

What will this Project do to Stop Hydrilla?

The U.S. Army Corps of Engineers (USACE) Buffalo District is continuing its efforts to treat hydrilla in the vicinity of Wells College Bay on Cayuga Lake, where hydrilla was first observed in September 2016. For the 2023 efforts, USACE Buffalo will again be collaboratively

implementing the project with the New York State Department of Environmental Conservation (NYSDEC). Treatment will focus on the use of fluridone (Sonar® H4C) and a combined 238.5-acre area in Wells College Bay will be treated by USACE Buffalo and NYSDEC, divided into the following areas (see Figure 1):

USACE Treatment Areas

- **Northern Treatment Area:** Approximately 95.9 acres between the Village Dock to Great Valley Road, comprised of four different areas.
- **Shallow Treatment South Area:** Approximately 10.4 acres from Wells Road North to Lafayette Street, at depths between 0-12 feet.
- **Deep Treatment South Area:** Approximately 9.5 acres from Wells Road North to Lafayette Street, at depths between 12-18 feet.

NYSDEC Treatment Areas

- **Little Creek Treatment Area:** Approximately 0.2 acres near the mouth of Little Creek.
- **Long Point Treatment Area:** Approximately 2.7 acres south of Long Point State Park.
- **Long Point State Park Shallow Treatment Area:** Approximately 0.8 acres near the Long Point State Park Boat Launch.
- **South Deep Treatment Area:** Approximately 34.5 acres north of Poplar Ridge Road to approximately 1600 feet south of State Route 90.
- **Southern Shallow Treatment Area:** Approximately 84.5 acres north of Poplar Ridge Road south to Long Point State Park.

The Sonar® H4C application will be split into a total of 10 treatments for the Northern Treatment Area: two applications at 20 parts per billion (ppb) and eight applications at 13.75 ppb occurring over treatments 3 through 10. Sonar® H4C application will be split into a total of 8 treatments for the Shallow Treatment South and Deep Treatment South areas. For the Shallow Treatment South area, four applications at 20 ppb will be followed by four applications at 10 ppb. For the Deep Treatment South area, treatments will be split into four applications at 10 ppb, followed by four applications at 8.75 ppb.

Post-treatment monitoring will be conducted to determine the success of the treatment and whether future treatments will be needed. The 2022 post-treatment assessment report contains a summary of the management efforts including water monitoring results and is available on the Hydrilla Collaborative website at:

<https://hydrillacollaborative.com/Home/CaseStudies>

When will Treatment Occur?

The initial application of Sonar® H4C is targeted for the week of June 26, 2023, and a total of 10 treatments will occur between June and August in the Northern treatment area, and eight treatments will occur in the Treatment South and Deep Treatment South areas. Treatments will initially occur approximately 7 days apart, depending on dilution rates within the lake treatment area.

Herbicide will routinely be applied on Wednesdays, unless there are weather delays. The herbicide will be applied only if there are favorable weather conditions. Any changes in the treatment schedule will be communicated to the public.

Herbicide Information

For more information on Sonar®, refer to the link below for product labels:

<https://www.solitudelakemanagement.com/product-labels-new-york-updates>

Will there be any Restrictions on Use of the Lake during Treatment?

A water sampling program will be implemented to monitor fluridone concentrations in the lake. The program will ensure that the herbicides are applied at the targeted concentration rates, and the monitoring results be used to determine herbicide dispersion. The Cayuga County Health Department will again be posting the monitoring results on their website which can be accessed at: <https://www.cayugacounty.us/1540/Eradication-Project-in-Aurora>

Restrictions

There are no restrictions for shing, swimming, or livestock/pet water consumption at the proposed application rates of Sonar® H4C.

There **ARE** restrictions for using water treated with Sonar® H4C for irrigation and for potable water treated with Sonar® H4C if treated water concentrations are above what is indicated in Table 1.

Table 1 Water Use Restrictions

Product	Established Row Crops/Turf/Ornamental Plants	Tobacco, Tomatoes, Peppers and Similar Plants, and Newly Seeded Crops/Seedbeds or Areas to be Planted Including Overseeded Golf Courses	Nursery, Greenhouse, Hydroponics	Potable Water
Sonar® H4C	Do not use if concentrations > 10 ppb	Do not use if concentrations > 5 ppb	Do not use if concentrations > 1 ppb; <i>FastEST</i> required	Do not use if concentrations > 50 ppb*

* Applications of Sonar® H4C will be below the listed thresholds. **ppb** parts per billion

Signs will be placed at all public access locations within the treatment area to notify the public of these restrictions.

Tentative Treatment Schedule (the Week of...)

WEEK OF	Date	Treatment Details
WEEK OF	June 26	1st Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	July 3	2nd Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	July 10	3rd Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	July 17	4th Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	July 24	5th Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	July 31	6th Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	August 7	7th Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	August 14	8th Sonar® H4C Treatment (Northern Treatment, Shallow Treatment South, and Deep Treatment South)
	August 21	9th Sonar® H4C Treatment (Northern Treatment Area)
	August 28	10th Sonar® H4C Treatment (Northern Treatment Area)

Who Can I Contact for More Information?

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CAYUGA LAKE AT AURORA, NEW YORK

2023 HYDRILLA CONTROL DEMONSTRATION PROJECT

Stop hydrilla from expanding further into other areas of New York State and the Great Lakes!



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What is Hydrilla and What Concerns Does it Pose to Cayuga Lake?



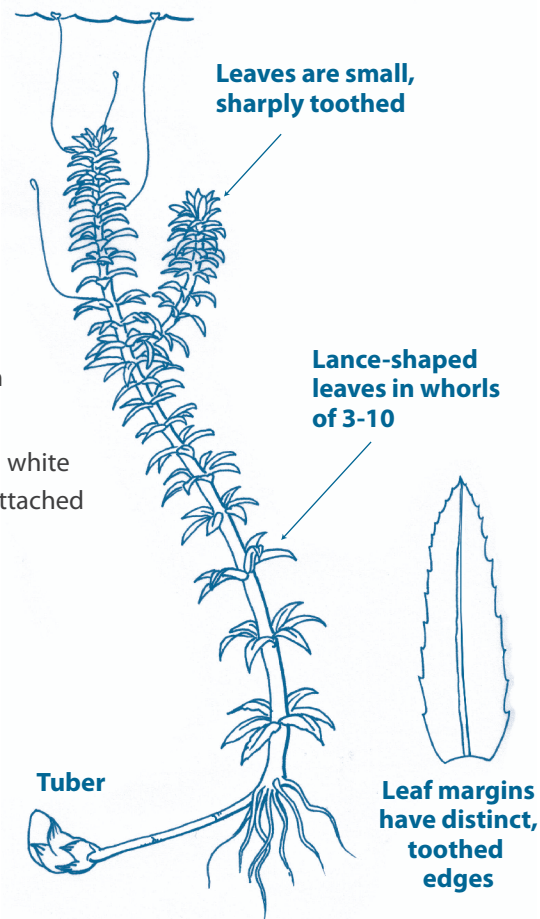
Source: Scott Kishbaugh, NYSDEC Hydrilla whorls up close

Hydrilla is a very aggressive aquatic invasive plant native to Korea. It is a submerged aquatic plant that is typically rooted in shallow water, with long stems that can grow up to 30 feet in length and up to one inch per day. These stems branch at the water's surface and grow horizontally, forming thick, dense mats. Hydrilla also produces tubers, small potato-like structures, which store food for the plant and also allow it to overwinter in the substrate of the waterbody and sprout in the spring.

What Does Hydrilla Look Like?

Key plant identification features:

- Pointed, bright green leaves about 5/8 inch long with small teeth on the edges
- Leaves generally grow in whorls of 3-10 around the stem, though 5 leaves are most common
- Floating white flowers and small white to yellowish potato-like tubers attached to the roots



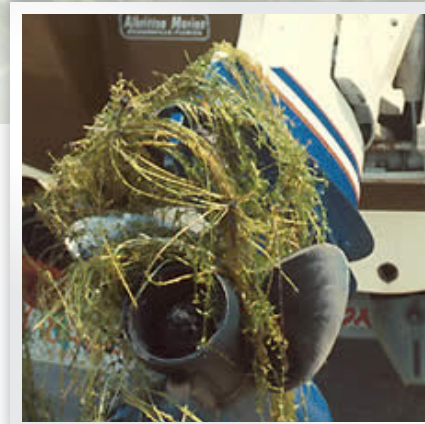
Source: Cayuga Lake Watershed Network 2012

Source: Leslie Mehrhoff, from the U.S. Forest Service



How Does it Spread?

- Primary method of spreading is through hydrilla fragments on recreational boats and trailers
- Even tiny fragments of hydrilla can sprout roots and establish new populations
- Fragments float and can be spread via wind and water currents



Source: Jeff Schardt, Florida DEP Hydrilla on boat

Why Do We Need to Stop It?

- It is one of the world's most invasive aquatic plants.
- It can grow up to one inch per day.
- It forms dense mats that block sunlight and displace native plants.
- It decreases dissolved oxygen levels which can lead to fish kills.
- It destroys waterfowl feeding areas and fish spawning sites.
- It reduces the weight and size of sportsfish due to loss of open water and native vegetation.
- It excludes boating, fishing, and swimming due to its thick mats.
- It can hurt the local economy due to impacts on tourism and waterfront property values.

Figure 1 2023 Project Area Map

