Long Lake
Aquatic Plant Control Program
2022 Activity Summary

A publication of the Long Lake Governmental Lake Board

Long Lake Governmental Lake Board
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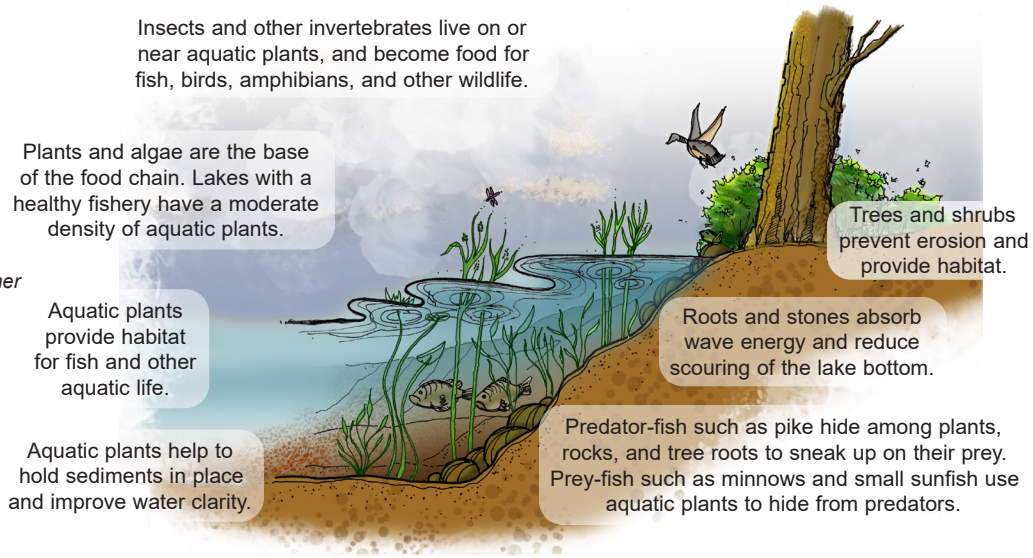
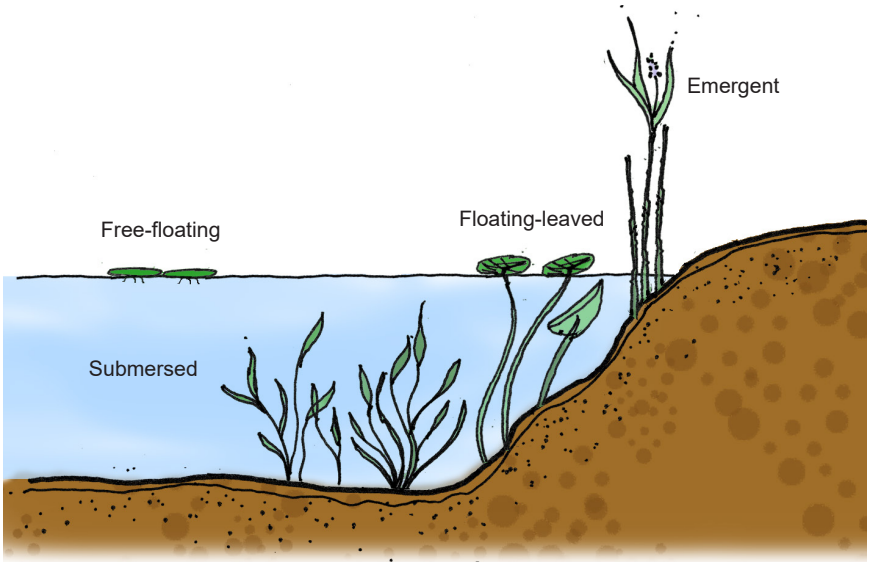
For many years, a nuisance plant control program has been ongoing on Long Lake. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial plant species. This report contains an overview of plant control activities conducted on Long Lake in 2022.

Aquatic plants are an important component of lakes. They produce oxygen during photosynthesis, provide food, habitat and cover for fish, and help stabilize shoreline and bottom sediments.



There are four main aquatic plant groups: submersed, floating-leaved, free-floating, and emergent. Each plant group provides important ecological functions. Maintaining a diversity of aquatic plants is important to sustaining a healthy fishery and a healthy lake.



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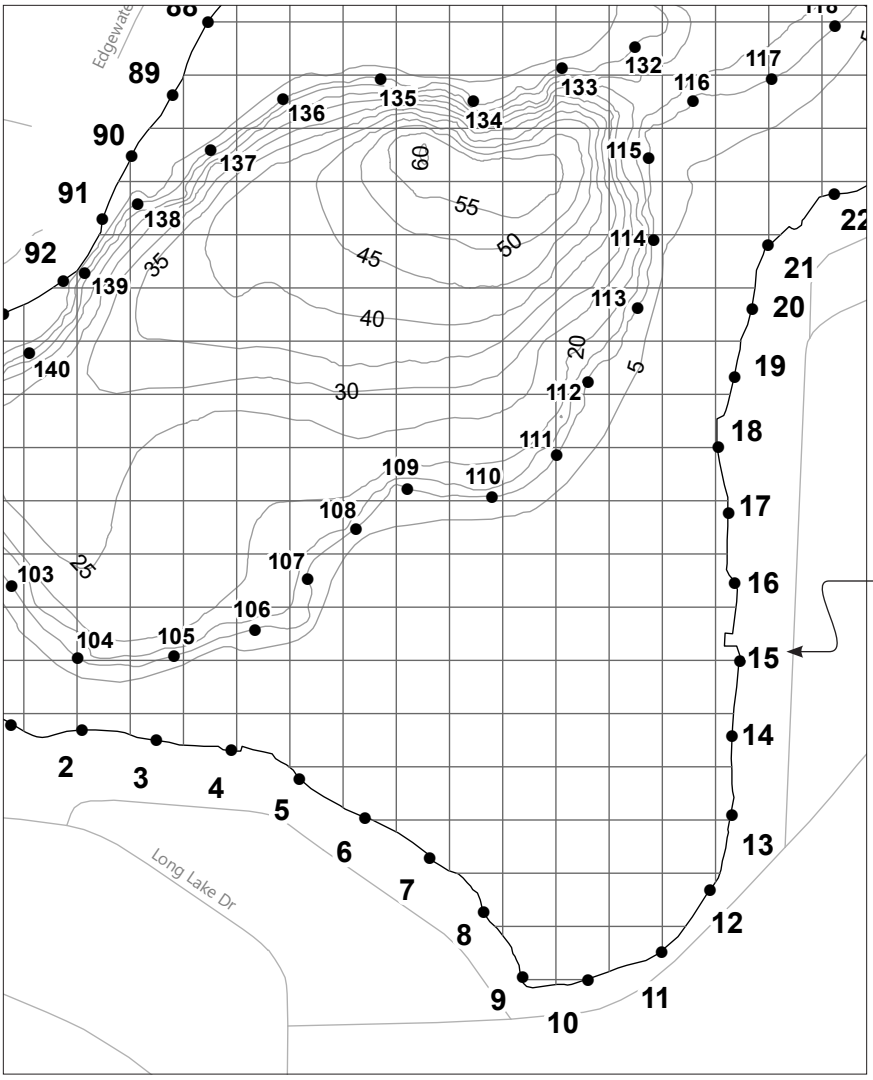
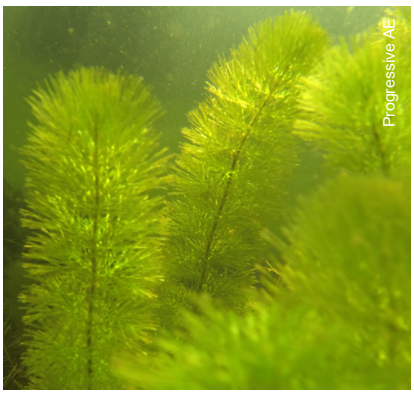
Plant control activities are coordinated under the direction of an environmental consultant, Progressive AE. Biologists from Progressive conduct GPS-guided surveys of the lake to identify problem areas, and georeferenced plant control maps are provided to the plant control contractor. Follow-up surveys are conducted throughout the growing season to evaluate results and the need for additional treatments. In 2022, surveys of the lake were conducted on May 16, June 21, and August 1.



GPS reference points established along the shoreline and along the dropoff of Long Lake are used to guide plant surveys and to accurately identify the location of nuisance plant growth areas.

Plant control in Long Lake involves the select use of herbicides to control invasive plant growth. Primary plants targeted for control in Long Lake include Eurasian milfoil and Cabomba. Both of these plants are non-native (exotic) species that tend to be highly invasive and have the potential to spread quickly if left unchecked.

Eurasian milfoil (*Myriophyllum spicatum*)



Cabomba (*Cabomba aquatica*)

Plant control activities conducted on Long Lake in 2022 are summarized in the table below.

LONG LAKE
2022 NUISANCE AQUATIC PLANT CONTROL SUMMARY

Date	Work Type	Acres Treated
May 16	Survey	
May 24	Herbicide: E. milfoil	41.25
June 21	Survey	
June 28	Herbicide: E. milfoil, cabomba, algae	12.00
August 1	Survey	
Total		53.25

In the fall of 2021, a hydro-acoustic survey of Long Lake was conducted to map and quantify the lake's bio-volume. The results of this survey were used to refine aquatic plant survey locations in 2022.