

2024 State of the Lake



**CANDLEWOOD
LAKE AUTHORITY**

Preserving and Protecting Candlewood Lake Since 1972

Dear Friends of the Lake,

The Candlewood Lake Authority is dedicated to ensuring Candlewood Lake remains a thriving, safe and sustainable resource for future generations by fostering environmental stewardship, enhancing public safety and promoting a courteous boating environment.

Please consider making a donation to the CLA to support our ongoing work in safeguarding our lake. Together we can make a substantial difference!

Mark Howarth
Executive Director

Martin O'Connor
Chairman

PS: Thank you to everyone who has supported us, believes in our mission and shares our vision for a better Candlewood Lake.

CLA's New Waterfront Headquarters

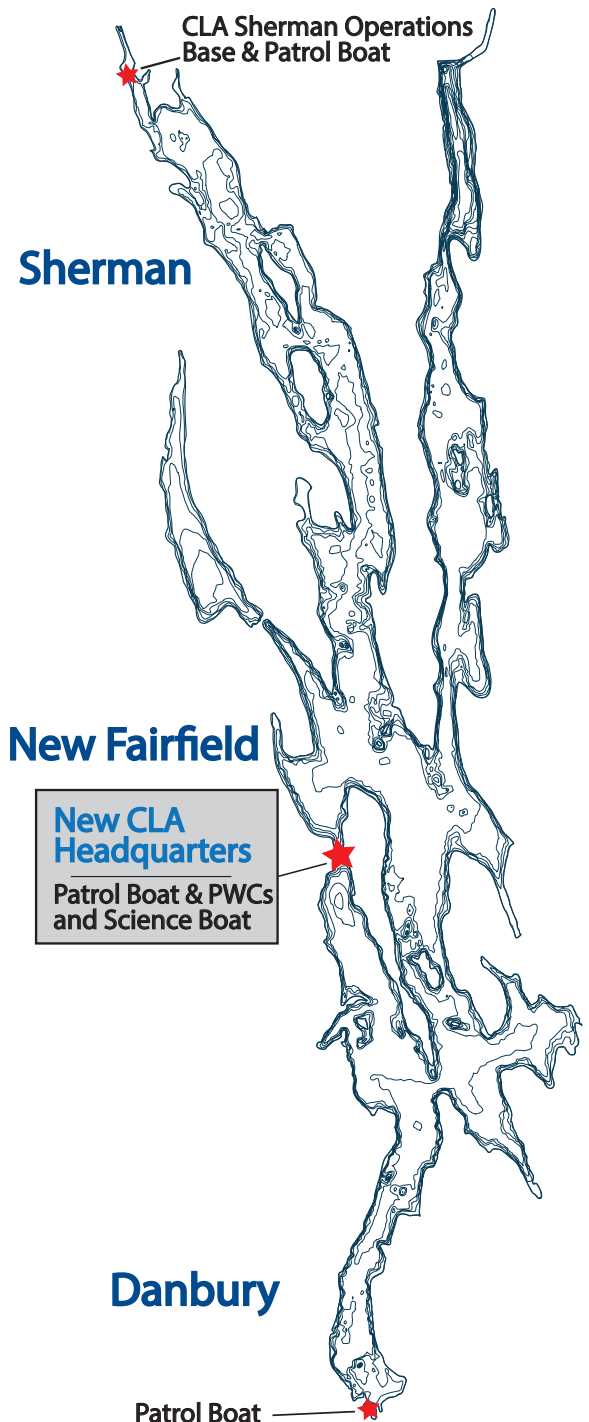
CLA's New Office Headquarters Advances Strategic Plan to Expand Presence on the Lake

After 15 years in "temporary" downtown New Milford office space, the CLA's main office has returned to the shores of the lake with a new headquarters at the former Candlewood Isle Causeway Marina in New Fairfield. Our new location allows us to station Marine Patrol boats in three locations: Sherman at our "Sherman Base" which also houses our operations department that deploys over 80 vital safety buoys, New Fairfield, and Danbury. This allows for faster response times and comprehensive coverage across the entire lake.

Our new location also allows our ecologist to spend more time on the lake collecting and analyzing data on site, saving time and money.

DONATE

www.CandlewoodLakeAuthority.org



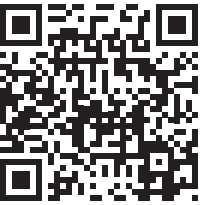
Responding to Our Changing Environment



Zebra Mussels on Boat

Understanding the Zebra Mussels in Candlewood

Zebra mussels have established a lakewide population in the lake since the first one was discovered in May of 2020. We have been monitoring their successful reproduction and rise in their population over the past five summers. That said, we anticipate their population cycle will be similar to what is seen in other lakes, with their population peaking and then fluctuating in the coming years before reaching an equilibrium within the ecosystem. Containing them to an area or eliminating them from the lake is not an option. Thankfully, the winter drawdowns will kill the zebra mussels exposed to the air, but that won't eliminate them all since they also live below the water level reached by the drawdown. One thing we are confident of is that despite the fact that our lake now has zebra mussels, it will remain the lake we love. [To find out more, watch our webinar...](#)



The CLA's three main areas of concentration to preserve the lake's health: Nutrient Pollution, Aquatic Invasive Species and Loss of Vegetation.

1 Identifying Nutrient Pollution Sources: CLA Takes Important Step in Lake Management Plan

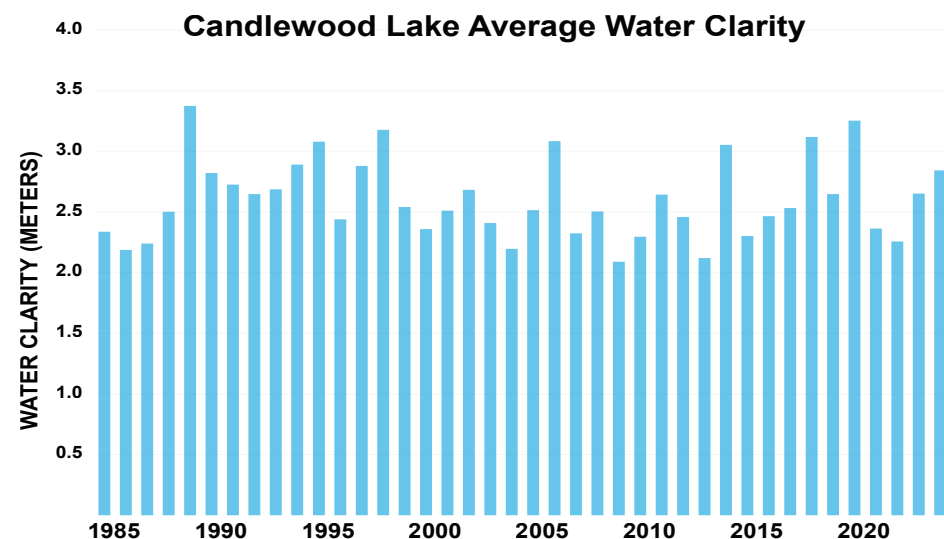
Nutrients in the lake, namely nitrogen and phosphorous, come from a variety of sources.

The Candlewood Lake Authority has embarked on a comprehensive study to identify the primary sources of nutrient pollution. Excess nutrients fuel algae growth that can cause a decline in water clarity and toxic algae blooms. This study is the framework for the CLA's Lake Management Plan.

This study, called a "Nutrient Budget", will investigate the share of the nutrient pollution coming from the below sources:

- Lake Bed Sediment
- Ground Water
- Precipitation
- Septic Systems
- Housatonic River
- Pump Up
- Watershed Runoff
- Stream Inputs

This summer, the CLA significantly increased the number of water samples taken from the lake to better understand the share of nutrients coming from internal loading (lake bed sediment). In 2025, we will examine nutrient runoff coming from streams, septic systems and storm drains.



2 Preventing New Invasive Species: Troubling Threats Lurking

Since 2021, CLA Lake Stewards have inspected 2,328 boats entering the lake on public ramps, preventing the introduction of 6 new invasive species from other bodies of water.

This winter CLA is developing a rapid response plan for any new invasive plants found in the lake, with a goal of containing or quickly eliminating the threat.

Currently the CLA is most concerned about the introduction of hydrilla and quagga mussels.



Hydrilla: Photo courtesy CT River Conservancy

Hydrilla aka "the world's worst invasive aquatic plant". Hydrilla grows faster and thicker than Eurasian watermilfoil and is more difficult to manage. It is established in Lake Lillinonah and the Connecticut River.

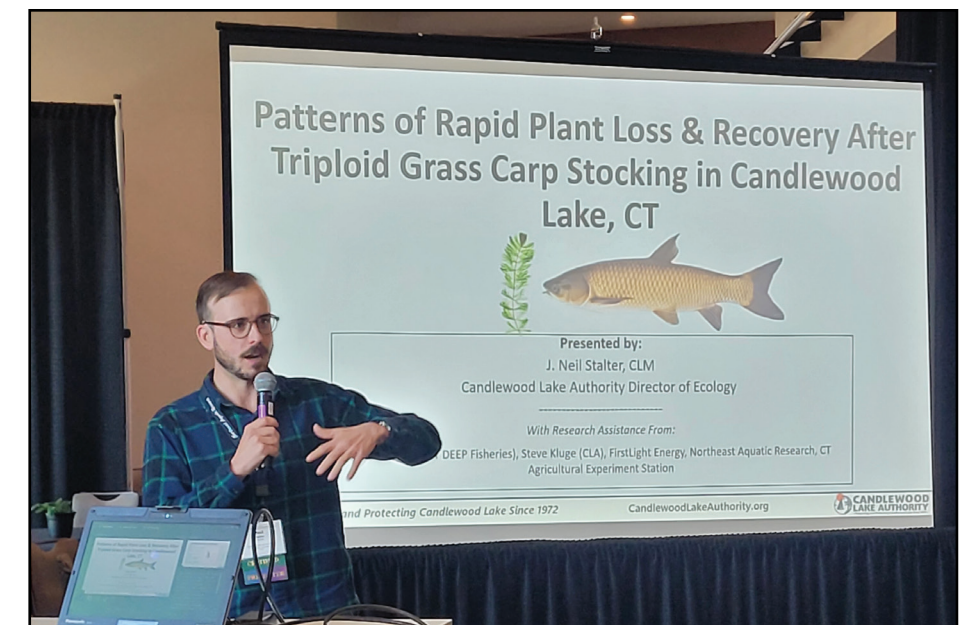
Quagga Mussels have a larger impact than zebra mussels and can rapidly populate more of the lake bed than zebra mussels. They are established nearby in the Hudson River.

3 Restoring Balance: Encouraging a Managed Return of Lake Vegetation

In 2022, the lake lost nearly all of its plants due to several factors including the sterile grass carp. While overly dense vegetation can be a nuisance, aquatic weeds are a critical component in lake ecosystems and lake health. Our goal is for the lake to have some vegetation to support a healthy ecosystem, but not a return to a level of vegetation that negatively impacts boating and recreation on the lake.

In response, DEEP Fisheries, with assistance from the CLA, began removing some of the sterile grass carp that were initially stocked in 2015 and 2017 to control excessive, invasive milfoil. A total of 459 of the original 8,903 grass carp have been removed to date.

This season we observed some regrowth of milfoil as well as an increase in native eelgrass, but plants are still seldom found.



CLA Director of Ecology, Neil Stalter, presents at the North American Lake Management Society's Symposium in November at South Lake Tahoe.

CT Vessel Registration Change - Boaters must have a valid "Individual Aquatic Invasive Species Stamp" or "Vessel Aquatic Invasive Species Decal." In 2025, the fee will no longer be included in your boat registration; it must be purchased separately. Visit the DEEP website for more details. This change ensures all lake users, including out-of-state boaters, contribute to invasive species management.

The Candlewood Lake Authority's Lake Steward Program is funded by the state's Aquatic Invasive Species Stamp funds.



Responding to Changing Recreational Lake Activity

The summer of 2024 set multiple records: the hottest on record and the highest number of vessels docked along the shoreline. In response, CLA Marine Patrol logged unprecedented hours on the water. To address rising nighttime activity in recent years the Marine Patrol has expanded its night coverage.

Additionally, the Marine Patrol has focused on educating boaters on safety and being courteous lake users. These enhanced patrol efforts have also led to the need for new equipment and technology.

Officers Can See In the Dark

The FLIR (Forward-Looking Infrared) system on our patrol boat, made possible by a donation, is a critical search and rescue tool which also doubles as night vision for the Patrol. With increased nighttime patrols, visibility has become crucial for the CLA Marine Patrol.



CLA Marine Patrol to Expand Use of PWCs

The CLA Marine Patrol fleet includes two personal watercraft (PWCs), also donated, were recently upgraded with lights and sirens. These PWCs enhance officers' ability to navigate near shorelines and in crowded areas, allowing for improved interaction with boaters and lake users.

What Do CLA Marine Patrol Officers Do Beyond Enforcing Boating Laws?

- Rescue Stranded Vessels and People
- Conduct Voluntary Safety Inspections at Launches
- Teach CT Safe Boating Certification Classes
- Respond to Accidents and Medical Emergencies
- Remove Floating Hazards from Boat Paths
- Fire Prevention, Mitigation and Education

New Video Series: Safety and Courtesy

The first video can be found on our website and social media...



...with more videos to come next season.

PROTECTING CANDLEWOOD LAKE
COLD WATER SAFETY

▶ 0:07 / 1:07



Keep up with what is happening on Candlewood Lake!

Follow us on Facebook or Instagram and sign up for our emails by going to www.candlewoodlakeauthority.org and click on "Subscribe".

DONATE

You Can Donate Online At
www.CandlewoodLakeAuthority.org

