



Conesus Lake Watershed Council

# 2024

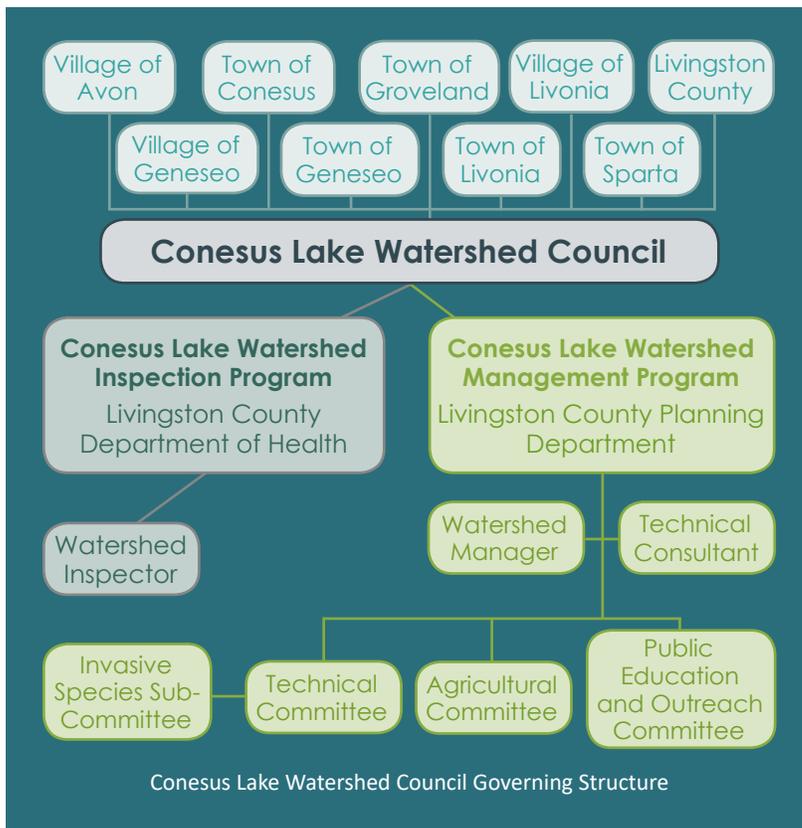
# ANNUAL REPORT

# INTRODUCTION

## About the Conesus Lake Watershed Council



The Conesus Lake Watershed Council (CLWC) is an intermunicipal organization formed in 2003 to guide implementation of the recommendations of the Conesus Lake Watershed Management Plan. Members of the Council, shown in the chart below, include elected officials from municipalities with lands within the watershed, representatives of public water purveyors, and partners engaged in efforts to protect the lands and waters for generations to come. The CLWC provides an important forum for collaboration among the stakeholders and community education on progress and emerging issues. Livingston County has two standing programs focused on Conesus Lake and its watershed, the Watershed Management Program and Watershed Inspection Program. The CLWC oversees these two programs and approves annual workplans and priorities.



**Photo:** North end of Conesus Lake, Vitale Park

Credit: LCPD



Evening sky of Conesus Lake

Credit: K. Hanafin

## Purpose of this Document

Recommendation H-2 in the Conesus Lake Watershed Management Plan (2003) is to prepare an annual update summarizing the status of activities in the watershed, particularly the ongoing efforts to reduce nonpoint source pollution. The Annual Report Card provides a framework for tracking water quality conditions in Conesus Lake and highlighting implementation projects and new emerging issues.

**Photos: Left On the Cover** -Photos provided by K. Hanafin, LCPD, LCSWCD, and NYSDEC. **Highlights (Pg.2)** -Photo provided by K. Hanafin

### Acronyms:

Citizens Statewide Lake Assessment Program (CSLAP), Conesus Lake Association (CLA), Cornell Cooperative Extension-Livingston County (CCE), Finger Lakes Institute (FLI), Finger Lakes Partnership for Regional Invasive Species Management (FLPRISM), Harmful Algal Blooms (HABs), Livingston County Department of Health (LCDOH), Livingston County Planning Department (LCPD), Livingston County Soil & Water District (LCSWCD), Livingston County Water & Sewer Authority (LCWSA), Natural Resources Conservation Service (NRCS), NYS Department of Environmental Conservation (NYSDEC), SUNY Environmental Science & Forestry (SUNY-ESF), United States Department of Agriculture (USDA), Water Quality Improvement Grant (WQIP).

# SUMMARY OF MAJOR ACCOMPLISHMENTS

Highlights from 2024

## Monitoring and Assessment

- SUNY Geneseo and SUNY Brockport lake monitoring focused on quantifying internal phosphorus release from sediment in all three basins
- SUNY Brockport tributary monitoring measured water quality in 9 tributaries in the Conesus Lake watershed
- 3 CLA CSLAP volunteers active on the lake

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## Invasive Species

- 2.5 Watercraft Stewards provided 1,007 hours of coverage at the State boat launch
- 80% decrease in Mile-a-Minute at the Geneseo site from 2022
- 2 Spotted Lanternfly traps deployed in the watershed; 0 detections
- NYSDEC stocking of 65,000 Walleye and 3,500 Tiger muskellunge completed
- 7 Macrophyte survey team members on the lake

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## Stormwater Management and Special Projects

- Conesus Lake Watershed Management Plan Update continues
- N. McMillan Creek streambank remediation project underway

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## Watershed Inspection Program

- LCDOH inspected 10 complaints in the lake/watershed
- Inspected 9 repaired septic systems
- Permitted 7 new septic systems

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## Education

- 13 Watershed Education Center programs reached 326 attendees
- 1 educational program in Avon CSD

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## Harmful Algal Blooms

- LCDOH HABS monitoring continued
- Over 100 CLA HABS spotters on the lake
- HABS mitigation pilot project at Camp Stella Maris feasibility explored

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## Agricultural Best Management Practices

- 2 LCSWCD Ag BMP project installed 10,650 ft of subsurface pattern drainage
- 4 catch basins, 2 surface inlet risers
- 1,250 ft of field border
- 120 ft replacement road culvert
- 1,600 ft of underground outlet

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For more information or to become involved in the Conesus Lake Watershed Management Plan Update, please go to:



# WATERSHED MANAGEMENT PLAN UPDATE



## Greetings from Conesus Lake in 2050!



The Conesus Lake Watershed Council (CLWC) is updating the Conesus Lake Watershed Management Plan, with the support of the Livingston County Planning Department and their watershed partners. The CLWC, an intermunicipal organization, is responsible for overseeing the implementation of the Plan to protect the water quality of Conesus Lake and its watershed.

📷 **Photos: Left & Center**-Attendees at Public Meeting #1 participating in discussion with consultants. **Right**-Public outreach post card mailer

Credit: LCPD

This Update advances the Plan into the next phase of addressing new water quality and environmental issues and new technological strategies. It will provide watershed communities with updated recommendations and actions, and green infrastructure strategies in land use.

Scan the QR Code to participate and learn more.



## Partnership and Collaboration

The Update is a collaboration between the CLWC, Livingston County, watershed partners, and the community. Technical assistance for this project has been provided by the Council's Technical Committee, which is comprised of several state, regional, and local agency and organization representatives, and two consulting firms, Anchor QEA and EDR, DPC.

### Status to date

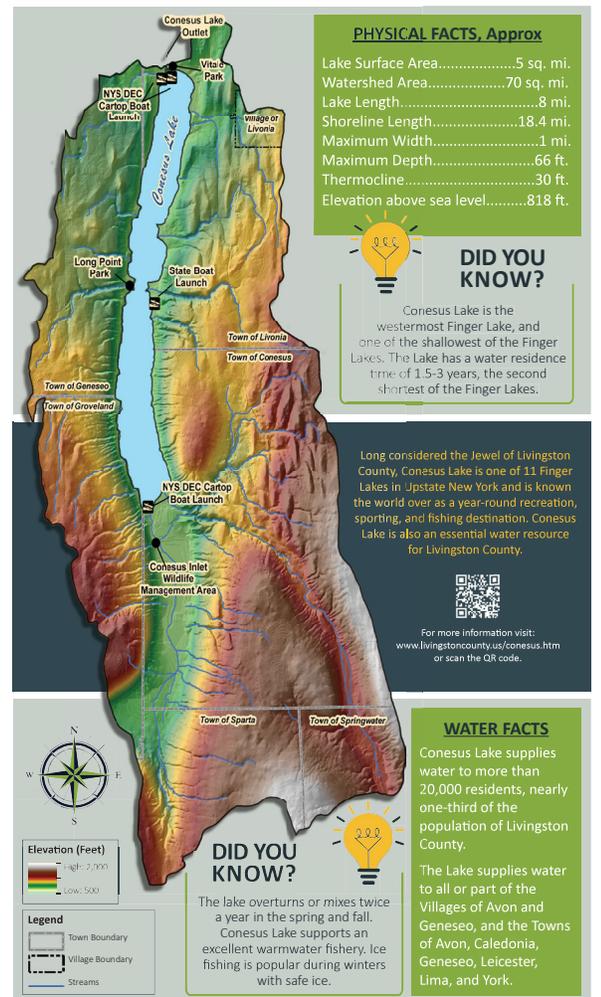
- 20-Year Progress Report completed
- Draft Watershed Characterization Report and supporting docs in process

### Next Steps in 2025

- Ag Partner Focus Group
- Public Meeting #2 in June, Meeting #3 in Fall
- Final Draft of Watershed Characterization Report and Management Plan open for public comment



## CONESUS LAKE WATERSHED



## Come Tell Us Your Vision For The Conesus Lake Watershed Management Plan

### Public Meeting

Monday, September 30th  
5:30 - 7:30 pm

**Camp Stella Maris**  
4395 E Lake Rd  
Livonia, NY 14487  
Light Refreshments Provided

[www.conesuslakewatershedplan.org](http://www.conesuslakewatershedplan.org)

This plan update will develop strategies to protect Conesus Lake, surrounding lands, and community well-being.

**"This project was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund."**

This banner was funded by the Finger Lakes-Lake Ontario Watershed Protection Alliance through an appropriation from the NYS Environmental Protection Fund.



**Photos:** **Top Left**-Autumn in the Village 2024. **Bottom Left**- Conesus Lake Watershed 20-Year Progress Report.

Credit: LCPD

## Public Participation Plan

Participation is key to the success of the Watershed Management Plan Update. Outreach in 2024 included:

- 2 Community Festival Info Booths, reaching 100+ people
- 4 Consultant presentations at CLWC Technical Committee/ Stakehold meetings
- 2 Focus Group discussions
- 5 Municipal Board, 1 CLA Board, 1 Rotary meetings
- Online & in-person surveys- 33 adults & 63 youth received
- 4,000+ post card mailings
- 25 Yard signs
- Social Media announcements & interactive website
- 1 Public Meeting- 54 attendees
- 2 CLA Laker News articles
- 170+ public comments received



Since 2003, the Conesus Lake Watershed Council has overseen the implementation of the Conesus Lake Watershed Management Plan with effective measures to protect and restore water quality. This document is an overview of the numerous programs and projects that have been implemented in the last 20 years.

### MAJOR ACCOMPLISHMENTS

\$2 MILLION FOR AGRICULTURAL BEST MANAGEMENT PRACTICES



20 YEARS WATER QUALITY MONITORING



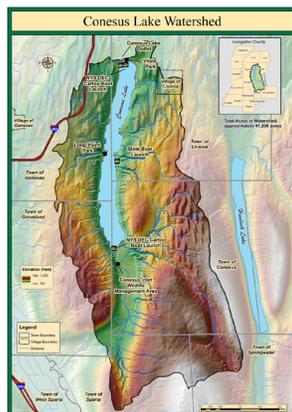
78 EDUCATIONAL WORKSHOPS & CAMPAIGNS



32,000 BOAT INSPECTIONS



### CONESUS LAKE WATERSHED



“This project was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.”



## CONESUS LAKE WATERSHED

20 Years of Progress, Projects, and Partnerships

### Agricultural Best Management Practices | Watercraft Steward Program



### Invasive Species Management



### Partnerships and Collaborations

Conesus Lake Watershed Management Program



For more information visit:  
[www.livingstoncounty.us/conesus.htm](http://www.livingstoncounty.us/conesus.htm)  
or scan the QR code.

Conesus Lake Watershed Inspection Program

### Monitoring and Technology



### Streambank Restoration | Lake and Watershed Projects



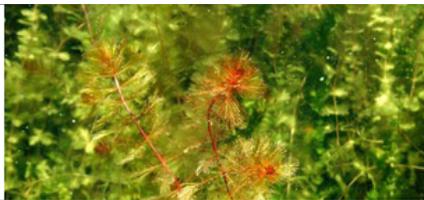
### Education and Outreach



This banner was funded by the Finger Lakes-Lake Ontario Watershed Protection Alliance through an appropriation from the NYS Environmental Protection Fund.



# MONITORING AND ASSESSMENT



The Conesus Lake Watershed Council oversees actions designed to protect and restore Conesus Lake and the watershed. A primary goal of the CLWC and its partners is to inform science-based lake and watershed management decisions. The SUNY Geneseo Lake and SUNY Brockport Tributary Monitoring Programs are essential to that process. Below is a summary of monitoring and assessment that occurred in 2024. Detailed reports are available at the QR codes below.

**Photos:** **Left-** Dr. Michael Chislock with Brockport and Geneseo students off to collect samples for phosphorus analysis. **Center-** Eurasian watermilfoil plants in shallow water. **Right-** SUNY Brockport students measuring discharge at N. McMillan Creek.

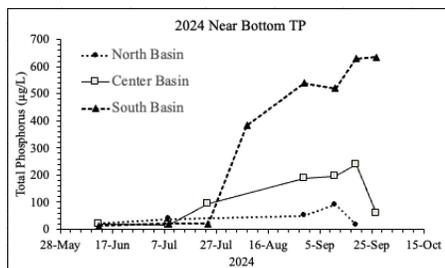
Credit: SUNY Geneseo and Brockport

## Lake Monitoring



The 2024 Monitoring Program focused on evaluating internal phosphorus loading from bottom sediments across all three basins of Conesus Lake. Phosphorus from sediment within the Lake was identified, a major contributor to lake nutrients from the 2019 Total Maximum Daily Load (TMDL). Internal loading of phosphorus from lake sediments occurs when specific conditions are present in the bottom waters during periods of lake stratification. The 2024 monitoring and assessment of internal phosphorus loading contributes to previous efforts to quantify the extent to which this phenomenon contributes to overall water quality of Conesus Lake.

Internal phosphorus loading was the highest estimated on record in 2024 - with an estimated 8,640 kg of phosphorus accumulating in the bottom waters between June to September. Importantly, 92% of the internal phosphorus loading occurred in the deep South Basin, where concentrations peaked at 635 ug/L - the highest concentration recorded to date in Conesus Lake.



Seasonal trends in near bottom TP concentrations (ug/L) from samples collected approximately one meter from the bottom of the three basins.

Credit: SUNY Geneseo

Factors that influence the extent and timing of internal phosphorus release include lake stratification, caused by water temperature differences between the surface and bottom waters, and the lack of dissolved oxygen at depths that contribute to chemical reactions leading to phosphorus release. Lake temperature stratification was measured in all three basins- North, Central, and South- by early June in 2024.

### 9

Tributaries to Conesus Lake monitored

### Nutrients Levels

Varied by watershed land use (forest/agriculture)

## 2024 HIGHLIGHTS

### ↑ TP Release

Greatest amount measured in South Basin

### Strong Stratification

More energy required to mix surface and bottom lake layers

Internal Loading - process by which phosphorus is released from lake sediments under specific conditions and time periods.

High surface water temperatures of the Lake caused stronger stratification that persisted into late August and September. The stability of the Lake, or the amount of energy required to mix the top and bottom layers, reached historically high levels in 2024. In each basin, dissolved oxygen in the bottom waters was depleted to a depth of approximately 8-10 meters, which creates conditions that are favorable to internal phosphorus loading.

Ultimately, the results from the Lake Monitoring Program in 2024 highlight that internal phosphorus release from sediment in each basin occurred and was particularly high in the South Basin. There is evidence to suggest that the surface waters of Conesus Lake are warming by approximately 2°C over the past 14 years, and the deeper waters are cooling - resulting in a greater temperature difference that may exacerbate the influence of internal phosphorus release in the future.

## Trophic State and CSLAP

Conesus Lake continued to participate in the CSLAP program, which is designed to provide comparable water quality

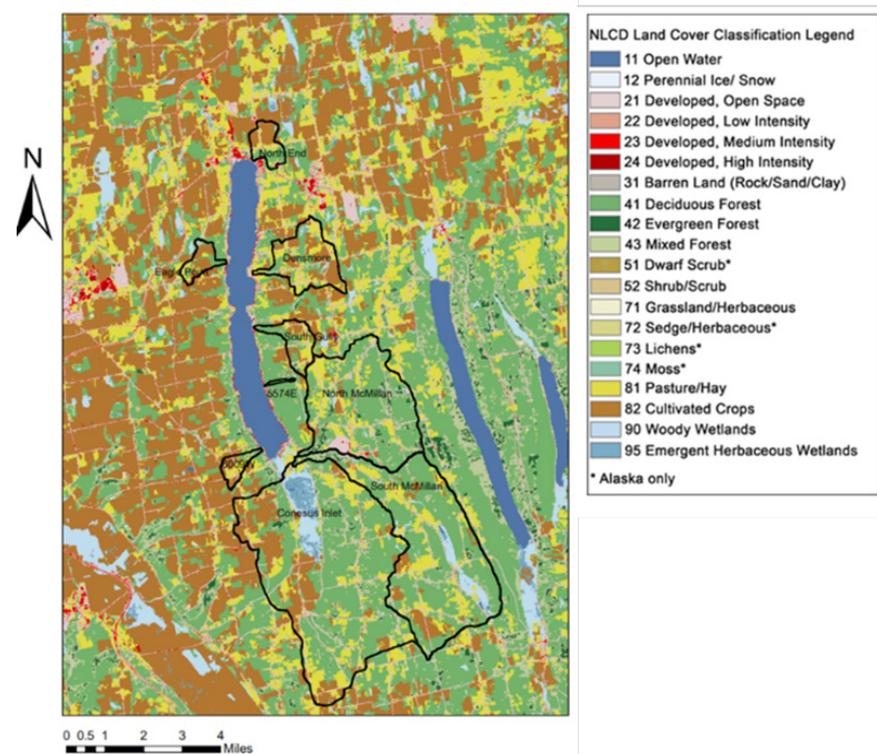
monitoring data for lakes across NYS. 2024 CSLAP data indicates that Conesus Lake continues to be classified as mesotrophic (moderate levels of productivity) with total phosphorus, water clarity, and chlorophyll-A within normal ranges for this lake.

## Tributary Monitoring



Water quality monitoring occurred on nine streams in the Conesus Lake watershed during 2024. The monitoring was focused on former USDA study tributaries, reference streams for long-term data collection, plus previously unassessed streams.

The tributary monitoring took place during a period of abnormally dry conditions in the summer and fall of 2024, with some tributaries drying up completely limiting the ability to collect samples across the full monitoring period.



Map of study tributary watersheds monitoring in 2024, with land use/land cover based on the 2019 National Land Cover Database (NLCD).

The influence of watershed land use on water quality was evident across the monitored streams. For example, reference streams that were largely surrounded by forests - like North and South McMillan Creeks - showed the lowest nutrient concentrations. A notable finding indicated that the Conesus Lake Inlet had the highest concentrations of total suspended solids (TSS) and total phosphorus (TP) among all monitoring streams in 2024. The long-term monitoring site on North End Creek continued to show elevated concentrations of TSS, TP, and total nitrogen (TN) relative to other tributaries monitored. Similarly, high TP and TN concentrations were measured in tributary 6009W - both sub-watersheds of North End Creek and tributary 6009W have high percentages of agricultural land use.



**Photo:** SUNY Geneseo Biology senior Isabel Marzec collecting a water sample for nutrient analysis.

Credit: SUNY Geneseo

## Key Recommendations for Future Tributary Monitoring

Several key recommendations have been identified for future tributary monitoring in the Conesus Lake watershed, informed by historical activities and 2024 monitoring results. First, increasing data collection and sampling during storm events will be targeted in future efforts, as storms have the potential to carry greater nutrient loads compared to baseflow conditions. This strategy responds to evidence that agricultural watersheds show higher concentrations of suspended solids and nutrients than forested areas, with storm events amplifying these differences. Additionally, measuring dissolved concentrations of nutrients, such as total dissolved phosphorus (TDP), will occur to better understand nutrient bioavailability for primary producers in Conesus Lake, such as algae.

[View more here.](#)



# INVASIVE SPECIES

Invasive species management is an important part of watershed management. Our partners work together to detect, eradicate and/or manage invasive species in Conesus Lake and the watershed. Efforts are guided in part by the CLWC Invasive Species Prevention and Response Plan (2013); an update to the Plan continued in 2024.

## Education and Monitoring

<b>Mile-a-Minute (MAM)</b> 8 site visits 216 MAM individuals pulled 9 staff & volunteers	<b>2024 HIGHLIGHTS</b>	<b>Spotted Lanternfly (SLF)</b> 2 SLF traps deployed in the Watershed 0 detections
<b>Macrophyte Survey Team</b> 7 Volunteers		

## INVASIVES SPOTLIGHT

### CONFIRMED IN CONESUS LAKE/WATERSHED



**MILE-A-MINUTE VINE**  
(*Persicaria perfoliata*)



**RUDD**  
(*Scardinius erythrophthalmus*)



**STARRY STONEWORT**  
(*Nitellopsis obtusa*)



**SPOTTED LANTERNFLY**  
(*Lycorma delicatula*)

### WATCH LIST FOR CONESUS LAKE



**HYDRILLA**  
(*Hydrilla verticillata*)



**SPINY WATERFLEA**  
(*Bythotrephes cederstroemi*)



**ASIAN CLAM**  
(*Corbicula fluminea*)



**QUAGGA MUSSELS**  
(*Dreissena rostriformis bugensis*)



**ROUND GOBY**  
(*Neogobius melanostomus*)



**WATER CHESTNUT**  
(*Trapa hatans*)

Visit [www.fingerlakesinvasives.org](http://www.fingerlakesinvasives.org) to read more.



**Photo: Above** -Macrophyte team member sampling for SSW. **Spotlight Section** -Invasive species confirmed in Conesus Lake Watershed.

Credit: A. Howe/Spotlight Credits: L. J. Mehrhoff (Bugwood.org), P Vander Sluijs, C. Cole, R. Videke (Bugwood.org), E. DeBolt, A. Benson (Bugwood.org), Center for Great Lakes and Aquatic Sciences Archive (Bugwood.org).

### How can you help reduce the spread of terrestrial invaders?

Practice Play-Clean-Go, clean hiking gear, use boot brush stations, don't move firewood, plant native species.



Credit: SUNY Brockport

Fruiting spike from Mile-a-Minute pulled from Genesee site by SUNY Brockport, NYSDEC and FLPRISM team.

### How can you help reduce the spread of aquatic invaders?

Practice Clean-Drain-Dry. Dispose of bait buckets and debris in trash cans or disposal stations. Do not dump aquarium contents in water bodies or ditches. Only use bait from dealers selling certified disease-free bait, and DO NOT use Rudd.



**STOP AQUATIC HITCHHIKERS!**

Be A Good Steward. Clean. Drain. Dry.  
[StopAquaticHitchhikers.org](http://StopAquaticHitchhikers.org)



Learn More About Aquatic Hitchhikers and Clean Drain & Dry: Scan the code with your phone's camera.



## Watercraft Steward Program

The primary pathway by which many aquatic invasive species reach inland waterways is by “hitchhiking” on recreational boats, trailers, fishing gear, or in the live wells of fishing boats. Our watercraft stewards educate on the risks of spreading invasive species by boating and assist boaters in performing inspections and boat decontaminations.

To read more visit [www.esf.edu/faculty/schulz/index.php](http://www.esf.edu/faculty/schulz/index.php) or scan the QR code.



### 2024 HIGHLIGHTS

621  
Invasive species  
specimens intercepted\*

10,470  
People engaged

3,895  
Boats Inspected

1,127  
Boats with  
organisms  
attached

17  
Decontaminations  
completed

\*All specimens intercepted were invasive species already present in Conesus Lake.

To view the Conesus Lake Watercraft Steward Program Data, please go to [www.esf.edu/faculty/schulz/index.php](http://www.esf.edu/faculty/schulz/index.php) or scan the QR code.



**Photo:** Conesus Lake Watercraft Steward, Temy, using the decontamination equipment at the Conesus Lake State Boat Launch.

Credit: SUNY ESF

2024 Season Totals	
Number of inspections	3,797
Total number of boats	4,108
Boats per day (average)	40.8
Total hours worked	1,007
Number of people interacted with	10,470
Average group size	2.6
Number of states launch users came from	20
Boater agreement rate	98.5%
Boats with organisms found	1,127
Percentage of boaters who took AIS spread prevention measures prior to arrival	70.7%
Number of new commitments to CDD	1,284

Credit: ESF/OPRHP

Watershed Steward Program Stats from ESF-NYS OPRHP Report.

## Partnerships Protect Water Quality

### Fish Stocking & Sampling Programs

NYSDEC has stocked young walleye in the lake to increase the walleye population that was decimated by the introduction of the invasive alewife. In turn, the walleye prey upon the alewives.

View DEC Fish Stocking Here.



### 2024 DEC FISH STOCKING

65,000 Walleye  
3,500 Tiger Muskellunge



Credit: NYSDEC

NYSDEC conducting fish stocking on Conesus Lake.

# WATERSHED INSPECTION PROGRAM



The Watershed Inspection Program is responsible for monitoring water quality and environmental conditions across the lake and watershed. In addition to responding to complaints and emergencies such as flooding and sewage overflows, the Watershed Inspector conducts routine surveillance of construction activities and monitors bathing beaches for compliance with public health standards, including harmful algal blooms.

**Photos: All above** -Field inspection of soil and erosion control concerns.

Credit: LCDOH

<p>10 Complaints</p> <p>1 Violations</p> <p>7 New Septic Systems</p>	<p>2024 Inspection Activities</p>	<p>9 Repaired Septic Systems</p> <p>48 Beach Closure Days</p> <p>1 Educational Event, Outside of WEC Programs</p>
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## Drinking Water and Bathing Beach Monitoring

In 2024, both LCDOH monitored beaches (Conesus RV Park Beach and Camp Stella Maris) were in full compliance with bacterial standards.

## SPECIAL PROJECTS



### Conesus Lake Streamgage Project

SUNY Brockport and CLA are collaborating on a 2-year research and monitoring project to install a streamgage in the inlet, with CLAWS funding.



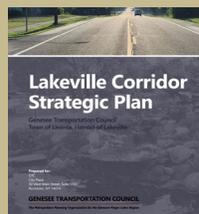
### North McMillan Creek Streambank Remediation Project

Project ongoing. Engineer designs completed and permits submitted.



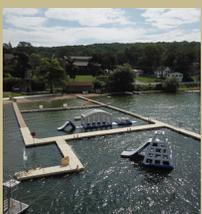
### Livingston County Road Ditch Remediation Grant

Contract with the DEC is in process for road ditch projects in the Towns of Conesus, Geneseo and Sparta.



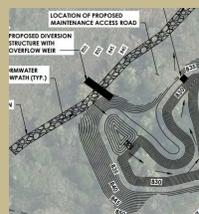
### Lakeville Corridor Strategic Plan

Route 20A in Lakeville was examined for connectivity, safety, resiliency, and function. Final plan was released in 2024.



### HABs Mitigation Pilot Project

Pilot project to be conducted at Camp Stella Maris to determine if horizontal aquatic thursters are effective in mitigating HABs. Funding and permitting received.



### Long Point Stormwater Management Pond Grant

Town of Geneseo resubmitted a NYSDEC WQIP grant application, with support from the LCPD. Awarded in 2024.



### Conesus Lake Watershed Management Plan Update

### Conesus Lake Watershed Management Plan Update

Update continues. Watershed partners and public engaged. Draft Watershed Characterization Report and supporting documents in process.

# HARMFUL ALGAL BLOOMS



During the summer and fall, the Conesus Lake Watershed Inspector conducts routine surveillance for HABs and responds to reports of blooms from the Livingston County Sheriff's Office Marine Patrol and citizens on the lake. For more information, or to report a HAB, contact the Department of Health at 585-243-7280 or email the Watershed Inspector at [dmaryanski@health.ny.gov](mailto:dmaryanski@health.ny.gov).

**Photos:** Three HAB events in Conesus Lake

Credit: LCDOH

## Harmful Algal Blooms Action Plan

The HABs response for Conesus Lake is guided by the NYSDEC Conesus Lake HABs Action Plan (2018) and the Conesus Lake Watershed Council Blue Green Algae Response Plan. The CLWC Response Plan is currently being updated; LCDOH updated the HABs advisories used to notify the public.

### KEY ACTIONS TO REDUCE P

To read the NYSDEC TMDL Report: Scan the QR code below.

- 2 Ag BMP projects installed in the watershed
- 1 Town/WQIP grant awarded



## 2024 BLOOM SEASON

Learn more about the Plan: Scan the QR code below.

- LCDOH HABs Surveillance 2-3/week
- 100+ CLA HABs spotters on the lake
- 30 Bathing beach water samples taken
- Confirmed HABs reported- 4 NYSDEC and 2 DOH (lakewide and relatively long lasting)



## Total Maximum Daily Load

The 2019 Conesus Lake Phosphorus Total Maximum Daily Load (TMDL) outlines target reductions in phosphorus (P) loading needed to restore and protect the lake for its designated uses.

# EDUCATION



The Watershed Education Center at Vitale Park, in the Town of Livonia, serves as an educational hub providing information about watershed protection and best management practices. A collaborative group of watershed partners, Town of Livonia, CLA, CCE, Chip Holt Nature Center, and Livingston County Planning Department and DOH, worked to deliver a year-round educational program, featuring scientists and professionals with local, regional, and state perspectives.



Sampling of the many WEC programs offered on topics ranging from Ag BMPs to wildlife, invasive species and microplastics, free of charge to participants. A total of 94 WEC programs have been offered to date.

Credit: CLA, LCDOH, LCPD

## 2024 HIGHLIGHTS

- 13 Watershed Education Center programs held
- The program reached 326 Attendees and had 403 YouTube views.

To view the upcoming 2025 WEC Program schedule go to [www.conesuslake.org/lake-community/wec/](http://www.conesuslake.org/lake-community/wec/)



# AGRICULTURAL BEST MANAGEMENT PRACTICES



The Livingston County SWCD conducted an Upland Watershed Protection Program for agricultural land uses to reduce nonpoint sources of pollution from entering waterbodies throughout the Conesus Lake watershed.

Finger Lakes-Lake Ontario Watershed Alliance funding was used by LCSWCD on two farm fields in the Town of Conesus to support priority stormwater management improvements.

**Photo:** Left-Rowland Road drainage installation. Right-Ag BMP project on Holmes Hill Road.

Credit: All Photos: LCWSD

## Mulvaney Farm - Holmes Hill Road

- Installed 7,200 feet of pattern drainage.
- Installed 2 surface inlet risers.
- Re-established field access.



Installation of sub-surface drainage infrastructure for Holmes Hill Road.



Mulvaney Farm Rowland Road: Before



Mulvaney Farm Rowland Road: After

## Mulvaney Farm- Rowland Road

- Installed 3,450 ft of sub-surface pattern drainage, with a cost share of 50% with the landowner.
- Installed four catch basins at Rowland Road and 120 ft of replacement road culvert.
- Installed 1,250 ft of field border.
- Installed 1,600 ft of underground outlet.

## EMERGING TRENDS AND ISSUES

Number of Confirmed HABs reports have fluctuated over the past few years in Conesus Lake with two blooms in 2024, five blooms in 2021- 2023, one bloom in 2020, six blooms in 2019, and nine blooms in 2018.

Impact of aquatic invaders in Conesus Lake: rudd and starry stonewort. Risk of aquatic invaders coming to Conesus Lake: hydrilla, water chestnut, Asian clam, quagga mussel, spiny waterflea, and round goby.

Invasive forest pests including, but not limited to spotted lanternfly, hemlock wooly adelgid, emerald ash borer, and spongy moth affecting forest cover and riparian habitat.

Changes in weather patterns (National Climate Assessment): Increase in the frequency and duration of droughts leading to low water levels and intermittent streams. Less reliable snowpack and spring groundwater recharge.

More intense rain events and overall precipitation leading to increased high flow events and associated risk of damage to property and infrastructure as well as increased pollutant loads to the waterways.

Increase in sodium and chloride levels in treated water at both the Village of Avon and Village of Geneseo water treatment plants. Sodium levels exceed the recommended levels for consumption by individuals on severely restricted sodium diets.

Climate change and Conesus Lake: Surface waters increased ~2°C over the past 14 years. Extended stratification period beginning early in spring and later turnover in fall. Reduced oxygen in bottom waters increasing internal phosphorus release.

## RECOMMENDATIONS

- Update the Conesus Lake Watershed Management Plan.
- Assist municipalities with water resources planning and zoning updates, including green infrastructure regulations.
- For more information or to become involved, please go to: [www.conesuslakewatershedplan.com](http://www.conesuslakewatershedplan.com)



Continue to advocate for funding and technical support for implementing agricultural BMPs in priority areas. Pursue additional funding and support for water restoration and special projects within the watershed.

Conduct SUNY annual monitoring program and LCDOH water quality parameter monitoring program. Continue active participation in CSLAP, PRISM, Watercraft Steward Program, and others.

Continue to support the Watershed Inspection and Watershed Management programs. Encourage participation in the NYSDEC septic system replacement program, through the LCDOH.

Continue implementation of Governor's HABs Initiative and pursue funding to support the recommendations in the Conesus Lake HABs Action Plan. Revisit Invasive Species, Harmful Algal Blooms, and Fish Kill Response Plans.

Continue to support Public Education & Outreach initiatives, including WEC programming. Conduct further investigation into potential causes and solutions to help mitigate increases in sodium levels.

Continue monitoring lake temperature, dissolved oxygen, and internal phosphorus cycling in response to warming trends. Integrate climate impacts into watershed management planning.

This annual report card was funded by the Finger Lakes - Lake Ontario Watershed Protection Alliance through an appropriation from the New York State Environmental Protection Fund.



**Learn More:**  
Scan the code with your phone's camera to read Conesus Lake Annual Report Cards.

## Conesus Lake Watershed Council

6 Court Street- Room 305  
Geneseo, NY 14454  
585-243-7550  
[livingstoncounty.us/conesus.htm](http://livingstoncounty.us/conesus.htm)



Document Prepared By:  
The Livingston County Planning Department and  
CC Environment & Planning

