

# Hydrilla in Cayuga Lake, Cayuga County

## THREAT:

Hydrilla is the world's most successful aquatic invasive plant.

Hydrilla rapidly spreads and causes severe impact to water quality, native plant and fish communities, recreation, irrigation, and water treatment facilities.

Hydrilla is difficult and costly to control - multiple chemical applications across multiple years, high cost of benthic matting and monitoring, and difficulty using triploid grass carp for control.

Hydrilla's known infestation has been mapped 27 acres of Cayuga Lake shoreline, south of Wells College.

## HUGE CONCERN:



Hydrilla in Cayuga Lake. Photo: Kathryn DesJardin

The shallow Northern shelf of Cayuga Lake (5,800 acres) is prime habitat for the fast-growing, highly competitive Hydrilla to flourish and overrun the ecosystem, at which point control of the Northern end of Cayuga Lake will be futile.

Due to the Finger Lakes' heavy human use and high economic value to the region, Hydrilla control is of paramount importance.

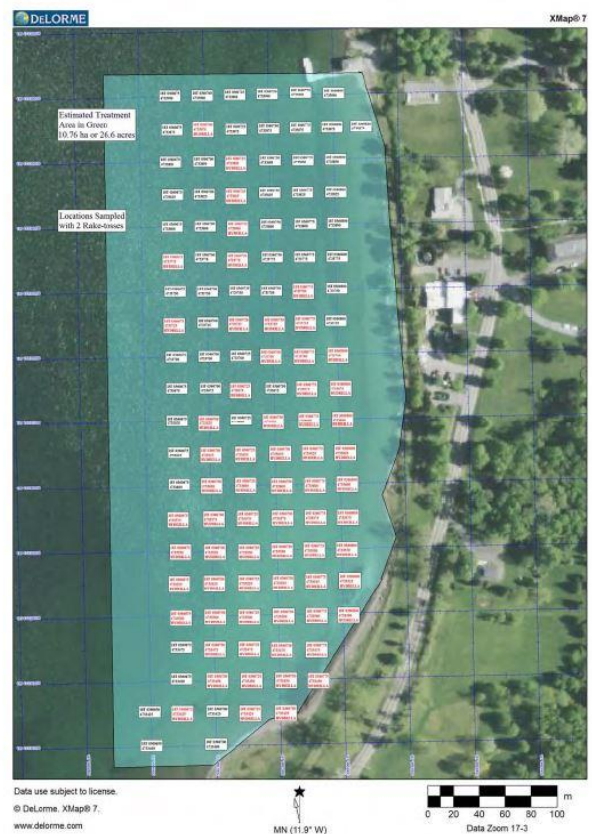
## ESTIMATED NEED:

- Chemical treatment to inhibit further tuber growth and formation- \$175,000 annually
- Chemical treatment to prevent Hydrilla fragments and turions from spreading and produce additional populations
- Monitoring of the plant communities, tuber density, and sampling efforts pre-and post-treatment- \$21,000 annually
- Coordination of the project- \$67,500 annually
- Public outreach and communication including targeted marketing and workshops- \$11,000

The Hydrilla infestation in Cayuga Lake, near Aurora, must be addressed to eliminate the risk of invasion to additional locations within Cayuga Lake, especially the northern shelf, and to the Finger Lakes and the Great Lakes basin.



Hydrilla in Cayuga Lake. Photo: Kathryn DesJardin



Area of infestation in Cayuga Lake, south of Wells College. Mapping created by Racine-Johnson Aquatic Ecologist, 2016

## **2017 Cayuga Lake DRAFT Hydrilla Work Plan**

The overall goal is to eradicate Hydrilla from Cayuga Lake near Aurora, in connecting tributaries, and prevent further spread in Cayuga Lake, the other Finger Lakes, and the Great Lakes. Eradication will prevent habitat loss for fish and other organisms.

The activities listed below will be conducted in 2017 conditional upon support for treatment and outreach. These activities will reduce the ecological threat posed by Hydrilla by beginning the process to eradicate and prevent further spread of Hydrilla throughout Cayuga Lake, the Finger Lakes, and the Great Lakes.

### **2017 TOTAL REQUEST: \$274,500**

Herbicide Treatment: Herbicide and required water quality monitoring will be applied to approximately 30 acres of Cayuga Lake and the associated tributaries- COST: \$175,000

Plant Monitoring: Monitoring of Hydrilla will take place in Cayuga Lake to determine plant location, growth, spread, and treatment timing. Tuber monitoring will also be conducted in the spring and fall to determine density and treatment effectiveness- COST: \$21,000

Coordination: A Hydrilla Coordinator will take the lead to contract with chemical herbicide treatment, prepare permits, work with the stakeholders to coordinate the various groups, and perform data analysis and reporting- COST: \$65,000

Travel: Cost for Coordinator to survey, monitor, meet with stakeholders, and manage program to control Hydrilla in Cayuga Lake- COST: \$2,500

Public Outreach: Public meetings and public education and outreach will be planned for 2017. These activities will further reduce the ecological threat from Hydrilla by educating the public on Hydrilla and how to prevent its spread. Programs will be conducted by entities such as: Cayuga County Planning, Cayuga County Cornell Cooperative Extension (CCE), Cayuga Lake Watershed Network (CLWN), Floating Classroom (FC)- COST: \$11,000