
2025 ANNUAL MEETING
Seneca Lake
PURE WATERS
Association
AND VOLUNTEER RECOGNITION

Welcome

Business First

- Finances and Membership
- Board of Directors (Election)
- Awards!
- Volunteers – Thank You

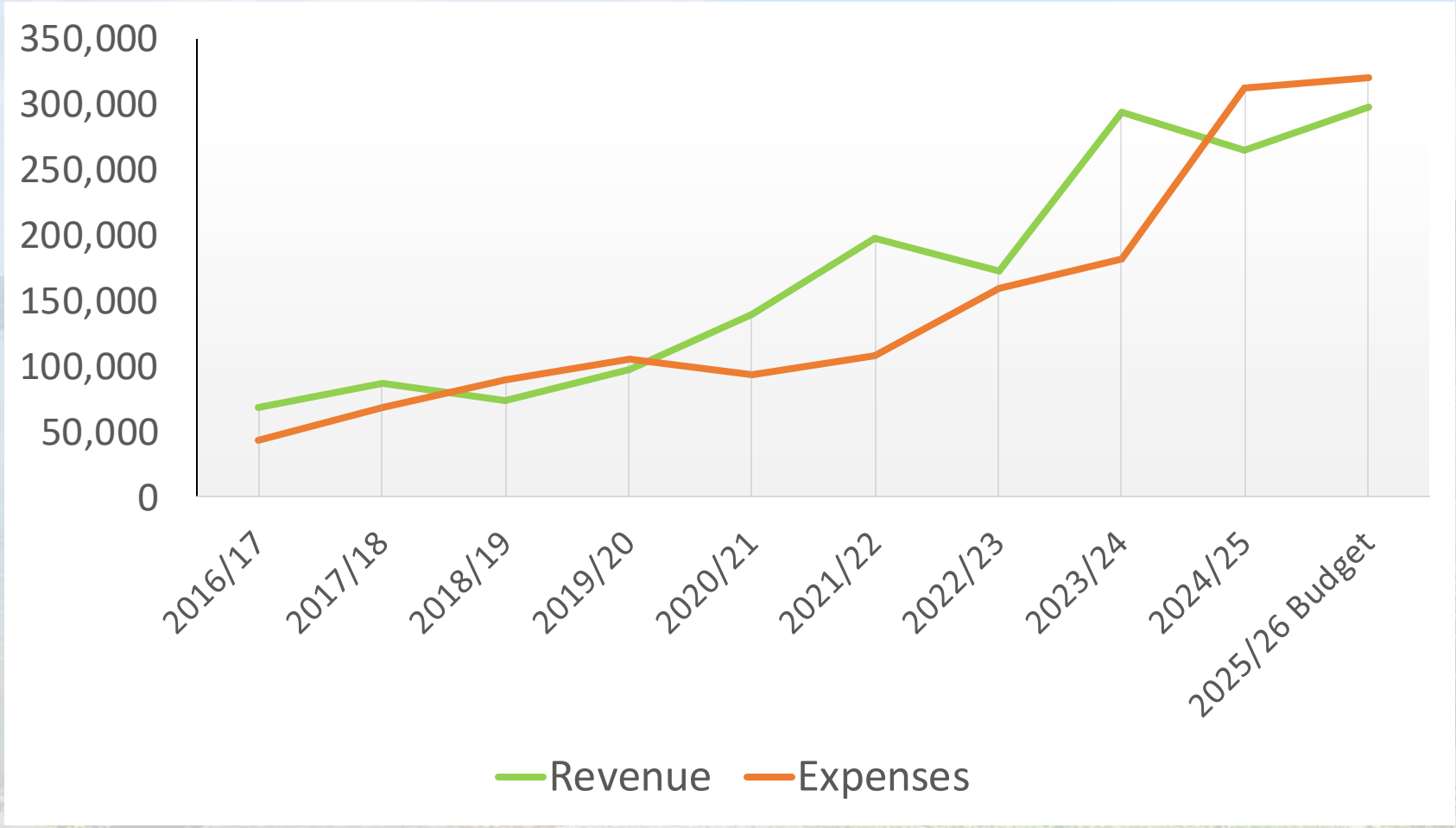
Spotlight Talks

- Hemlock Woolly Adelgid
- Stream Flow Instrumentation and Monitoring
- Near Shore Nutrient Research and Cladophora

Health of the Organization

The future is looking bright!

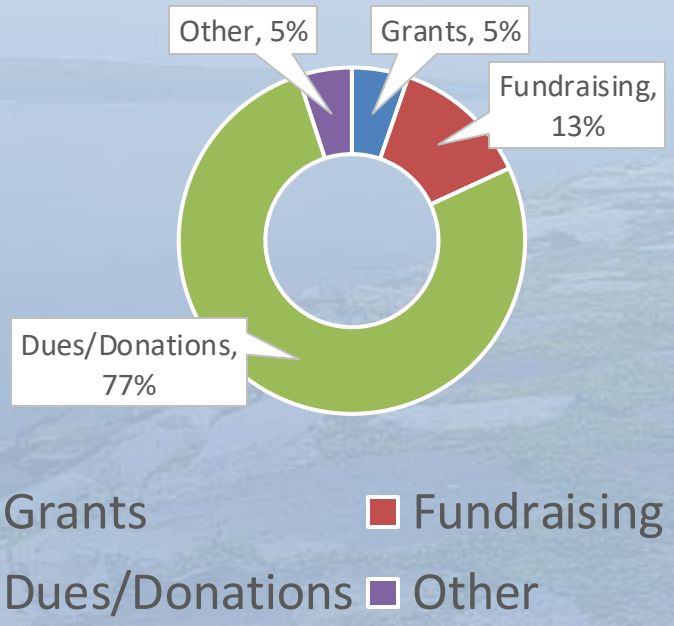
Growth Since 2017



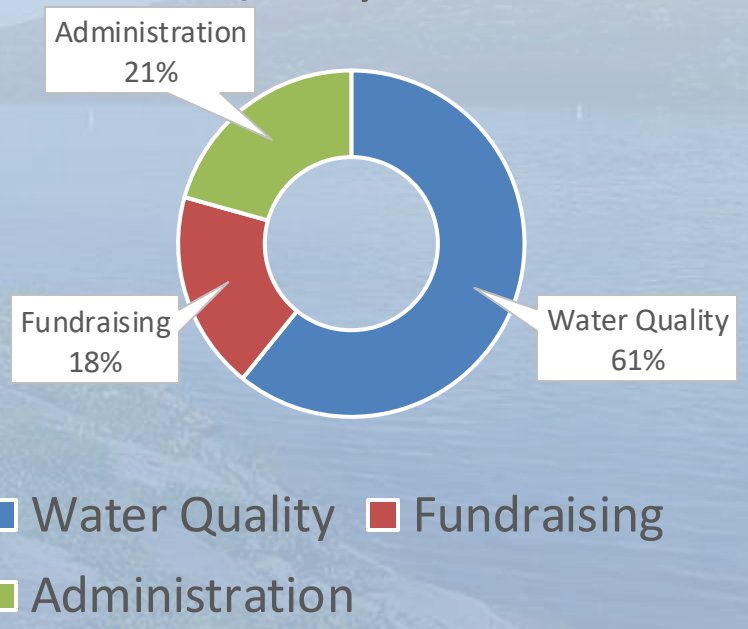
Revenue vs Expenses 2016-2026

Revenue and Expenses 2024-2025

Revenue 2024-2025
$264,886



Expenses 2024-2025
$311,295

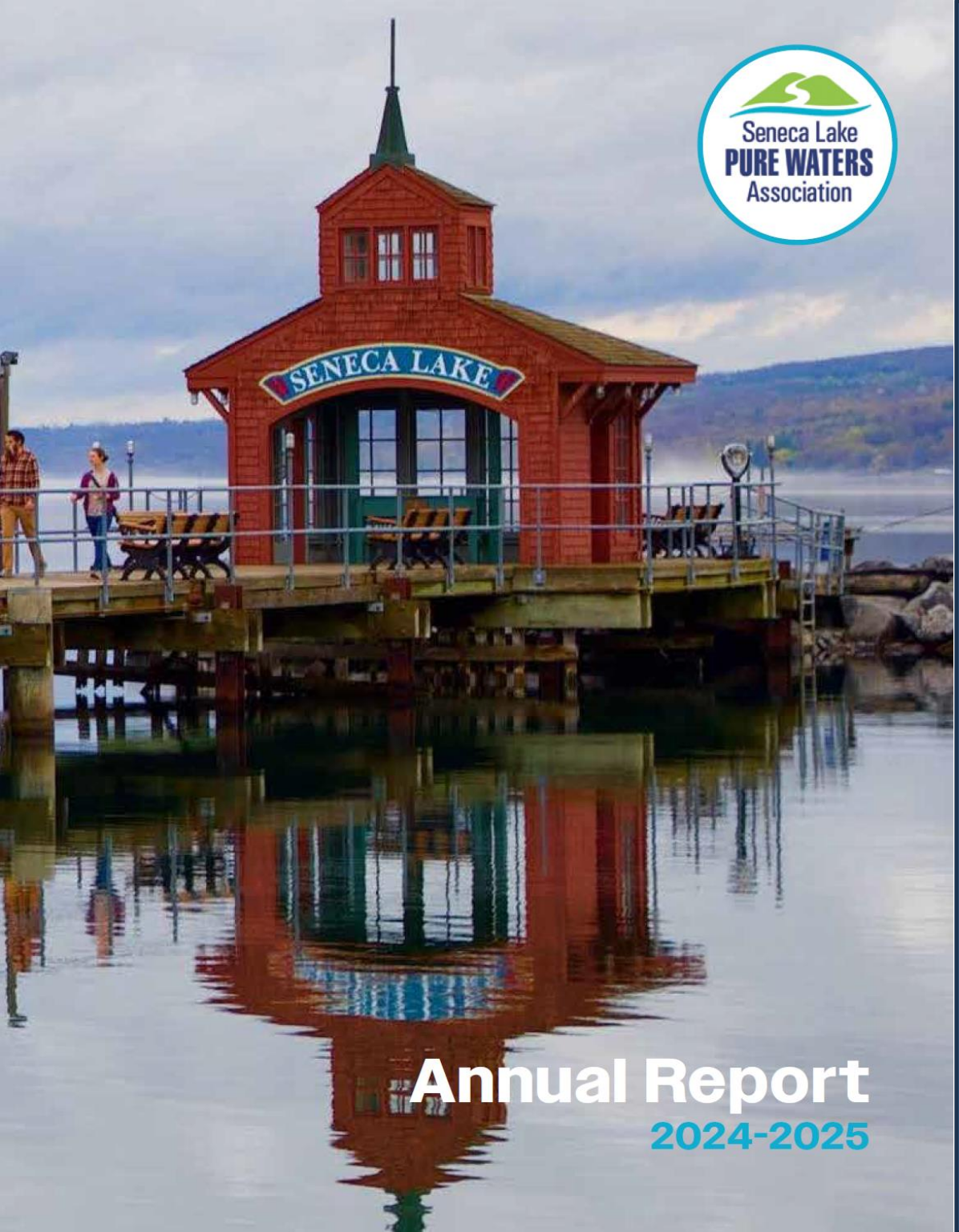


Membership

New member tracking software and counting methodology this year.

Level	Number	Business	Number	Amount
Steward	304			< $100
Partner	264	Bronze	29	$100
Protector	53	Silver	26	$250
Lake Defender	29	Gold	8	$500
Watershed Benefactor	32	Platinum	1	$1000+
Community Partner	5			
	687		64	

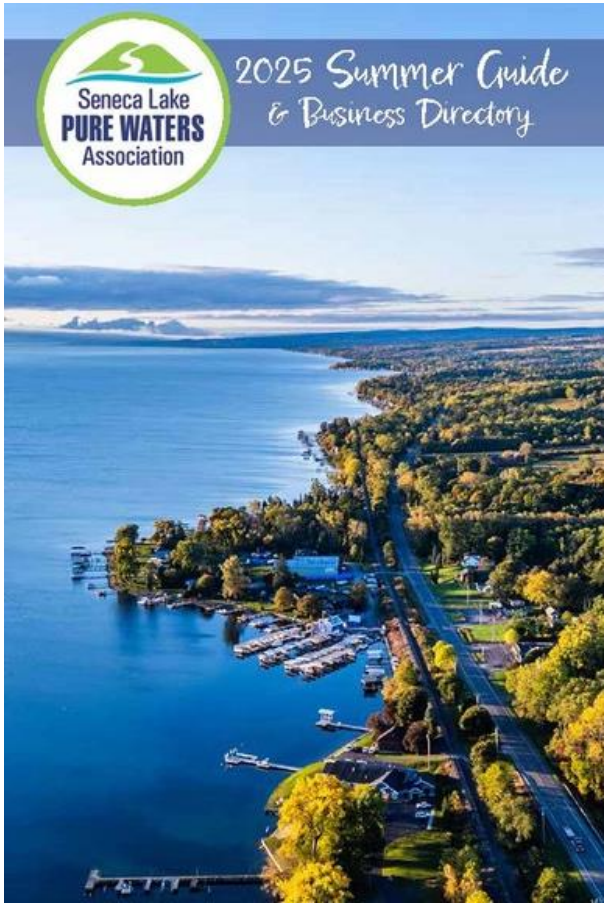
Association membership
as of June 1, 2025



The Fiscal Year 2024-2025 Annual Report is ready for publication.

Soft copy will be available on the website soon and we will announce when it is released.

It contains much more information about the organization and what we accomplished last year.


Seneca Lake
PURE WATERS
Association
2025 Summer Guide
& Business Directory


PRESERVE
PROTECT
PROMOTE

PURE Brew - A Crisp Pilsner Supporting Seneca Lake

SNPR Match Campaign

Since 2021, our partnerships with local SWCDs have supported 21 projects that keep:

- **2,800 tons of sediment**
- **2,800 lbs of phosphorus**
- **5,200 lbs of nitrogen**

out of Seneca Lake each year!

We raised over $13,000 – nearly double last year's total!

Strategic Plan

The plan is just being completed with the help of a grant through CauseWave

There are 4 goals, but the process targets one goal at a time

The “Wildly Important Goal” or WIG concerns the implementation of the 9 Element Plan:

WIG: Identify priority 9E plan projects that will accelerate reduction of phosphorus loading to Seneca Lake and motivate partners for action by 5/15/26.

Board of Directors

Seneca Lake Pure Waters board members celebrating our office relocation.

Board of Directors

Term Expires 2025:

Kelly Coughlin (Geneva)
Peggy Focarino (Penn Yan)
Mark Gibson (Himrod)
Larry Martin (Penn Yan)
Mark Petzold (Geneva)
Jill Ritter (Geneva)
Bill Roege (Penn Yan)

Term Expires 2026:

Charles Fausold (Valois)
Timothy Johnson (Corning)
Jim McGinnis (Watkins Glen)
Stuart Messur (Geneva)
Mark Swinnerton (Hector)

Term Expires 2027:

Peter Budman (Penn Yan)
Thomas Burrall (Geneva)
Lisa Greenwood (Varick)
Kristin Gusack (Hector)
Linda Sampson (Dundee)
Jody Tyler (Keuka Park)
Jacob Welch (Himrod)

Thank you!

Retiring Board of Directors.

Larry Martin

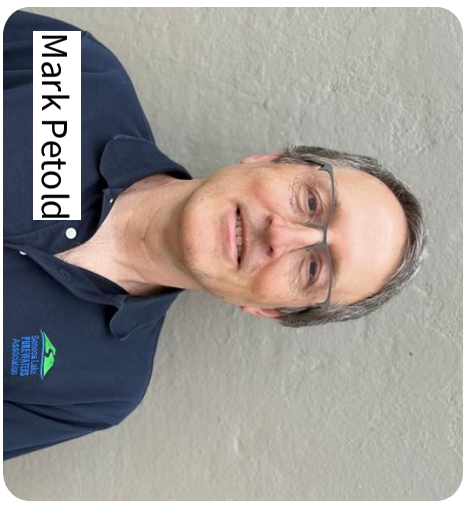
Volunteer Extraordinaire

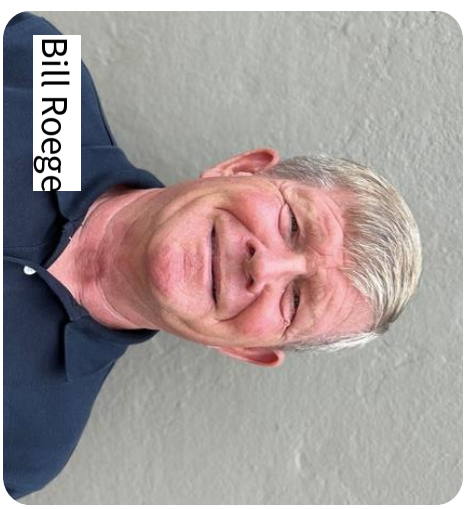
Jill Ritter

BOD Treasurer
Volunteer Extraordinaire

Returning Board Members

2025-2028





New Board Candidates

2025-2028

Vote for Board of Directors Class of 2028

Current Officers

2024-2025

From left to right: Mark Petzold – Vice President, William Roege – President, Jill Ritter – Treasurer, Mark Gibson – Secretary

Future Officers

2025-2026

William Roege - President

Mark Petzold - Vice President

Charlie Fausold - Treasurer

Mark Gibson - Secretary

2025 AWARDS

Without you, our mission wouldn’t be possible

Rich Adams Memorial President's Award

Jill Ritter

- Volunteer since 2014 (Lake Level Committee)
- Leadership: VP, Treasurer, Committee Chair
- Been an active member on Events, Membership, Lake Level, and SNPR committees
- Leads fundraising, auctions & outreach
- Strengthens programs with institutional knowledge

Mary Rose Co-Volunteer of the Year Award

Mimi Girdley

- Stream Monitoring Volunteer, 10+ years
- Stream Team Lead, 3+ years
- HABs Monitoring Volunteer

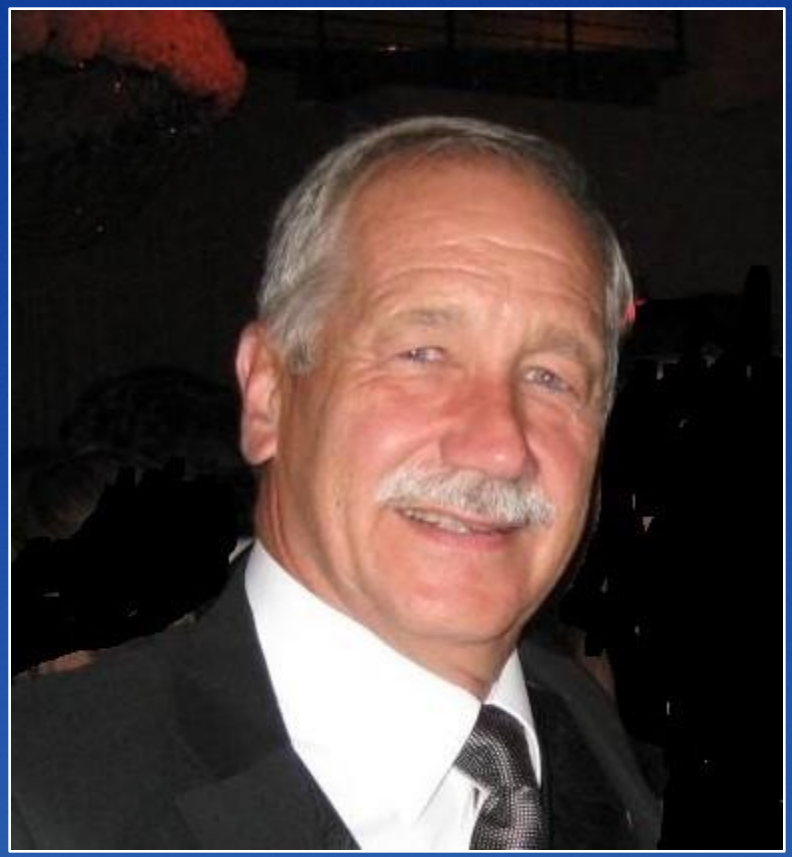
Susan Martin

- CSLAP Volunteer
- CoCoRaHS (Community Collaborative Rain, Hail and Snow) Volunteer
- Lake Level Committee Member

Howard H. Kimball Memorial Founders Award

Don Kloeber

- Led kiosk project at Sampson State Park
- Key supporter of SNPR program
- Recruited volunteers & donors
- Built partnerships to protect Seneca Lake

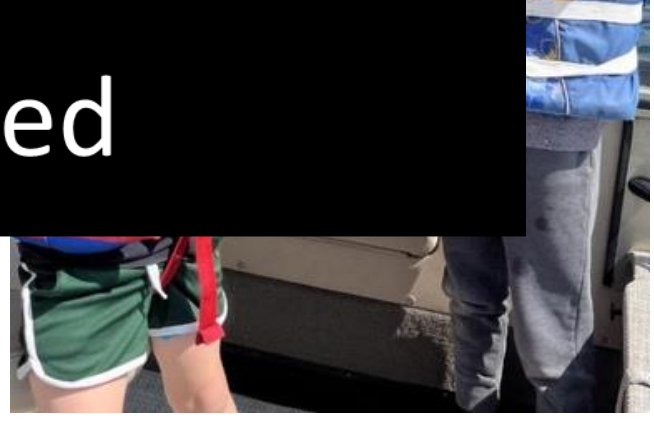



INVASIVE
INVASIVE


HERONS

Volunteer Impact: Field Volunteers & Hours (2024-25)

Volunteers Needed



Now Hiring: Association Director

- We are searching for someone to lead the organization to ever greater heights
- We are seeking a well-rounded individual with some experience
- We desire a background in the environmental sciences or similar field
- See the full announcement on the website
- If you know someone that would be a good fit—encourage them to apply now!

THANKS

Follow Us On Social Media

@senecalakepurewaters

@Seneca Lake Pure Waters Association

Seneca Lake PURE WATERS Association

Pure Waters Hemlock Initiative

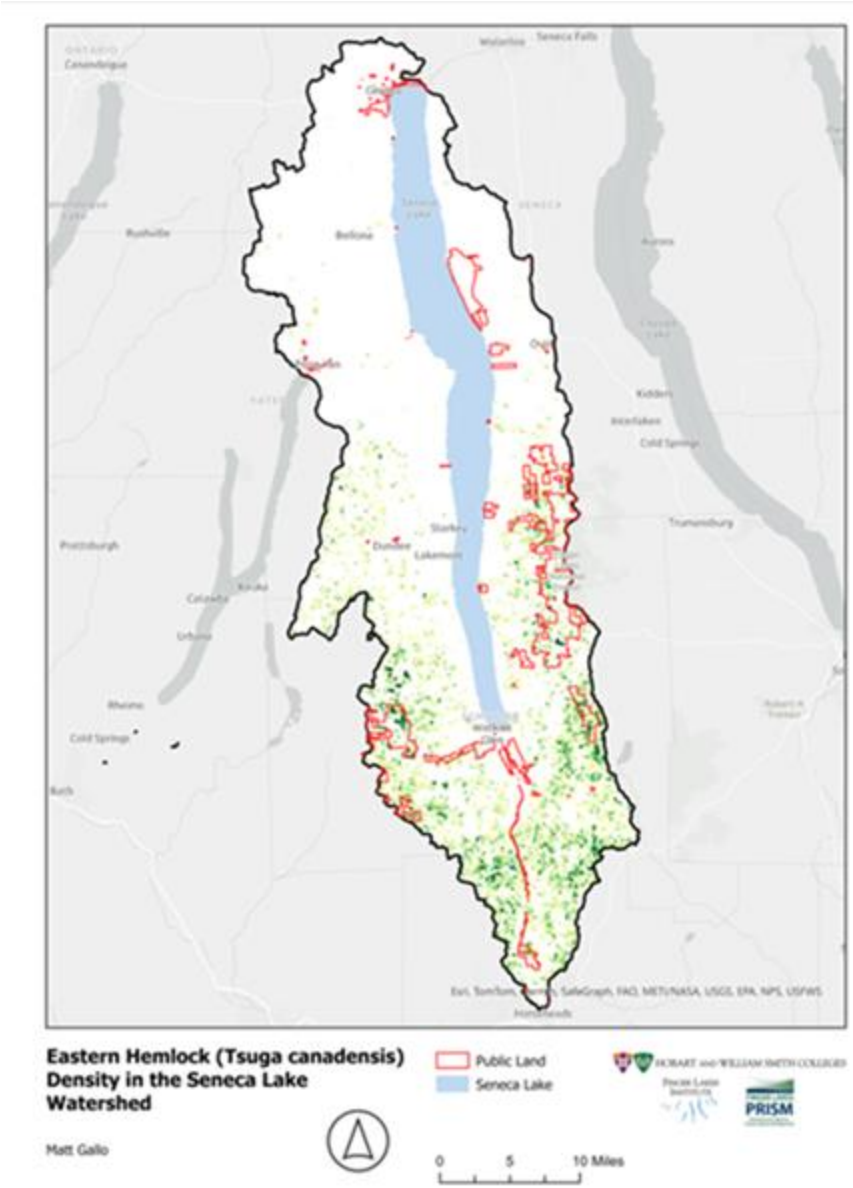
Protecting and Restoring Eastern Hemlocks in the Seneca Lake Watershed

Jim McGinnis
Project Manager

Zeb Strickland
Forest and Water Solutions, LLC

Key Elements of the Initiative

- Importance of Eastern Hemlocks
- Threat from Hemlock Woolly Adelgid (HWA)
- Treatment Methods: Insecticides and Biocontrols
- Landowner Engagement and Implementation Plan



Eastern Hemlocks are a foundational species….

Habitat Support

These trees create habitats essential for a diverse range of species, supporting biodiversity in the region.

Temperature Moderation

Eastern hemlocks provide shade that helps regulate water and air temperatures in the watershed.

Pollutant Filtration & Erosion Reduction

These trees filter pollutants from runoff, improving water quality and supporting healthier aquatic ecosystems.

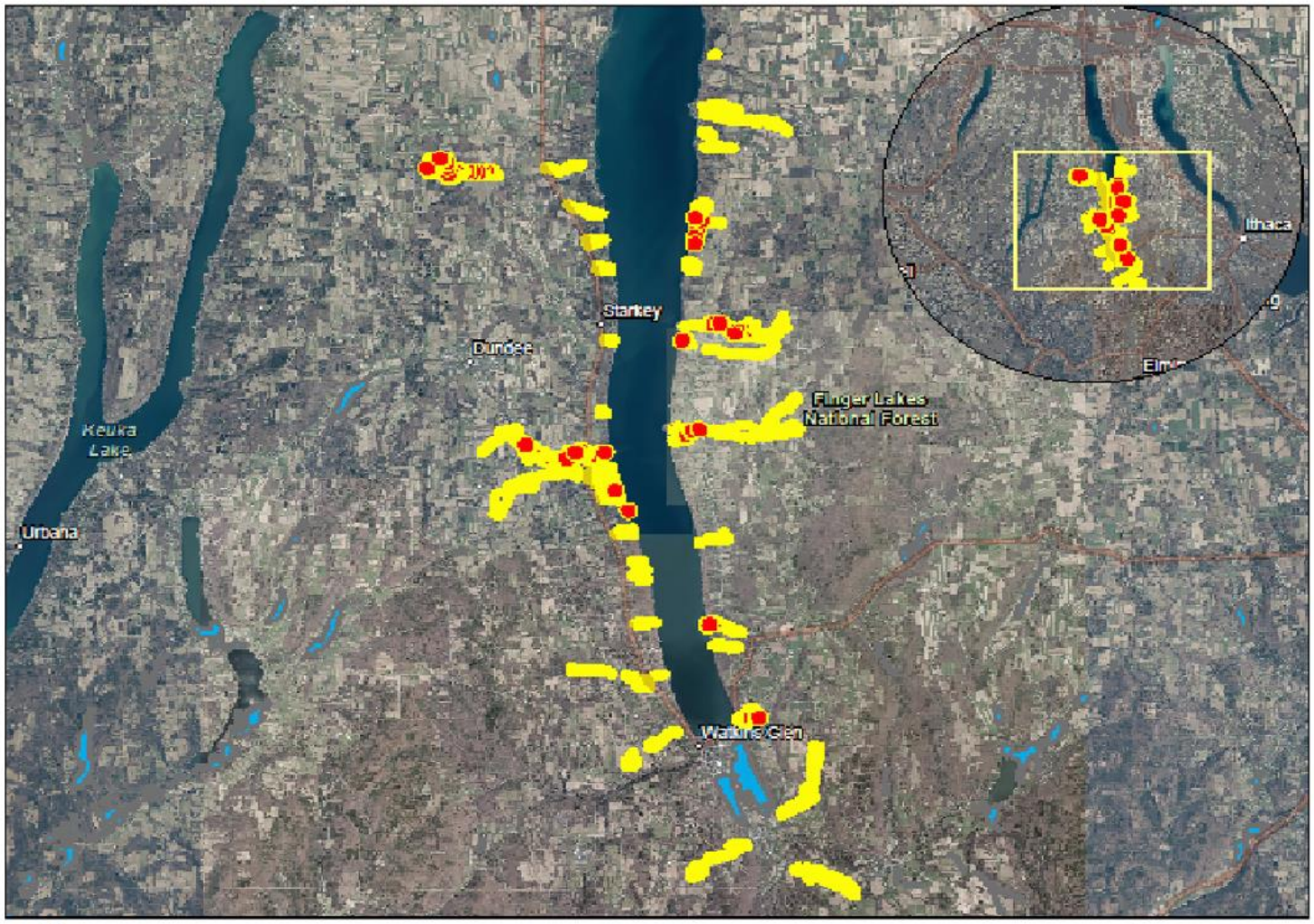
Threats Posed by HWA

HWA Invasion Impact
HWA severely damages hemlock trees, often leading to widespread tree mortality.

Ecosystem Disruption
Damage to hemlocks disrupts forest ecosystems, affecting both plant and animal species.

Water Quality Effects
The loss of hemlocks negatively impacts water quality in nearby lakes, streams, and rivers.

Pure Waters Hemlock Initiative Overview Map



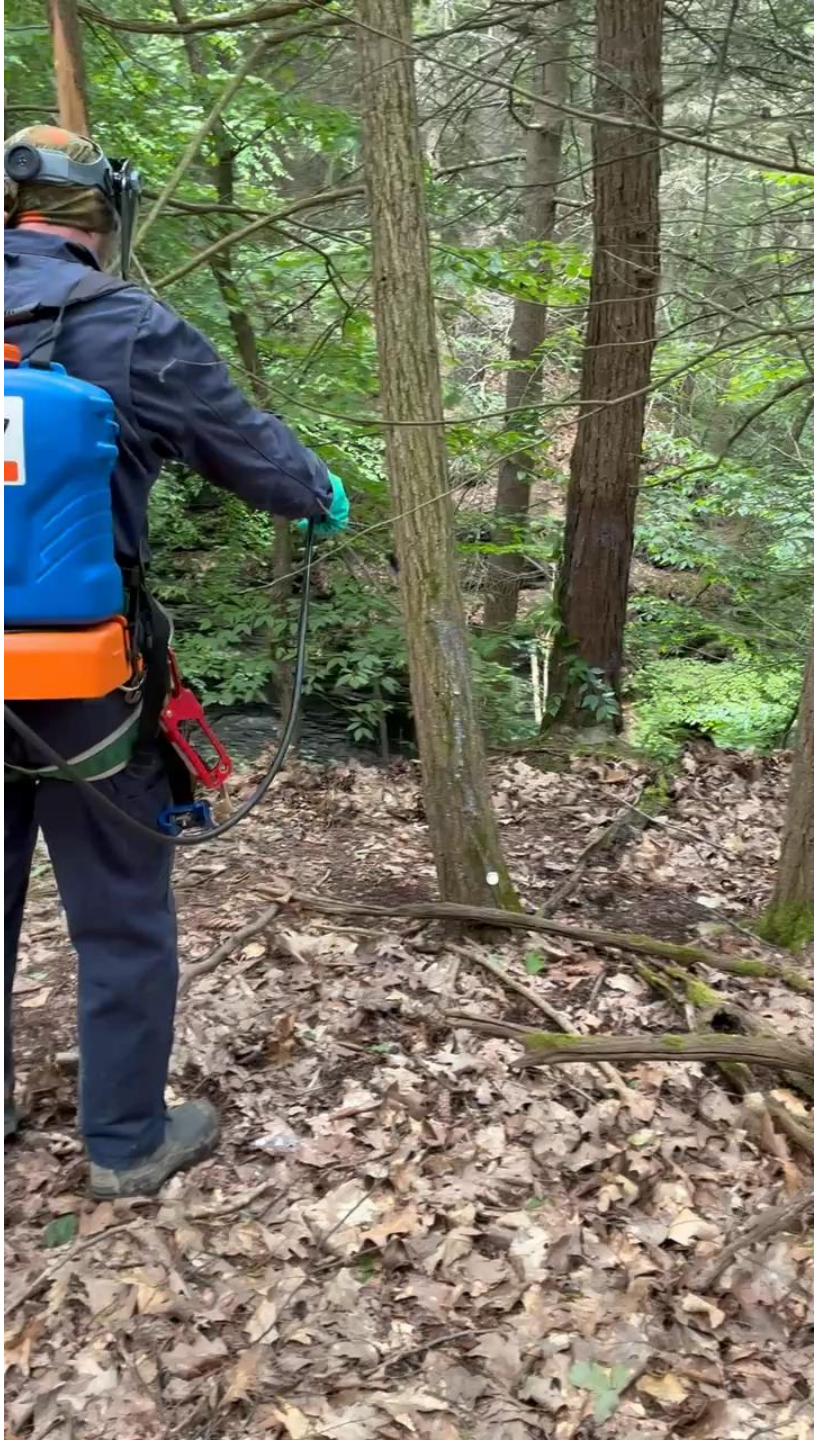
192 Surveys

>4,000 Treatable Trees

Locating critical watershed hemlock stands along Seneca Lake for future treatment of hemlock woolly adelgid.

Map authored by: Zeb Strickland
Credits: World Imagery and NYS GIS publishing clearing house

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, NYS ITS Geospatial Services, Westchester County GIS , NYS Office of Information Technology Services GIS Program



Application of Systemic Insecticides

Targeted Pest Control

Imidacloprid and Dinotefuran effectively target HWA, protecting tree health without harming other species.

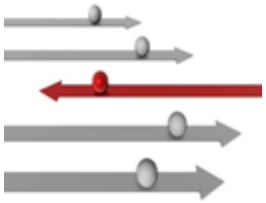
Minimized Ecological Impact

These systemic insecticides reduce environmental risks by concentrating their action within the tree.

Longer term: Biocontrols

The Cornell NYS Hemlock Initiative has established HWA natural predator beetles on state lands.

Three-Year Landscape Management Plan for Private Lands



Structured Three-Year Plan

The plan outlines a clear timeline and steps for managing and treating private lands over three years. The first phase has been funded by The Rose Family Foundation.

Collaboration with Landowners

Successful outcomes depend on active collaboration and communication with private landowners.

Focus on Treatment Outcomes

The plan emphasizes treatments that promote sustainable and effective land management results.

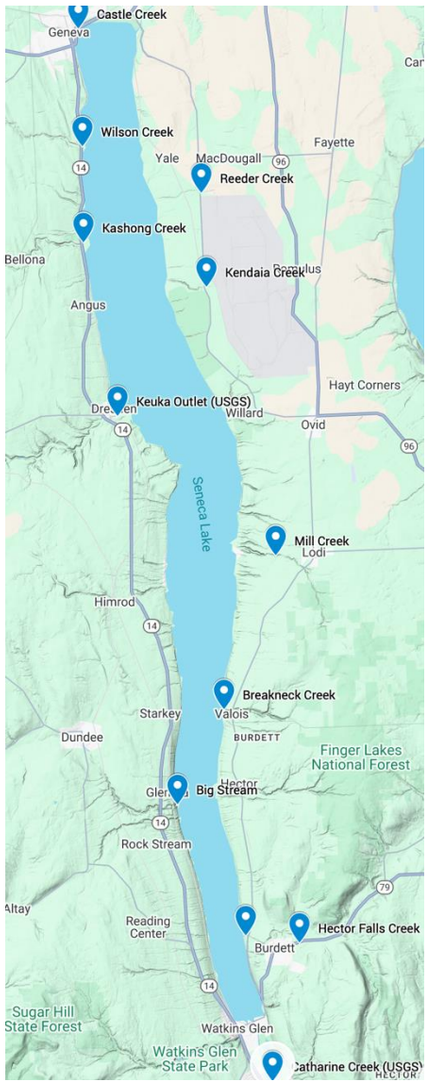
Stream Flow Monitoring

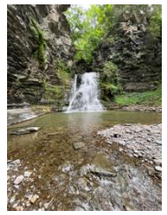
Mark Petzold
Pure Waters Vice President

Why is Pure Waters measuring Stream Flow?

- Phosphorus is a key driver of HABs. How do we know how much is entering the lake?
- The 2022 Nine Element Plan for Phosphorus Reduction estimates that 235,000 lbs of phosphorus enter Seneca Lake each year
    - The 9E Plan used 2020 flow and nutrient data from Reeder, Kashong, and Castle Creeks
- Pure Waters is collecting flow and nutrient data on 10 streams to calculate nutrient loads
    - This will help verify whether the 9E Plan estimate is accurate.
    - The 9E Plan model can be re-run with additional data inputs for greater precision.”
    - Determine if the NYS phosphorus reduction efforts are effective.
- Nutrient loads will vary by year, so long-term monitoring is needed.

Where are we measuring flow?





- Catharine Creek (USGS)
- Big Stream
- Keuka Outlet (USGS)
- Kashong Creek
- Wilson Creek
- Castle Creek
- Reeder Creek
- Kendaia Creek
- Mill Creek
- Breakneck Creek
- Glen Eldridge
- Hector Falls Creek

How do you measure stream flow?

- Manual measurements of water velocity (ft/sec) and flow area (ft^2) are used to calculate flow in ft^3/sec.

- Pressure sensors in the stream record the hourly water height.

- Flow curves are generated from these data, providing ft^3/sec at any given water height.

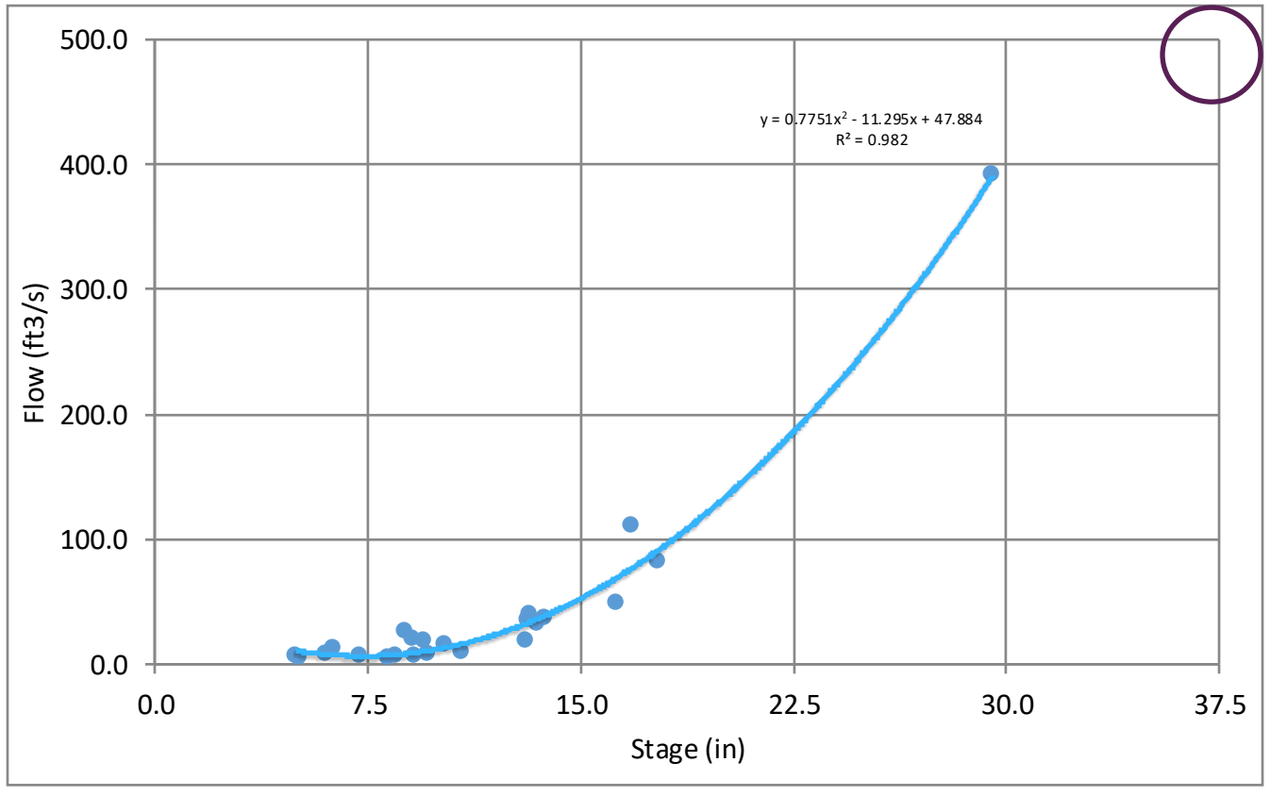
- Low flow versus high flow conditions are considered.

  - The 9E plan indicates that 80–90% of non-point source nutrients enter the lake during high-flow events.

  - High-flow conditions require different techniques for manual measurement.

Wilson Creek Flow Curve

- Hourly water height from the sensor provides the flow value, X.
- y=0.7751X2 - 11.295X + 47.884
- On 5/7 at 7:00 AM, the water height was 29.5", corresponding to a flow of 391 ft^3/sec.
- This equals approximately 10,500,000 gallons per hour.



Big Stream 6/10

- Water velocity at the bridge is ~10 ft/sec.

- Water volume was 1,100 ft^3/sec, equivalent to about 30,000,000 gallons per hour.

- Retention ponds are one method for reducing overall flow and limiting phosphorus entering the lake.

What about Phosphorus?

- Stream samples, mostly collected during high-flow events, are processed by FLI, CSI, and ESF.

- 5-14 samples per stream taken

- Phosphorus concentrations are pending, which are needed to calculate the loads.

THANK YOU!!
Steve Shaw (SUNY-ESF) – stream flow guidance
Michelle, Bill H., Jim R., Tom S., Sean M., Eric H. – site access
Stu M., Dan & Lori C., Jackson, JM, Ken S. – field assistance

Nearshore Nutrient Research

Cladophora, HABs, and Phosphorus

Thursday, September 11, 2025

Finger Lakes Institute
Hobart and William Smith Colleges

Seneca Lake PURE WATERS Association

Cladophora

- We have been getting complaints concerning the amount and odor when it is rotting on the shoreline
- Thick, slimy macroalgae that clings to hard surfaces
- Grows in the early summer, then dies off in mid-summer and washes on shore or is buried
- Seems to be more prolific since the quagga mussels arrived
  - Great Lakes see quite a bit of it
  - Uses available phosphorus before cyanobacteria take over

Research Questions

- Why do the Finger Lakes have HABs when their phosphorus levels seem too low?
- Are there consistent “hot spots” for excess Cladophora
  - If so, are they correlated with HABs?
- Could there be dynamic phosphorus concentrations near the shore that enable HABs and Cladophora?

Project Design – Data Collection

- Cladophora shoreline buildup reporting tool that mirrors the HABs tool
- Weekly nutrient sampling at six dock locations in the northern basin
- FLI students conduct monthly offshore macrophyte searches at the dock locations
- If HABs appear, sample at the site to determine blue-green chlorophyll and toxin levels
- FLI standard sampling program from the Scanlon in the northern basin
- Buoy meteorological and water data
  - Potential use of dock weather stations too

Late-May through mid-October

Cladophora Results

- Season was very long with Cladophora washing up into mid-August
- 132 total reports—86 reports of Cladophora on the shore
  - Most reports were from the northern basin
  - More reports on the west side than the east
- Odors were reported
  - Most of the time for "extensive" reports
  - Over 50% of the time for "moderate"
  - Only a few times for "minimal"
- Map of results: https://www.google.com/maps/d/edit?mid=1GCzgM8uhSbgnRtuf6y6AEezJoqqNPgc&usp=sharing

Observations So Far

- Phosphorus levels near shore are similar to levels in the middle of the lake
- Many reports concerning the lack of weeds this year
- Cladophora seemed to hang around later than normal this year (mid-August or later)
- Very few HABs this year (so far)
  - Winds have been strong
  - This year's lake level tracks very closely with 2020 (drought)
  - 2020 also had very few HABs

Next Steps

- Finish evaluations
- Analyze results—perhaps present at the FLI winter conference
- Continue Cladophora reporting next year
  - Advise DEC of our experience
- Determine whether sampling is worth doing again or consider expanding to the southern basin

Seneca Lake Pure Waters Association