



Department of  
Environmental  
Conservation

# Chautauqua Lake 2025 Update

Julie Barrett O'Neill, Region 9 Regional Director

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March 22, 2025

# Agenda

- Mayville PFAS
- 2025 Herbicide Permits
- Wetlands Law
- Nutrient Management Strategy/Internal Loading Study/Funding Provided
- Fisheries Update

Chautauqua Lake Watershed Program  
Webpage



# Mayville PFAS

# Mayville PFAS



# Purpose of Remedial Investigation

## Objectives:

- Evaluate Known and Suspected Sources;
- Develop an Understanding of Subsurface Geology;
- Delineate Nature and Extent of Contamination;
- Assess Contaminant Migration; and
- Assess Remedial Options to Address Ongoing Discharge.

# Proposed Remedial Investigation

## NYSDEC

Standby Contractor – Labella Associates, Inc

Engineering Contractor – WSP (formally Ecology and Environment)

### Subsurface Soil Investigation

- 34 Soil Borings
- 250 Soil Samples

### Groundwater Investigation

- Installation of 35 Monitoring Wells
- Groundwater Sampling of All Wells

### Drainage Ditch Investigation

- 10 Co-located Surface Water and Sediment Samples

### Interim Remedial Measure Assessment

- Surface Water Sampling, Test Pitting, Flow Monitoring, and Video Inspection of Drainage System



# Investigation Areas

## Operable Units

OU-01 – Town of Chautauqua Municipal Building  
(referred to as *TCMB*)

OU-02 – Patterson Street

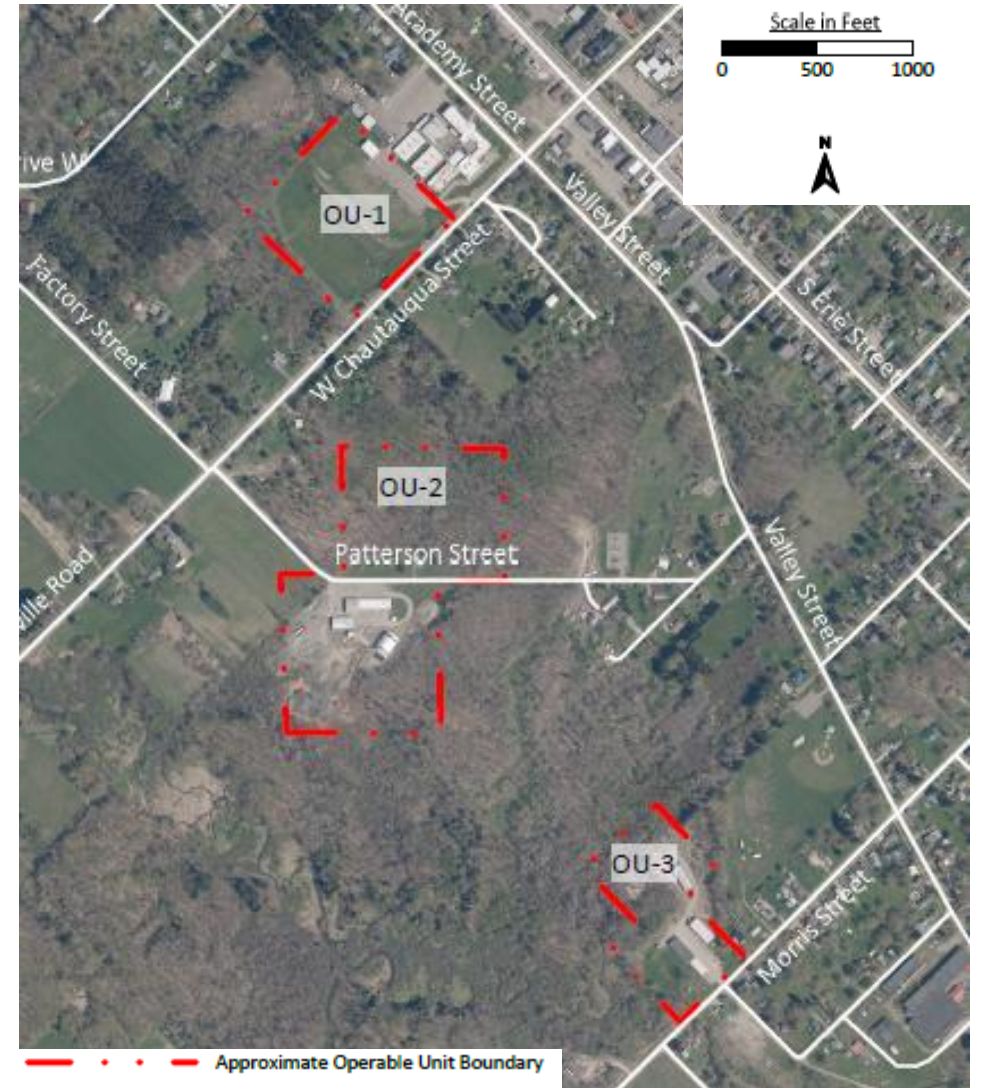
OU-03 – Morris Street

## Previously Investigated Areas

Maple Drive East

Mud Creek

Lakeside Park



# Proposed Soil Boring Investigation (OU-01)

## Objective:

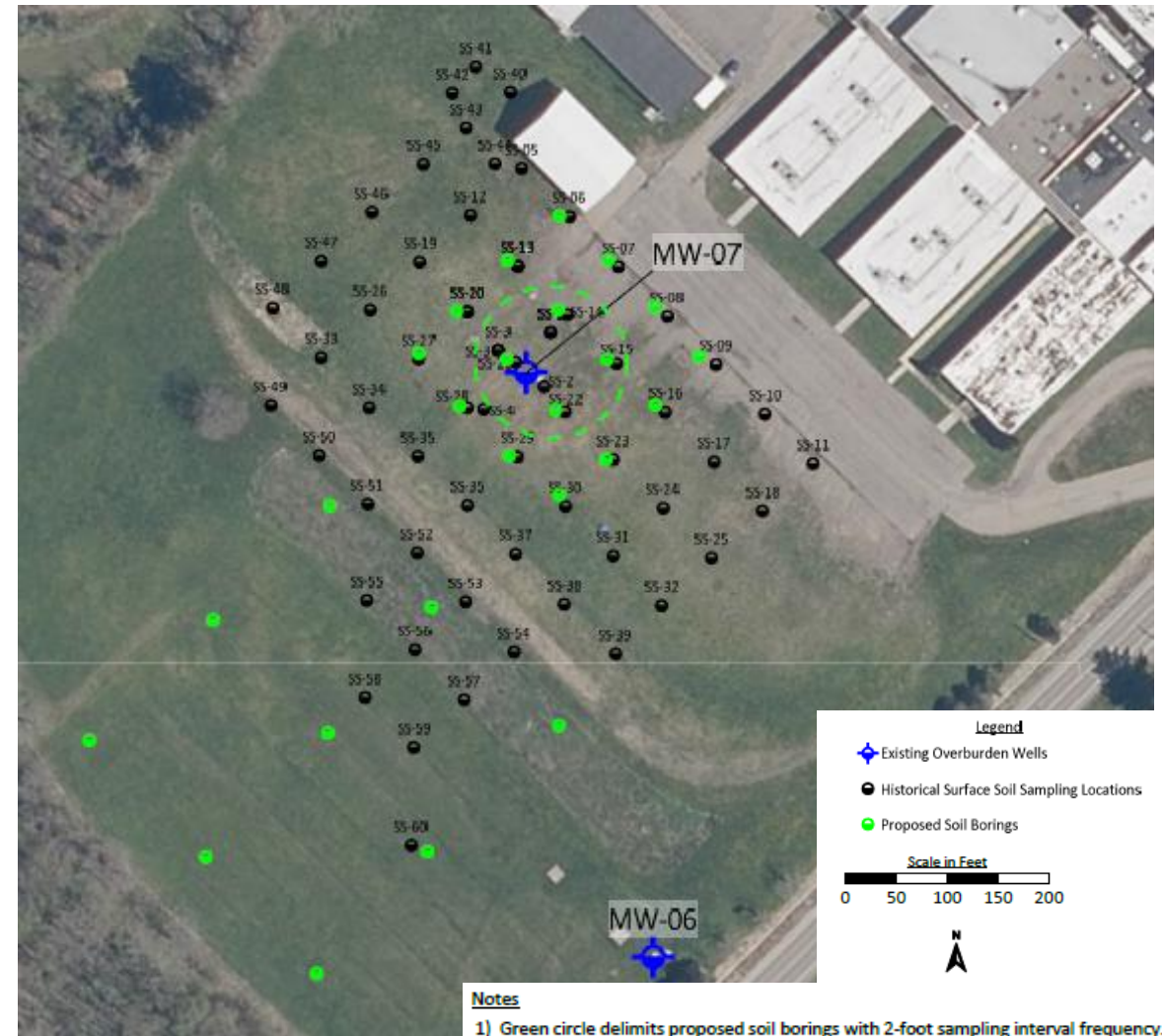
Assess subsurface geology and contaminant extent surrounding the source area.

## Upper Tier –

- 16 Soil Borings
  - ≈ 28 Feet Below Ground Surface (fbgs).
  - Sample Frequency: Every 2 to 4-feet.

## Lower Tier –

- 9 Soil Borings
  - ≈ 18 fbgs.
  - Sample Frequency: Every 4-feet.

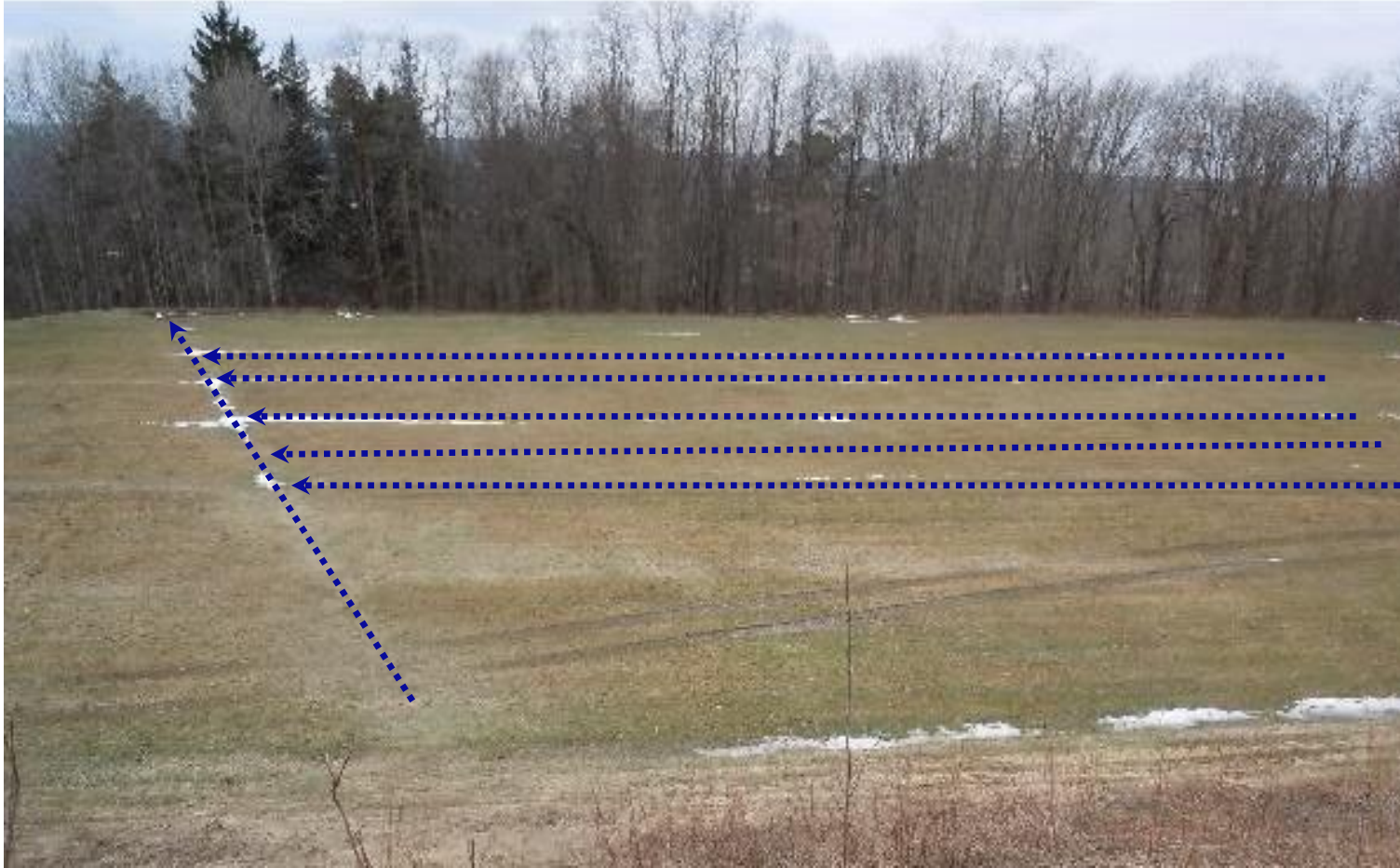


### Notes

- 1) Green circle delimits proposed soil borings with 2-foot sampling interval frequency.
- 2) Best attempts will be made to co-locate the proposed soil boring locations in the Upper Tier with historical surface sample locations.



# Evaluation of Contaminant Migration



**Suspected Layout of Drain Tile of Former Football Field  
(Lower Tier)**



**Drain Tile Discharge Pipe**



**Raceway Along  
Patterson Street**



**Drainage  
Ditch  
Along  
Route 430**

# PFAS Remedial Investigation

## Timeline:

- April to May 2025 – Soil boring investigation. Work is expected to take between 3 and 4 weeks.
- Late May 2025 – Overburden and bedrock well installations. Work is expected to take approximately 2 weeks.
- May - June 2025 – Monitoring well installations. Work is expected to take approximately 6 weeks.
- Late July 2025 – Groundwater sampling event. Work is expected to take approximately 2 weeks.

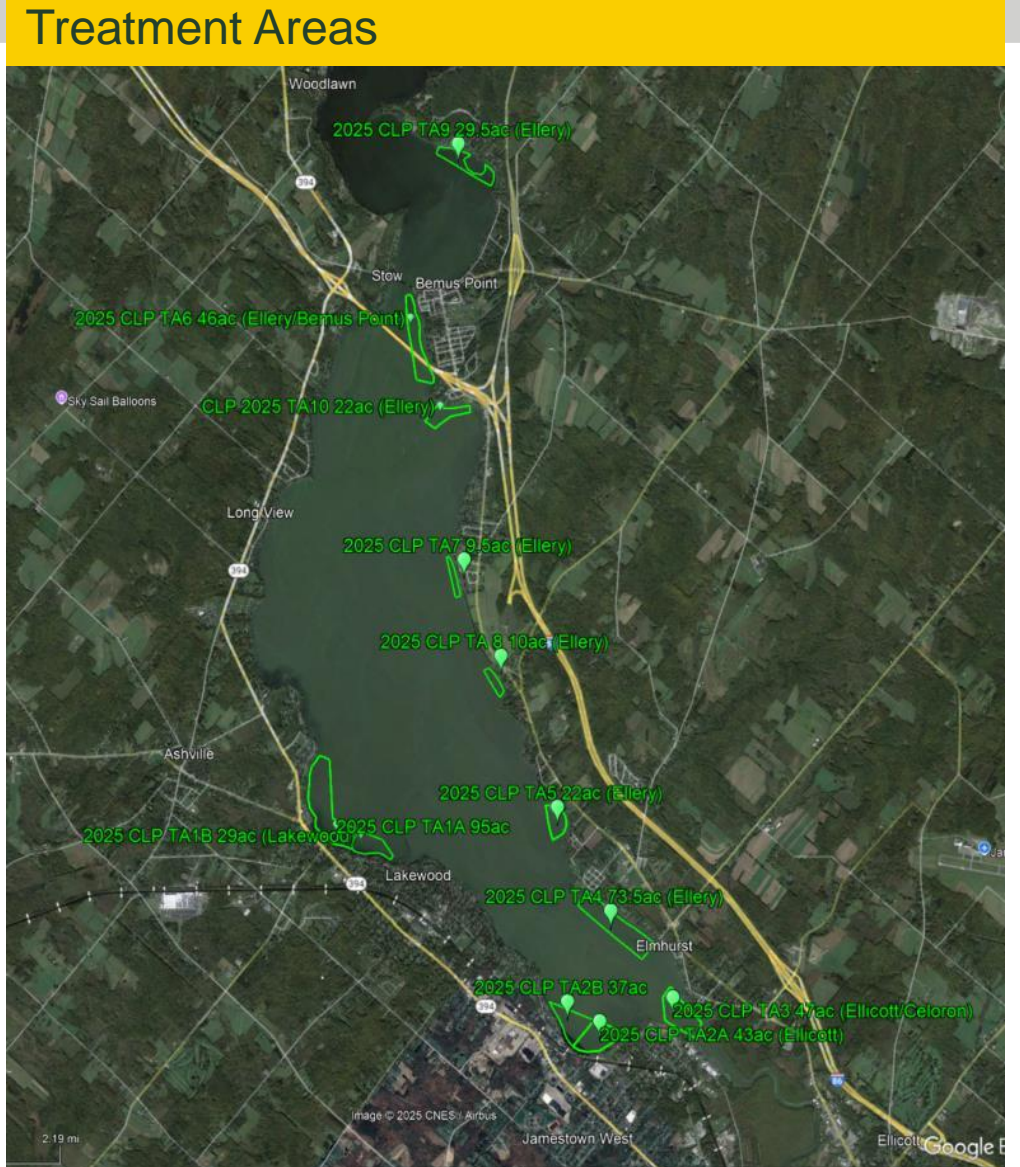
# Herbicide Permits



# Curly Leaf Pondweed

Requested Herbicide Permits for:

- Aquatic Herbicide Clearcast, EPA # 241-437-67690.
- Town of Ellery – 212.5 acres
- Town of Ellicott – 90 acres
- Town of Busti – 161 acres



# Eurasian Watermilfoil Permits

Requested Herbicide permits for:

- Aquatic herbicide ProcellaCOR EC, EPA # 67690-80.
- Town of Ellery 102.5 acres
- Town of Ellicott – 83 acres.

## Treatment Areas





# **Wetlands Regulation**

# Wetlands Regulations

More wetlands in and around Chautauqua Lake are now jurisdictional wetlands. This includes:

- Wetlands of all sizes located in the area classified as urban.
- Offshore wetlands dominated by submergent vegetation.

In jurisdictional wetlands and their 100-foot adjacent areas, DEC wetland permits are required to:

- construct new structures or expand existing structures
- cut or clear vegetation (including harvesting submergent vegetation)
- excavate or deposit fill
- apply pesticides
- dredge

# **NEW JD Process (664.8)**

Step 1 – Determine if parcel or property is within Article 24 Jurisdiction (Parcel JD)

Step 2 – Determine extent of wetlands on the parcel or property (Delineation)

Step 3 – Determine if a project requires an Article 24 Permit (Project JD)

# Online Jurisdictional Determination (JD) Request Form

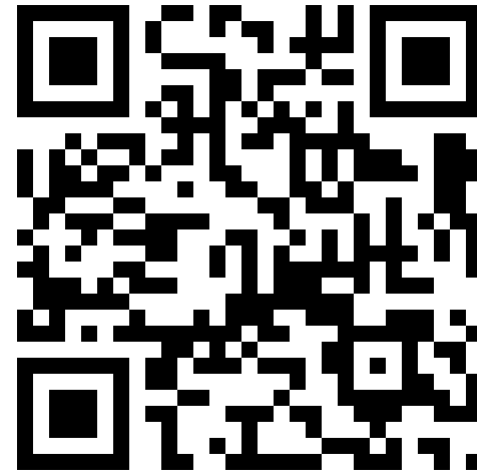
- **Allow Pop Ups**
- **What you'll need**
  - **Landowner:**
  - **Parcel ID #**
  - **Physical Address**
  - **Contact Info: Mailing Address/Email**
  - **Private Company/NGO**
  - Same as above
  - Company Name
  - Shapefile – not required but appreciated

## Apply for a Jurisdictional Determination

To apply for a freshwater wetland JD, submit an online request to DEC and provide your name, parcel address and ID number, and your contact information.

[ONLINE JURISDICTIONAL DETERMINATION FORM <sup>ef</sup>](#)

You must provide physical address of the parcel, parcel ID #, and a way to contact you. Either mailing address or email. Preferably email, to receive a parcel jurisdictional determination.



# Online JD Request Form

NYS Freshwater Wetlands Jurisdictional Determination Reques...

First Name:\*

Last Name:\*

This request is being sent by or on behalf of:\*

If this project has any associated spatial data, please upload the shapefile(s) below:

1

Contact Telephone Number:\*

Contact Email Address:

This request is being sent by or on behalf of:\*

Private Landowner  
Government Agency  
Private Company  
**Private Landowner**  
Real Estate Professional

spatial data, please upload the

here or select file

Contact Telephone Number:\*



# Typical Projects General Permit

- Freshwater Wetlands Proposed General Permit (GP-0-25-003)
- Five-Year Term
- Allow:
  - Repair, replacement, or removal of existing structures and facilities;
  - Construction or modification of various residential, commercial, industrial, or public structures;
  - Temporary installation of access roads and laydown areas;
  - Cutting trees and vegetation;
  - Drilling test wells;
  - Routine beach maintenance and replenishment in areas under DEC jurisdiction.



# Drafts Permits Released February 5, 2025

- Electric Utility Right of Way Maintenance and Repair General Permit (GP-0-25-005)
- **Lake Shorelines Freshwater Wetlands General Permit (GP-0-25-007)**
- **Modification of Management of Invasive Species General Permit (GP-0-25-008)**
- Natural Gas Utility Right of Way Maintenance General Permit (GP-0-25-009)
- Modification of Stream Crossings for Timber Harvesting General Permits (GP-0-23-004 and GP-0-23-005)
- Housing Development GP (GP-0-25-006)
- The Community-Scale Solar Energy Installations GP (GP-0-25-004)
- ***Comment period extended to 3/31***



# For more information about Freshwater Wetland Regulations

Freshwater Wetland Program Webpage:



Email:

[fw.ecohealth@dec.ny.gov](mailto:fw.ecohealth@dec.ny.gov)

# **Nutrient Management**

# 2012 TMDL Estimated Phosphorus Loading

Figure 9. Estimated Sources of Total Phosphorus Loading to Chautauqua Lake North

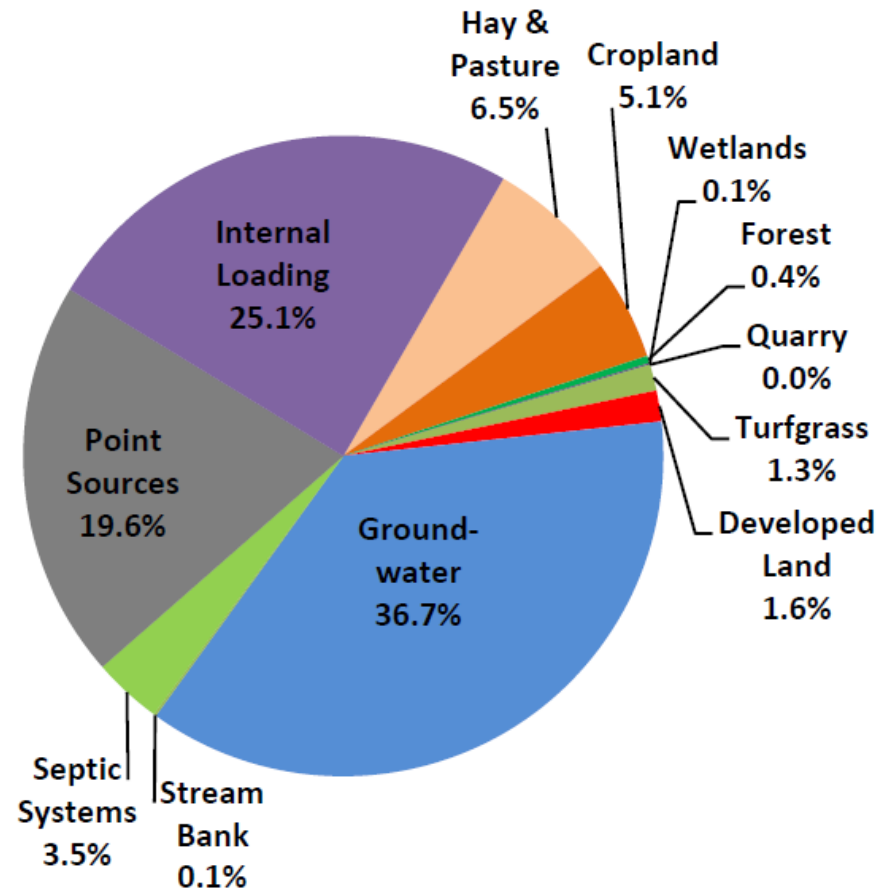
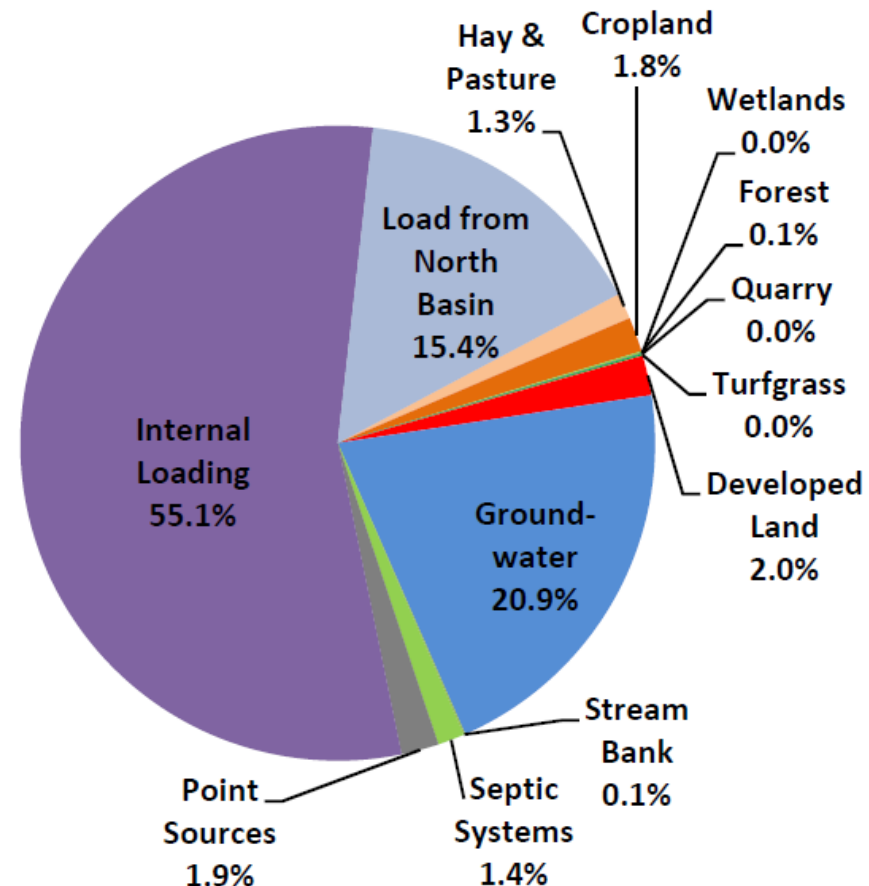


Figure 10. Estimated Sources of Total Phosphorus Loading to Chautauqua Lake South

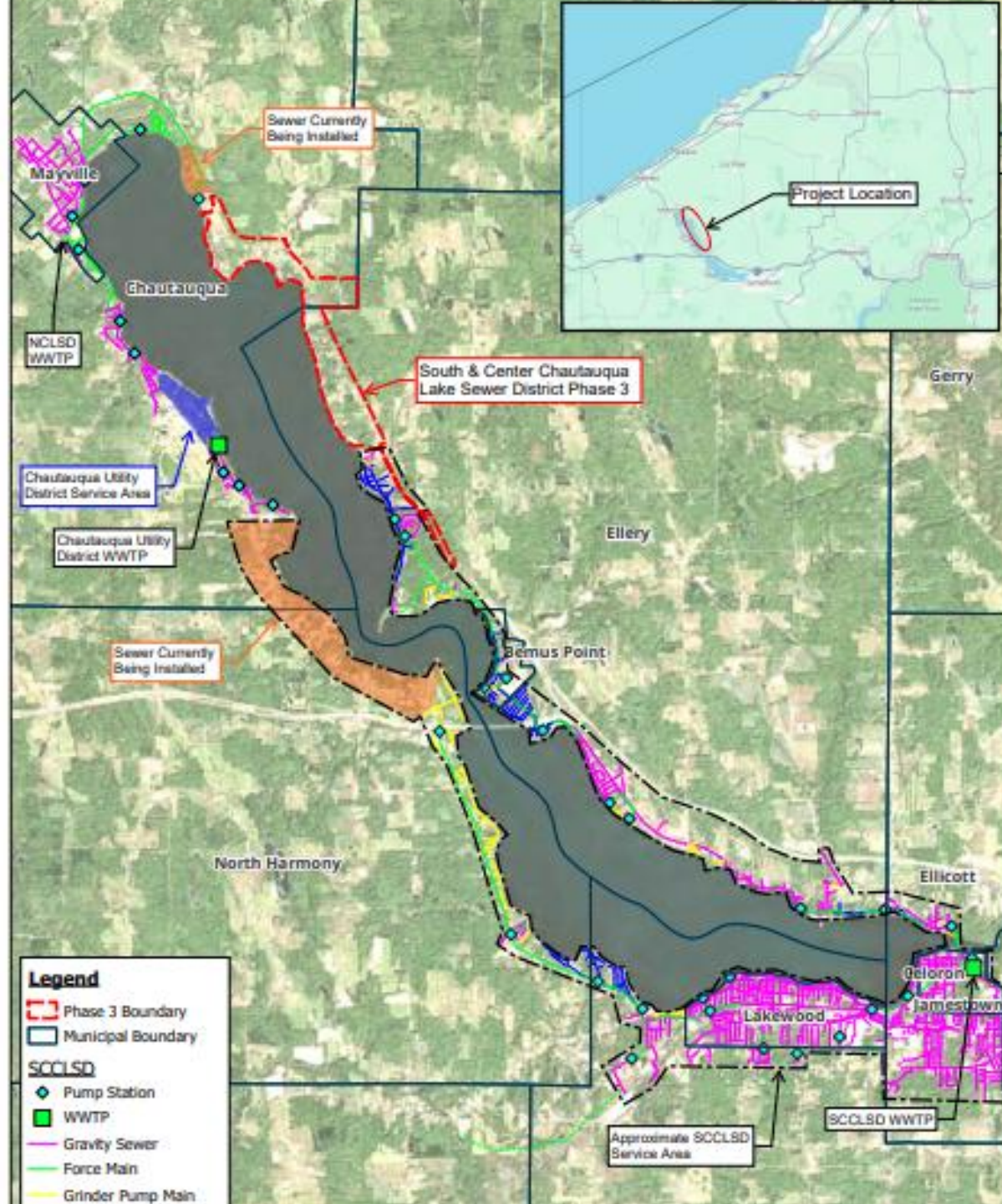




## Sewer Extension – Status-

### South & Center Chautauqua Lake Sewer District Phase 3

- Town of Chautauqua and Town of Ellery,
- 395 developed parcels and 68 undeveloped vacant buildable parcels.
- The maximum amount to be expended for the South & Center Chautauqua Lake Sewer District Sewer Phase 3 is \$35,590,000.



# 2024 Update: State Water Investments

## \$25M+ since 2021

### Funding for:

- Sewer Extensions
- I&I Reduction
- WWTP Improvements
- Stormwater Management & Green Infrastructure
- Culvert upgrades
- Erosion stabilization

### Awards to:

- County
- SWCD
- City of Jamestown
- Towns: Chautauqua, North Harmony
- Villages: Lakewood, Falconer, Mayville
- Institute

# TMDL Watershed Implementation Plan

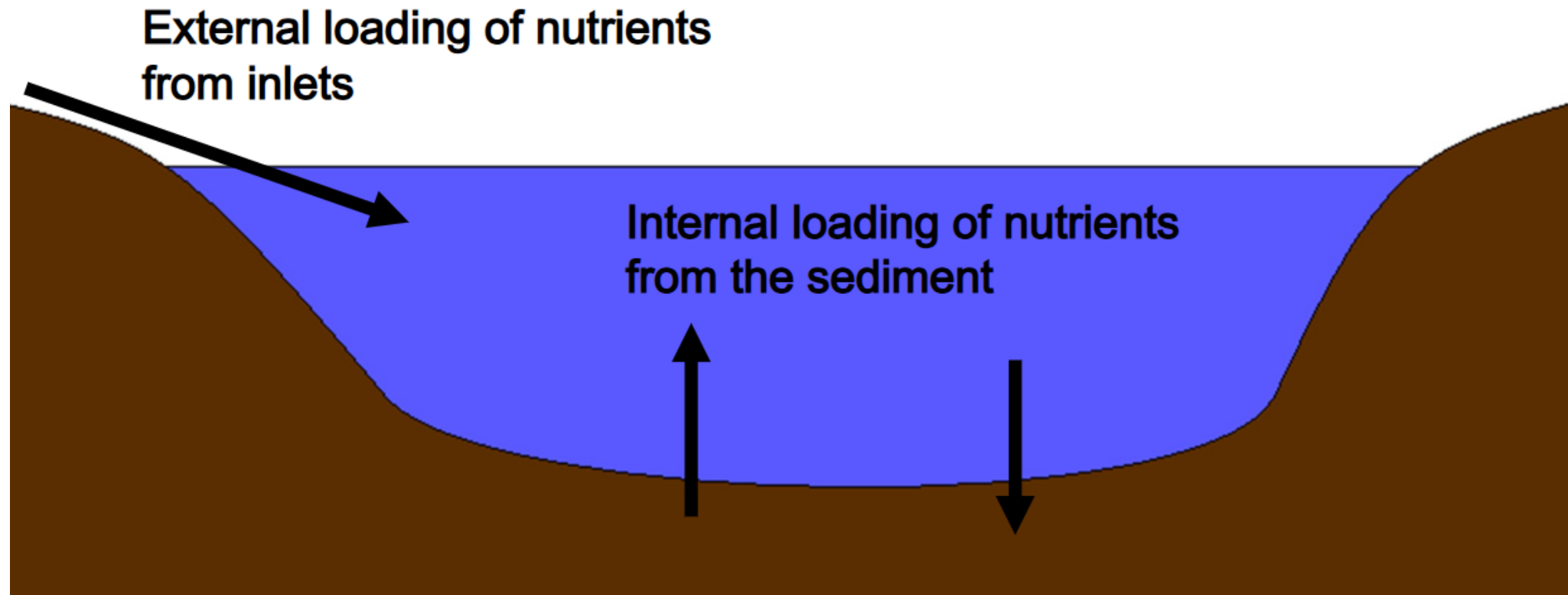
A TMDL Watershed Implementation Plan (WIP) is part of NY's broad adaptive management strategy to reduce phosphorus pollution in receiving waters. The TMDL WIP will incorporate the following elements:

- Trends in lake phosphorus concentrations since the finalization of the TMDL
- Analysis of land-use changes since the finalization of the TMDL
- Summary of implementation projects completed and their estimated phosphorus reductions
- Consultation with stakeholders about suspected sources of phosphorus loads and potential projects to address problem areas
- Select studies to fill knowledge gaps
- List of recommendations for projects in different sectors including urban, agriculture, septic, and natural

## Internal Nutrient Loading Study

*Estimated* to contribute about:

- 7,014.7 lbs/yr (25.1%) of phosphorus to the North Basin.
- 29,147.8 lbs/yr (55.1%) of phosphorus to the South Basin.



# Internal Loading Study

- 2025-26 Ramboll and the Upstate Freshwater Institute.
- Describe the mechanism, magnitude, and timing of sediment phosphorus loading in the North and South basins by quantifying the potential for internal release from sediment concentrations in both basins, plus measures of sediment physical properties
  - collecting water chemistry, continuous monitoring of temperature and dissolved oxygen, sediment chemistry, and bathymetry to support calculations.
  - focus on both spatial (North and South basins) and temporal (seasonal) internal phosphorus loading mechanisms
  - Estimate sediment phosphorus loading in the North basin from accumulation of P in the hypolimnion during summer
- Identify and assess feasibility and potential effectiveness of management options for internal loading reduction



# Fisheries

# Fisheries Update

Chautauqua lake is managed as a high-quality multi-species fishery, with muskellunge, walleye, largemouth and smallmouth bass as the primary sportfish, along with abundant panfish populations.

- Muskellunge: The adult muskellunge population was above long-term measures of abundance in 2024. The largest muskie sampled was 51 inches and weighed 41 lbs seen in the picture to the right!
- Walleye: Walleye abundance is near the long-term average. Walleye abundance has been slowly declining in recent years due to poor reproduction since 2020.
- Bass: While not assessed every year, populations of both largemouth and smallmouth continue to thrive. The lake hosted several national bass tournaments in 2024.
- Panfish: Ice fishing this winter has been spectacular with good sized yellow perch and bluegill being caught all around the lake. Crappie have recently shown up in Mayville and should provide excellent fishing in April following ice-out.



Fish & Wildlife Tech Alek with a BIG Muskie caught out of Chautauqua Lake



**Department of  
Environmental  
Conservation**

# **Drinking Water Protection**

# Drinking Water Source Protection Plan



**Chautauqua Lake Communities  
Drinking Water Source Protection Program  
(DWSP2) Plan**

Chautauqua Utility District  
Chautauqua Water District #2  
Village of Mayville

Prepared For

**Town of Chautauqua,  
Village of Mayville and  
Chautauqua Institution**

July 2024

 **Department  
of Health** 

## DEC Region 9 Follow Up:

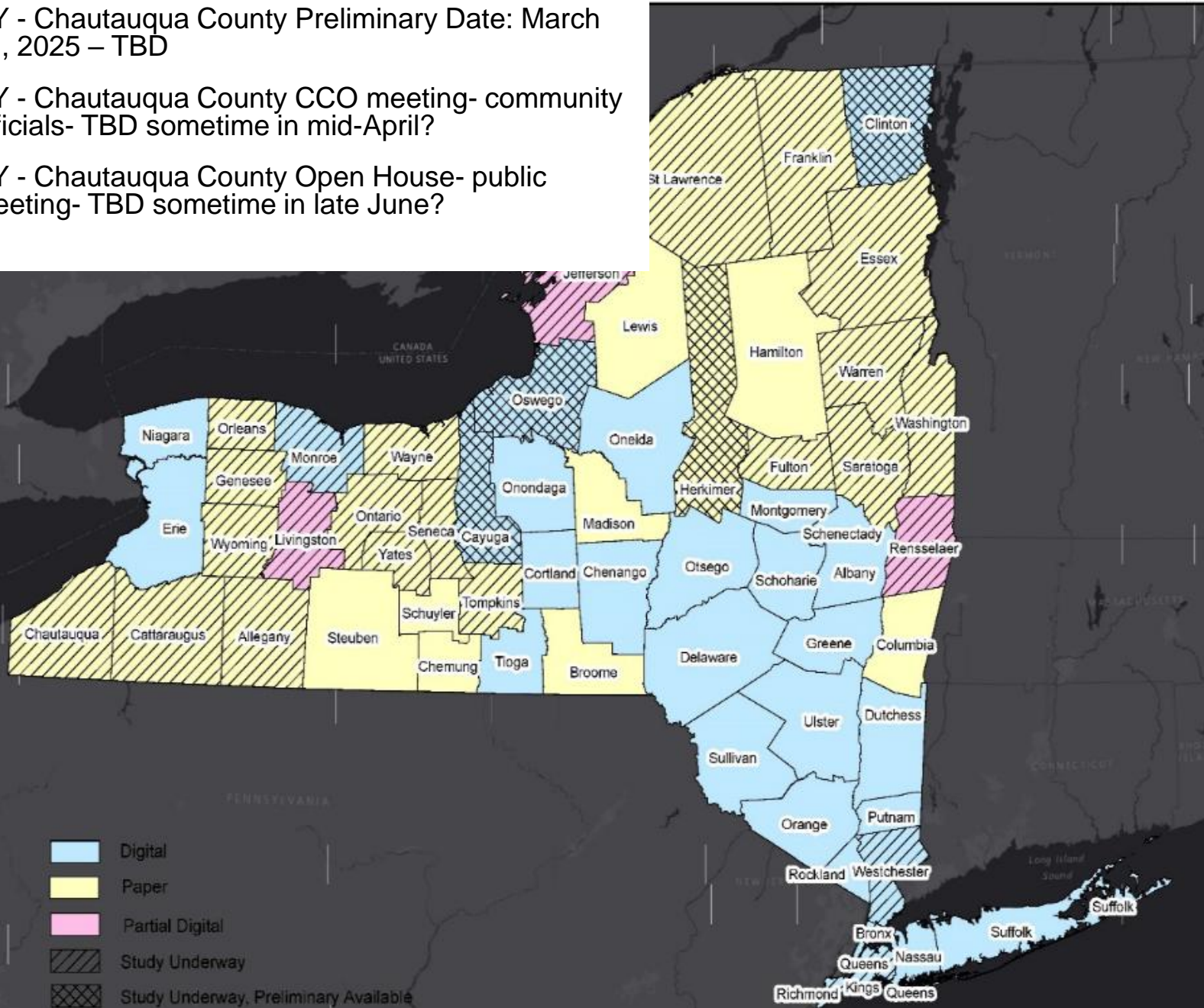
- Chemical Bulk Storage Facilities
- Petroleum Bulk Storage Facilities
- Active Landfills
- Remediation Sites
- Soil & Gas Wells (Active & Orphan)
- Mines
- SPDES Facilities
- Nutrient Loading



# **Flood Management**

- o NY - Chautauqua County Preliminary Date: March 31, 2025 – TBD
- o NY - Chautauqua County CCO meeting- community officials- TBD sometime in mid-April?
- o NY - Chautauqua County Open House- public meeting- TBD sometime in late June?

# Current Mapping Status



## Local, State, and Federal Roles and Responsibilities

### ■ **Communities (city, county, town, village):**

- ❑ Adopt floodplain management ordinances
- ❑ Enroll in the National Flood Insurance Program (NFIP)
- ❑ Administer and enforce building codes and ordinances, maintain records

### ■ **NYS Department of Environmental Conservation:**

- ❑ Oversight of community floodplain management programs and approval of ordinances
- ❑ Technical assistance and training
- ❑ Assist with flood study data and mapping
- ❑ Coordinate between FEMA and communities

### ■ **FEMA:**

- ❑ Oversees the NFIP (enrolls communities, can suspend or put communities on probation)
- ❑ Produces flood studies and flood maps
- ❑ Reviews and approves changes to flood maps



## About This Guide

This **Quick Guide** helps local officials and citizens understand why and how New York State communities manage development in floodplains to protect people and property. The New York State Uniform Code includes requirements for buildings in floodplains. Communities adopt ordinances with requirements. In cases of conflict, those codes and ordinances must be followed, not the guidance in this publication.

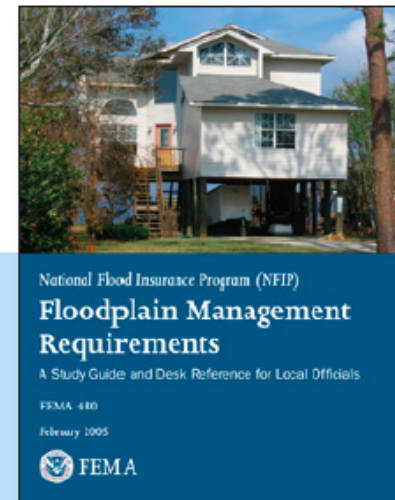
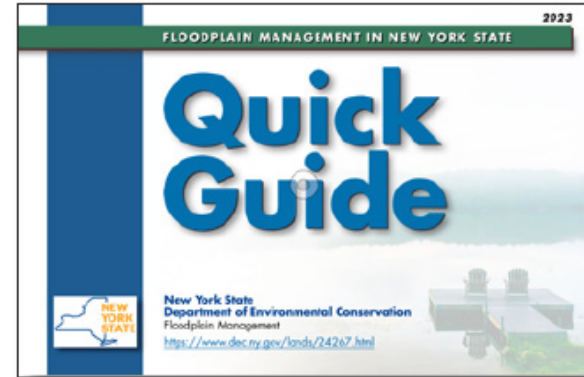
This **Quick Guide** was developed and funded jointly by the New York State Department of Environmental Conservation (NYSDEC) and the Federal Emergency Management Agency (FEMA). Download the guide from <https://www.dec.ny.gov/lands/24267.html>.

Questions, comments and requests for additional copies should be directed to the NYSDEC Floodplain Management Program at [floodplain@dec.ny.gov](mailto:floodplain@dec.ny.gov)

Prepared by:

RCQUINN  
CONSULTING, INC.

For more detail on all aspects of floodplain management, please refer to FEMA 480, *National Flood Insurance Program, Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials*.





## Community Responsibilities

To participate in the National Flood Insurance Program, New York State communities agree to:

- **Recognize** flood hazards in community planning ([see page 8](#))
- **Adopt and enforce** flood maps and a flood damage prevention ordinance
- **Require** permits for all types of development in the floodplain ([see page 41](#))
- **Assure** that building sites are reasonably safe from flooding
- **Require** new and substantially improved buildings, manufactured homes, and additions to be elevated to or above the Base Flood Elevation (BFE) plus 2 feet
- **Require** non-residential buildings to be elevated or dry floodproofed to or above the BFE plus 2 feet
- **Determine** if damaged buildings are substantially damaged
- **Conduct** field inspections; cite and remedy violations
- **Require and maintain** surveyed elevation information to document compliance ([see pages 55, 56,](#) and [57](#))
- **Carefully consider** requests for variances
- **Resolve** non-compliance and violations of floodplain management requirements
- **Advise and work** with FEMA and NYSDEC when updates to flood maps are needed
- **Maintain** records for review and respond to periodic requests from FEMA and NYSDEC



## NFIP Recommended Planning Considerations

New York State communities should consider incorporating planning considerations into comprehensive plans, land development codes, floodplain management regulations, and multi-hazard mitigation plans to reflect the long-term goal of increasing resiliency to future flooding. NFIP regulations (44 CFR Section 60.22(c)) outline 19 factors for consideration, including:

- **Divert** development to areas outside the SFHA to reduce flood damage
- **Full public disclosure** to potential buyers of properties in the SFHA
- **Acknowledge** that SFHA development may increase flood risk of existing development
- **Improve local drainage** to control increased runoff that increases the probability of flooding on other properties
- **Require additional elevation** above the minimum BFE plus 2 feet required by the New York State Uniform Code (requires NYS Code Council approval)
- **Require consistency** between State, regional and local comprehensive plans and floodplain management programs
- **Require** evacuation plans for manufactured home parks and subdivisions