



HONEOYE LAKE WATERSHED TASK FORCE

Honeoye Lake Watershed Task Force Position on Aquatic Vegetation Management

The Honeoye Lake Watershed Task Force is an organization dedicated to monitoring lake conditions and conducting activities designed to improve water quality. Its members include town supervisors or their appointed representatives from all towns in the watershed and the Honeoye Valley Association.

Honeoye Lake supports a perennial, dense aquatic plant community, characteristic of shallow, nutrient-enriched lakes. Since 1987, mechanical harvesting has been employed on Honeoye Lake primarily to improve lake access, while also removing nutrients stored in plants.

Good lake management requires the use of sound scientific analyses based on established water quality principles to determine the most cost effective, environmentally friendly, and legally permitted management techniques. In 2008, the Honeoye Lake Watershed Task Force revisited the vegetation management approach. A committee was established to review options and develop a plan to manage aquatic plants. The committee consisted of Canadice and Richmond residents and town board members, lake consultants and NYS DEC. A public hearing was held to hear comments and gather suggestions from all interested parties. The final Honeoye Lake Macrophyte Management Plan (HLMMP) was approved by the NYS DEC and adopted by the towns. It is available at: <http://www.co.ontario.ny.us/DocumentCenter/View/1308/Honeoye-Lake-Macrophyte-Management-Plan?bidId=>

The HLMMP considered all known techniques of aquatic vegetation control including mechanical, chemical, and biological approaches as well as the “no management” option. Each technique was evaluated based on effectiveness, longevity, cost, acceptability to lake users, and the ability to obtain applicable regulatory permits. While all management strategies have costs and benefits, mechanical harvesting emerged as the best technique to manage nuisance vegetation growth in Honeoye Lake across the multiple criteria. The harvesting program remains under continuous review to improve service to residents and protect the Honeoye Lake ecosystem. Despite anecdotal reports to the contrary, the use of mechanical weed harvesting has not been demonstrated in any scientific studies to be a causative or aggravating factor in Harmful Algal Blooms.

The towns of Richmond and Canadice contribute a combined ~\$10,000 annually to meet program costs. Another \$30,000 in New York State funds administered through Ontario County, brings the annual budget to \$40,000. The program budget covers a seasonal staff of two people and operations and maintenance of the harvester, shoreline barge, and dump truck to transport harvested plants to composting sites.

Benefits of Aquatic Vegetation Harvesting have been demonstrated to be:

- Enhance lake use for swimming, boating and water skiing by repeatedly removing aquatic plant growth near the water surface while allowing growth near the lake bottom for a healthy lake ecosystem (fish habitat, oxygen production, nutrient absorption, etc.),
- **Removed 360 wet tons of vegetation in 2017 that would have otherwise remained, decayed and fertilized future “crops” of aquatic plants and algae with ~1,440 lbs. of phosphorous. One pound of phosphorus can produce 500 pounds of wet algae,**
- Reduce the total mass of vegetation growing in 3 to 6-foot depth zone,



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- Reduce shoreline turbidity by keeping aquatic plant root systems intact and holding the bottom substrate in place, and
- Enhance the fishery by providing additional weed edges where game species feed.

In addition to these proven results since program inception, another documented change in the aquatic vegetation of Honeoye Lake has been a tremendous reduction in Eurasian water milfoil, an invasive species that can impact preferred native plant species by its rapid growth.

A concern of using aquatic vegetation harvesting is that the harvester doesn't pick-up all the weed fragments that it creates and, as a result, excess weed fragments are deposited in nearshore areas and upon beaches. Weed fragments are also created by boat props, wind action, and natural plant die off, all adding significantly to the nearshore and shoreline accumulation of weed fragments. To address this concern, a shoreline collection barge was added to the program in 2017. Residents can call or email the Ontario County Aquatic Vegetation Management Program to request shore side pick-up of accumulated weed fragments from early July to mid-October. The barge service has been well received by lakeshore property owners by removing aquatic weed fragments regardless of how they were created in the lake.