

# Wetland Protection Resource Sheet



## Background

### Problem

Wetlands are “nurseries for life,” as they provide habitat for many species of aquatic and terrestrial plants and animals. They are the transition zone where the flow of water, cycling of nutrients, and energy from the sun meet to produce a unique ecosystem characterized by hydrology, soils, and vegetation. New York State Department of Environment and Conservation (NYSDEC) currently identifies wetlands through various identifications. A large factor in the identification of state regulated wetlands is the requirement for the wetland to be a minimum of 12.4 acres, or 5 hectares. In 2025, NYSDEC is planned to update this requirement to a minimum area of 7.4 acres, just under 3 hectares. Many valuable wetlands remain unprotected, posing a risk to biodiversity and water quality.

### Solution

Local governments can protect small wetlands by creating ordinances, even for areas below the state's size threshold of 12.4 acres. Additionally, partnering with environmental organizations to conduct wetland restoration and conservation projects can help enhance and preserve these areas.

## Water Storage

Wetlands absorb and store water while slowly releasing it. This slows the water’s momentum and erosive potential, reduces flood heights, allows for groundwater recharge, which contributes to base flow to surface water systems during dry periods, and can reduce streambank erosion by maintaining riparian vegetation.

While the size of the wetland does play a role in the amount of water that may be stored, a network of small wetlands can store large amounts of water, resulting in decreased flood damage and increased resiliency for municipalities.

## Water Filtration

Wetlands serve to slow the flow of water and enable the settling of sediments to the wetland floor. Nutrients from fertilizers, manure, leaking septic tanks, and municipal sewage that are dissolved in the water from runoff may be absorbed by the plants and microorganisms that are present in the wetland, while other pollutants stick to the soil. This process of filtration regularly removes much of the water’s nutrient and pollutant load before the water leaves the wetland.

Too much development and impervious surfaces near wetlands can inundate them with excess sediment and pollutants from stormwater runoff, reducing their health and ecosystem services. Filling wetlands for development completely removes their services from the drainage area. Ensuring the use of a watershed-based approach to wetland protection ensures that the whole system, including land, air, and water resources, is protected. By protecting, restoring, enhancing, and creating wetlands, overall watershed health is improved, and it supports overall climate change adaptation and resiliency.

# Case Studies

## MADISON, WI



### Introduction

Madison, Wisconsin enacted a wetland overlay district ordinance in their municipal code. This was enacted to maintain safe and healthful conditions, to prevent and control water pollution, to protect fish spawning grounds, fish and aquatic life, and wildlife habitat, and to preserve shore cover. This district, contains only wetlands determined and mapped by the state of Wisconsin.

### Permitted Uses

- Hiking, fishing, trapping, swimming, non-motorized boating, duck blinds, piers, docks, walkways, observation decks, and trail bridges
- Structures must be built on pilings, including limited excavating and filling necessary for such construction or maintenance
- Maintenance, repair, replacement, and reconstruction of existing highways and bridges, roads, electric, telephone, water, gas, sewer, and railroad lines including limited excavating and filling necessary
- Replacement and reconstruction of existing publicly owned radio and television towers provided that neither the existing nor the replaced or reconstructed tower is in a shoreland

### Boundaries

- Includes all wetlands greater than 2 acres shown on the Wisconsin Inventory Maps
- Determinations of navigability and ordinary high-water mark shall initially be made by the Zoning Administrator
- When an apparent discrepancy exists between the Wetland District boundary shown on the official Wetland Zoning Maps and the actual field conditions at the time the maps were adopted, the Zoning Administrator shall contact the Department of Natural Resources to determine if the Wetland District boundary, as mapped, is in error

### Prohibited Uses

- Any use not listed as permitted or conditional unless the wetland has been rezoned by amendment of this ordinance



Wetland By: SeanPavonePhoto  
Source: Adobe Stock



### Introduction

The wetland overlay district in the Town of Durham, New Hampshire is intended to protect the quality and functioning of wetlands throughout the Town. This is done by managing the use of the wetland and the upland buffer adjacent to the wetland in coordination with the state dredge and fill permit system. The provisions are intended to protect the water quality of wetlands, minimize flooding and flood damage by preserving the flood storage capacity of wetlands, and protect wildlife, fisheries, habitats, and wetlands.

### Main Features

- Separates wetlands into several categories to determine buffer areas
- Excludes wetlands that have functioning manmade features to control them
- Permitted uses mainly include non-structure uses, focusing on conservation and enhancement

### Permitted Uses

- Certain activities are allowed without a permit, notwithstanding the uses permitted in the underlying zoning district, so long as they do not alter the surface condition or configuration of the land by the addition of fill, do not obstruct or alter the natural flow or infiltration of surface water, and comply with the regulations of the Wetland Conservation Overlay District (WCOD)
- Certain activities are allowed if the planning board determines that appropriate erosion control measures will be used

### Applicability

All wetlands except:

- Isolated, non-tidal wetlands with a contiguous surface area of less than 3,000 square feet that are not vernal pools and are not associated with any surface water, natural drainage way, or other wetland
- Wetlands associated with currently functioning and maintained, non-abandoned, and manmade structures
- An upland buffer strip adjacent to each wetland subject to the provisions of this district as identified above. The width of the upland buffer strip from the reference line of the wetland shall vary with the type of wetland
- Wetlands are delineated by state certified wetland scientists in accordance with the U.S. Army Core of Engineers' (USACE) Wetlands Delineation Manual, Technical Report Y-87-1
- The provisions in this article apply in addition to any state requirements for a dredge and fill permit or other state approval permit

### Conditional Uses

- Certain activities are permitted as conditional uses when permitted in the underlying district and when the planning board determines the criteria is met



Great Bay, Durham By: Gail  
Source: Adobe Stock



# Case Studies

## WOODSTOCK, NY



### Introduction

In 2009, the Town of Woodstock instituted its Wetlands and Watercourse Protection Standards ordinance standards in its municipal code. This ordinance intends to protect local wetlands for the purpose of environmental conservation, protecting water quality, and protecting the watershed. This local law goes beyond state standards in terms of protection.

### Main Features

- Includes wetlands of any size, regardless of being mapped by NYSDEC or not
- Places emphasis on the flow of water in the wetlands

### Wetland Classification

- No minimum size for wetland classification
- Excludes stormwater detention basins and artificial ponds less than 1/10 acre

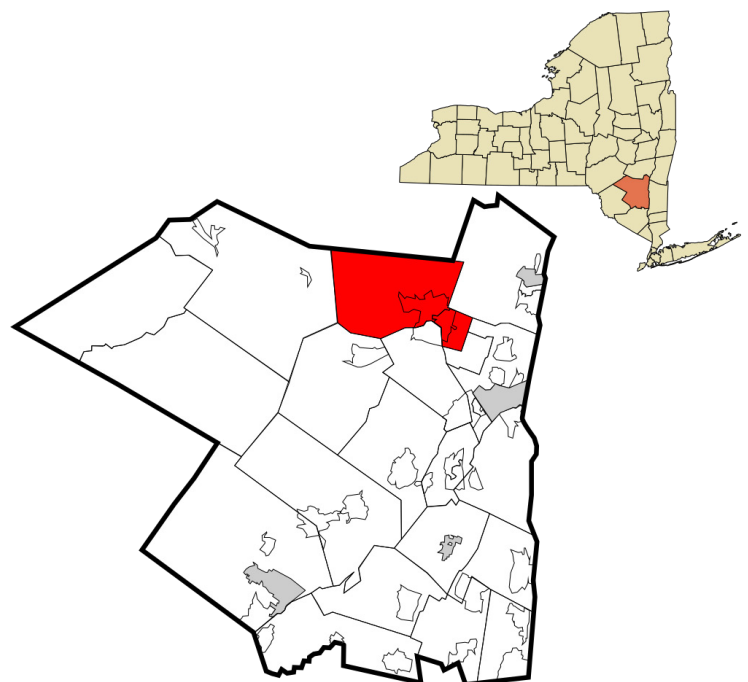
### Wetland Buffer Area

- 50 feet for wetlands less than 1/10 acre
- 100 feet for wetlands greater than 1/10 acre

### Regulated Activities

Require a permit:

- Dumping, filling, or depositing any soil, stone, sand, or fill of any kind
- Construction or enlargement of any building or structure
- Construction of any road, driveway, parking facility, pavement, or the establishment of trails consisting of impervious surfaces for vehicles
- Diversion of water flow
- Timber harvesting or clearing of vegetation
- Introduction of any influents of high thermal content capable of causing harmful ecological effect
- Installation of any septic system or swimming pool drainage system
- Withdrawal of ground or surface water more than 2,500 gallons per day for more than 7 days in 1 year
- Inter-basin transfers of water of more than 10,000 gallons per day from one watershed to another
- Any other activity that impairs the function of the wetland or water body



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