

Little York Lake Management Plan: Executive Summary

In a little over 200 years, a lake that was formed by the retreat of the glaciers, has been dammed, developed and is now in danger. Cultural eutrophication is quickly claiming this lake accelerated by the introduction of aquatic invasive species (AIS).

Sediment buildup and excessive vegetation have led to impacts to all of the following uses of the lake:

- Fishing
- Swimming
- Aesthetics
- Boating
- Property value/use
- Use of shoreline

The planning team identified the following objectives in priority order:

- A. Reduce sediment and sedimentation in the lake.
- B. Manage aquatic vegetation including invasives such as variable leaf milfoil.
- C. Establish an active and ongoing management process to restore and maintain the lake and its ecosystem.

The planning team evaluated 10 tools for their applicability to meeting the objectives.

The following table summarizes key attributes of these tools along with their fit in the overall lake management process within the stated goals:

Tool	Pros	Cons	Fit
1. Benthic Barriers	Effective Inexpensive	Tactical only Labor intensive Permits required Weeds only	May be good for quick tactical response to new infestations
2. Hand Harvesting	Effective Immediate results	Labor intensive May be expensive at start Permits required Weeds only	Good for ongoing maintenance of weed problem
3. Drawdown	May reduce weed and other AIS populations May reduce sediment	Uncertain impact Will require approval in order to impact sediment	May be a tool in a maintenance program but unclear
4. Aeration	Reduces sediment May reduce weeds	Program price Uncertain results Ongoing operations (multi-year)	May be useful for maintenance of sediment base
5. Biologicals	Reduces weeds over time	Weeds only	Probably not useful

		Insects are not scalable Carp faces permitting challenges	
6. Herbicides	Effective	Requires (almost) annual application Expensive Permitting issues	Probably not useful in our situation
7. Dredging	Effective Immediate results Impacts primary objective	Expensive	Recommended primary tool for restoration
8. Boat wash/ Stewards	Changes behaviors Protects on an ongoing basis	Expensive No direct results	Important as an ongoing maintenance tool
9. Shoreline Restoration	Improves overall lake health	Requires individual action	Promote as part of ongoing education
10. Septic Management	Improves overall lake health	Requires individual action	Promote as part of ongoing education

Over the course of the last several years (2015-2019) we have operated a set of programs to implement these tools:

- Developed a comprehensive lake management plan
- Mechanical harvesting has been used over several years, though in a reduced capacity because it leads to the continuing spread of milfoil through fragmentation
- Benthic barriers have been deployed in a test environment for three seasons and determined to be appropriate for tactical applications
- We have conducted a feasibility test of hand harvesting of milfoil
- We have an annual drawdown of the lake which, since the new dam, has been restricted to 18" per DEC permit
- We have investigated aeration and are in discussions with vendors for a pilot program
- We helped obtain a \$150,000 boat steward grant to provide boat stewards and signage at the public boat launch. We supported the application for a boat decontamination station at Dwyer Park in the recent round of DEC grants.
- We have promoted CCSWCD septic management programs to lake residents over the last two years
- We have provided support and collaboration with CCSWCD on developing a shoreline restoration program
- We commissioned a mapping study of the lake to better assess our lake situation
- As part of C-OFOKLA we obtained a \$50,000 NFWF grant to assess our watershed. We are working with CCSWCD and funding from USCA to implement programs based on the assessment.