

CAYUGA LAKE, AURORA AND ITHACA, NY HYDRILLA CONTROL DEMONSTRATION PROJECT

AQUATIC PLANT CONTROL RESEARCH
PROGRAM, RIVERS AND HARBORS ACT OF
1958 (P.L. 85-500), AS AMENDED

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Photo: Ithaca CVB



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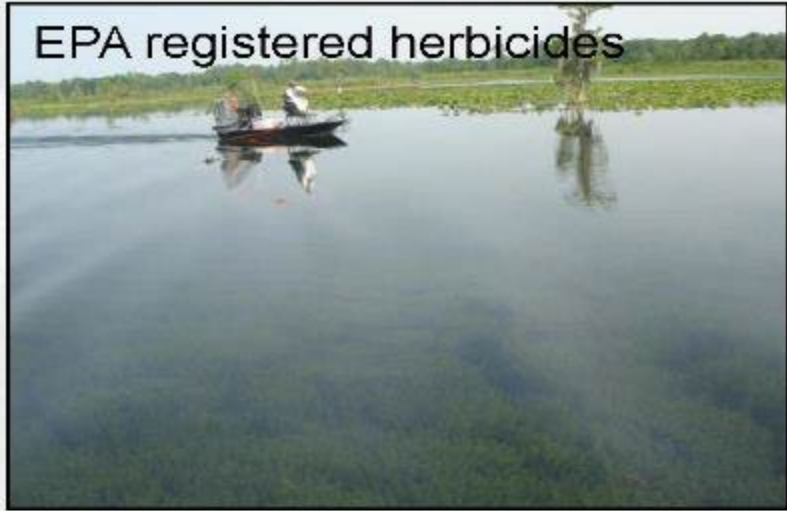
GOAL: PROTECT WHAT'S IMPORTANT

1. Public safety – responsible use of a well understood herbicides
2. Protect and restore the Great Lakes/Finger Lakes and the associated ecological and economic benefits
3. Significantly reduce the risk of hydrilla spreading and potentially eradicate it in the project area





Management Options for Hydrilla are Limited



Do Nothing



SELECTED HERBICIDES AND USE RESTRICTIONS



Product	Irrigation – Row crops, turf, trees or plants	Irrigation – Newly seeded areas, including overseeded golf course greens	Irrigation – Nursery, Greenhouse, Hydroponics	Drinking, culinary or food processing purposes
Harpoon (chelated copper)	None	None	None	< 200 ppb
Sonar H4C (fluridone pellet)	7 days	Fastest required	< 1ppb	< 50 ppb*

* Applications of these products will be below the listed thresholds.



Aurora





Treatment

North Treatment Areas (98.8 acre)

Sonar H4C

7 applications @ 20 ppb

Weekly on Wednesdays;

Jun 28 – Aug 7



2024 Fluridone Treatment Areas
Cayuga Lake at Aurora, NY



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Water Monitoring

Water samples were collected weekly during the treatment period, including finished drinking water

All finished drinking water samples < 0.5 ppb



2024 Contractor Water Sample Sites
Cayuga Lake at Aurora, NY



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Cumulative Point Intercept Sampling

The percent occurrence of hydrilla was 1.3% or less throughout the year

Had effective control within treatment areas with the exception of Mckenzie-Childs Cove

Still have good frequency of occurrence of other SAV



2024 USACE Hydrilla Points
Cayuga Lake at Aurora, NY



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2024 Hydrilla Points Cayuga Lake at Aurora, NY

0 3,600 7,200 14,400 Feet



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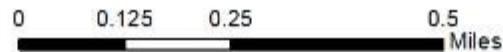
ITHACA



Photo: Ithaca CVB



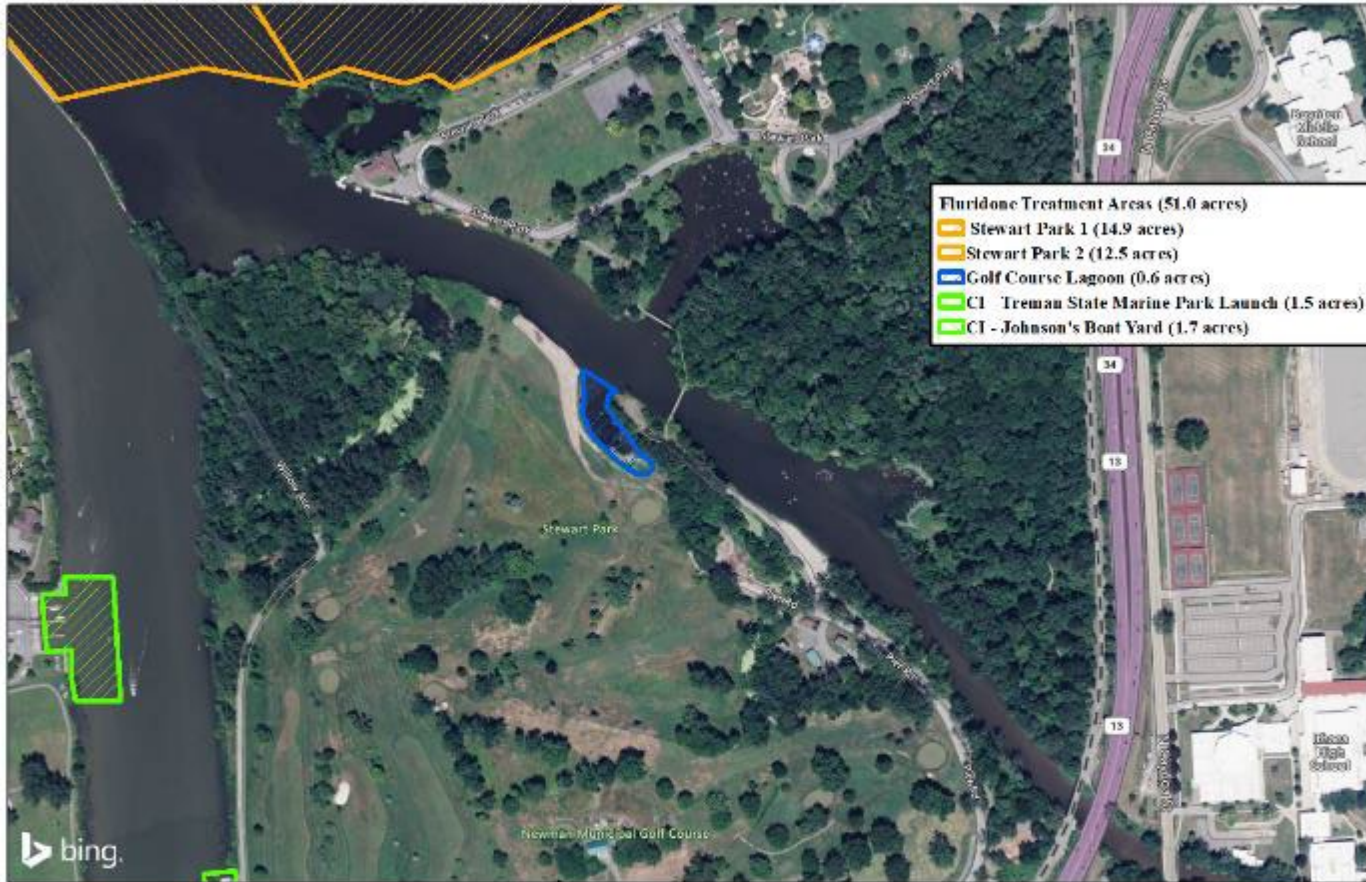
**2024 Fluridone Treatment Areas
Cayuga Lake at Ithaca, NY**



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FALL CREEK

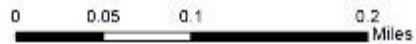


Sonar H4C, 0.6 acres

- 7 applications @ 20 ppb
- Weekly on Thursdays
- Jun 27 – Aug 8



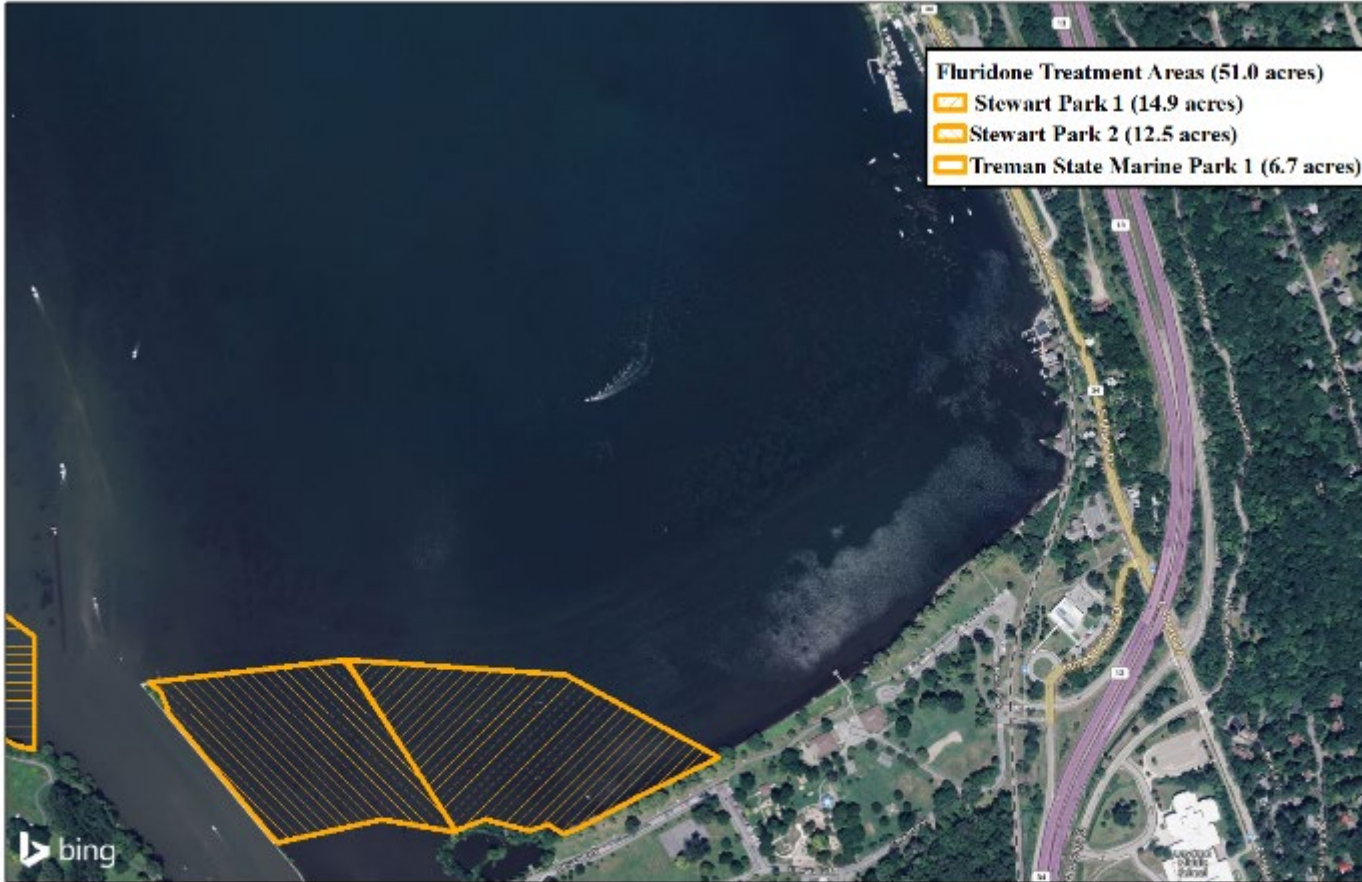
2024 Fall Creek Treatment Area
Cayuga Lake at Ithaca, NY



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CAYUGA LAKE EAST



Sonar H4C, 27.1 acres

- 2 applications @ 20 ppb
- 8 applications @ 13.75 ppb
- Weekly on Thursdays
- Jun 29 – Aug 29



2024 Cayuga Lake East Treatment Areas
Cayuga Lake at Ithaca, NY



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CAYUGA LAKE WEST



Sonar H4C, 6.7 acres

- 2 applications @ 20 ppb
- 8 applications @ 13.75 ppb
- Weekly on Thursdays
- Jun 27 – Aug 29

Fluridone Treatment Areas (72.3 acres)

- Stewart Park 1 (14.9 acres)
- Stewart Park 2 (12.5 acres)
- Tremman State Marine Park 1 (6.7 acres)
- Fall Creek (18.7 acres)

2023 Cayuga Lake West Treatment Area Cayuga Lake at Ithaca, NY



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CAYUGA LAKE INLET



Sonar H4C, 3.4 acres

- 7 applications @ 20 ppb
- Weekly on Thursdays
- Jun 29 – Aug 8

Sonar H4C, 13.2 acres

- 2 applications @ 20 ppb
- 8 applications @ 13.75 ppb
- Weekly on Thursdays
- Jun 27 – Aug 29



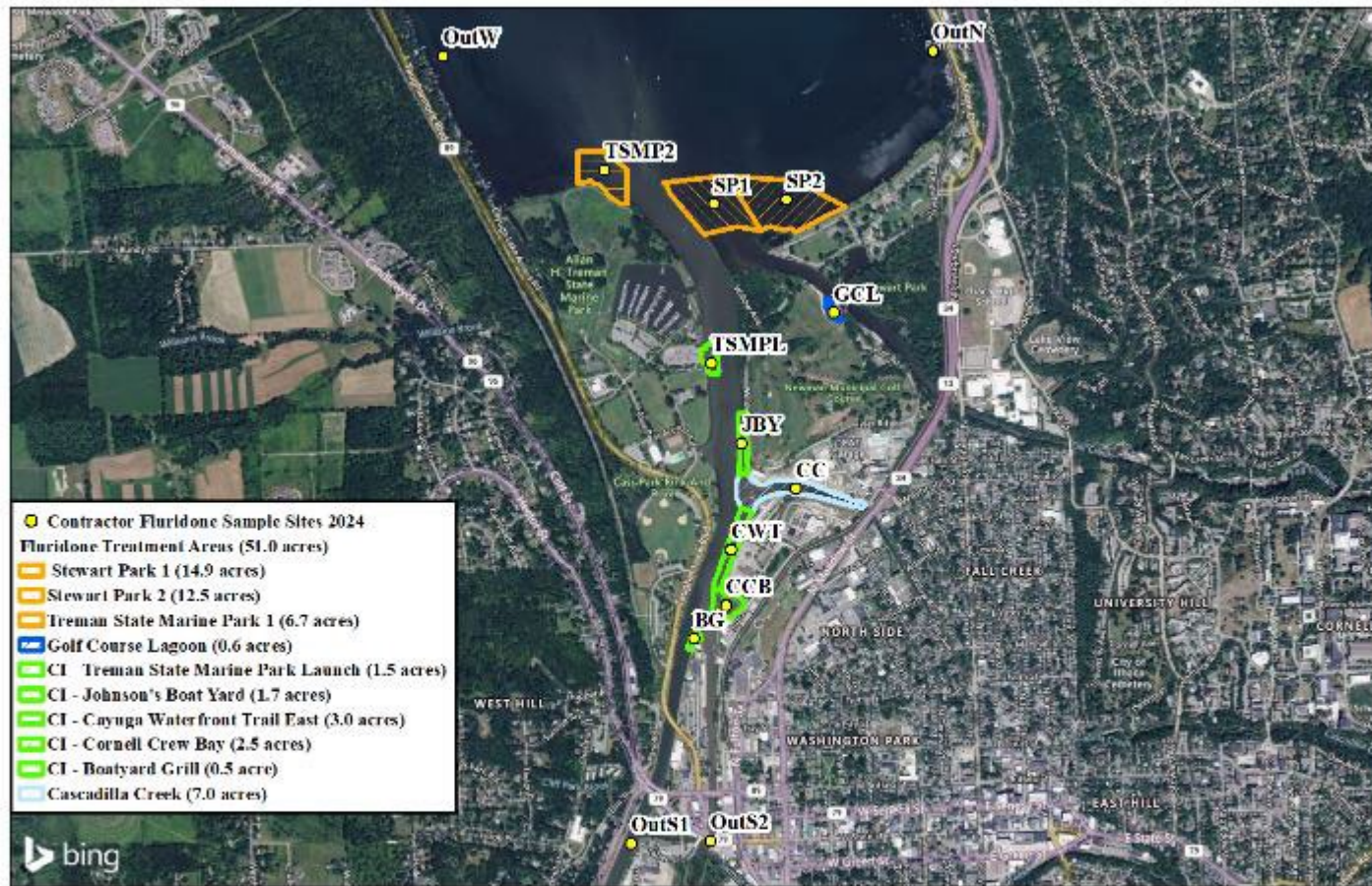
2024 Cayuga Inlet Treatment Areas
Cayuga Lake at Ithaca, NY



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WATER MONITORING



Water samples were collected weekly during the treatment period, including finished drinking water

All Bolton Point water results <0.5 ppb

2024 Fluridone Water Sample Sites
Cayuga Lake at Ithaca, NY



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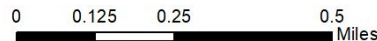
POINT INTERCEPT SAMPLING



- Hydrilla was found for two of the three sample dates. Found two locations in October which was 0.5%.
- Frequency of other aquatic plants in the project area is high.
- Fall Creek and portions of the Cayuga Lake Inlet are areas of concern.



2024 Hydrilla Locations
Cayuga Lake at Ithaca, NY



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PATH FORWARD



- Complete data processing and analysis
- Prepare post-treatment summary reports, end of February 2025
- Confer with experts and stakeholders to draft plans for 2025
 - Aurora – address hydrilla in northernmost areas including Ellis Point and McKenzie Childs Bay
 - Ithaca – address hydrilla in Inlet



ADDITIONAL RESOURCES



- New York Invasive Species Information: <http://www.nyis.info/>, select hydrilla from the aquatic plants tab
- Cornell Cooperative Extension/Tompkins County: www.stophydrilla.org, includes FAQs regarding fluridone
- Finger Lakes PRISM: <http://fingerlakesinvasives.org/>
- Cayuga Lake Watershed Network: <http://www.cayugalake.org/>
- Center for Aquatic and Invasive Plants: <http://plants.ifas.ufl.edu/node/183>
- SOLitude Lake Management:
<http://www.solitudelakemanagement.com/product-labels-new-york-2017>
- Great Lakes Hydrilla Collaborative: <http://hydrillacollaborative.com/>