a “Class 9” pesticide by Ontario's Ministry of the Environment, Conservation, & Parks
- Any pesticide classified as “category 1 endocrine disruptor” by the European Commission
- The Neonicotinoid family of pesticides
- Any pesticide identified as persistent by the US Composting Council
- Application, storage, or sale of nonsynthetic substances specifically listed as “prohibited” on the National Organic Program’s National List



Blue Hill Reversing Falls, Maine By: Richard  
Source: Adobe Stock

### Exemptions

- Pet supplies for tick and flea treatment, when used in the manner specified by the manufacturer
- Insect repellants for bodily application, when used in the manner specified by the manufacturer
- Chlorine, bromine, salt, and other pool chemicals that are used to keep swimming pools safe for people may kill fish and other aquatic life in streams when water is discharged
- General use paints, stains, wood preservatives, sealants, and structural wood preservation, when used in the manner specified by the manufacturer
- Drinking water and wastewater treatment
- Pest control will follow integrated pest management practices in emergency situations
- Commercial farming
  - Encourage the adoption of ecologic based organic practices



# Case Studies

## WEST SENECA, NY



### Introduction

West Seneca, New York is a town located in Erie County southeast of Buffalo. In 2000, West Seneca instituted its Pesticide Ordinance. This ordinance, establishes the policy of the Town to eliminate toxic pesticide use in and on public Town owned land.

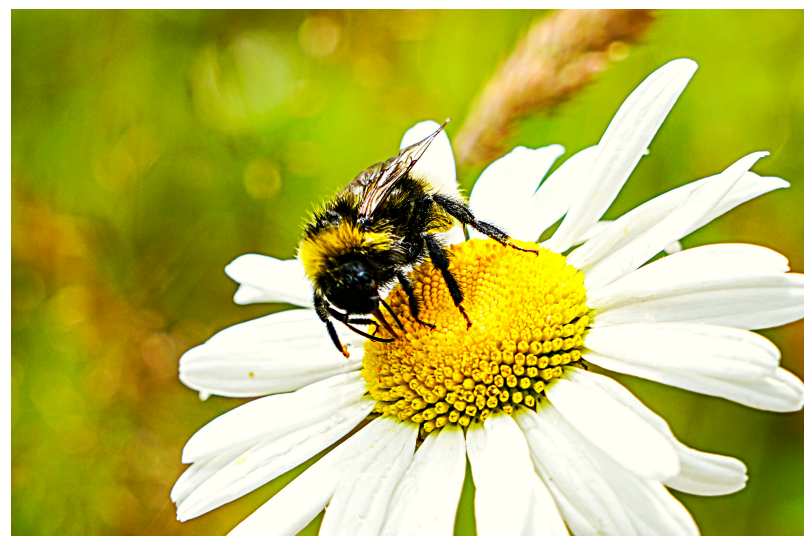
### Stipulations

If pesticides are to be used, the entity applying them must clearly post a notice at the application site and the following should be posted for 48 hours after the application of pesticide use:

- Date of posting
- Trade name and active ingredient of the pesticide used
- Organism targeted
- Specific location, date, and approximate time of application
- Method of application
- Trade name and the active ingredient of the pesticide used
- Copy of the label
- Name and telephone number of the person responsible for the application
- Poison control telephone number
- The following should be posted for 48 hours after the application of pesticide use
- Date and time of application

### Exclusions and Exceptions

- Emergency situations and stinging insects infestation criteria
- Pest infestation poses an immediate threat to human health or safety
- Any pesticide used must have the least acute and chronic toxic effect on human health or safety
- Underlying causes of the pest infestation are addressed in order to prevent future outbreaks
- Pesticides used for the purpose of maintaining a safe drinking water supply at drinking water treatment plants, wastewater treatment plants, reservoirs, and related collection, distribution, and treatment facilities
- Pesticides used for the treatment of swimming pool water
- Antimicrobial pesticides
- Pesticides in contained baits for the purpose of rodent control
- Pesticides classified by the USEPA as exempt materials under 40 CFR 152-25



Bumblebee on a Flower By: Zigmunds  
Source: Adobe Stock