

## Wabeek Lake Aquatic Plant Control Program 2023 Activity Summary

A publication of the Wabeek Lake Improvement Board

## Wabeek Lake Improvement Board

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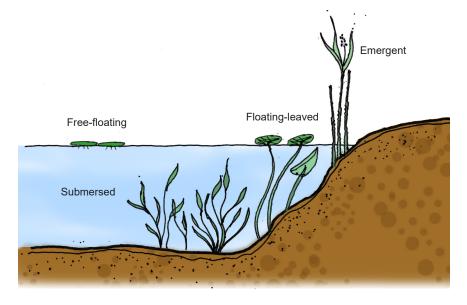
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This year, a nuisance plant control program was implemented on Wabeek Lake. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial plant species. This report contains an overview of plant control activities conducted on Wabeek Lake in 2023.

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.

Insects and other invertebrates live on or near aquatic plants, and become food for fish, birds, amphibians, and other wildlife. Plants and algae are the base of the food chain. Lakes with a healthy fishery have a moderate Trees and shrubs density of aquatic plants. prevent erosion and provide habitat. Aquatic plants Roots and stones absorb provide habitat wave energy and reduce for fish and other scouring of the lake bottom. aquatic life. Predator-fish such as pike hide among plants, Aquatic plants help to rocks, and tree roots to sneak up on their prey. hold sediments in place Prey-fish such as minnows and small sunfish use and improve water clarity. aquatic plants to hide from predators.

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.

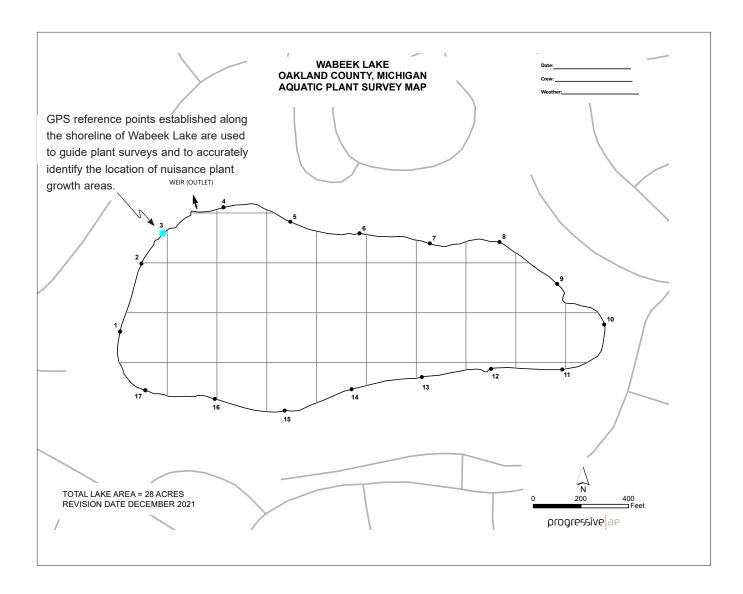


Environmental Consultant
Progressive AE

Herbicide Applicator
Aqua-Weed Control Inc.

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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.



Plant control in Wabeek Lake involves the select use of herbicides to control invasive plant growth. The primary plants targeted for control in Wabeek Lake are Eurasian milfoil and Phragmites. These plants are non-native (exotic) species that tend to be highly invasive and has the potential to spread quickly if left unchecked.



Eurasian milfoil (*Myriophyllum spicatum*)



Phragmites (Phragmites australis)

Plant control activities conducted on Wabeek Lake in 2023 are summarized in the table below.

## WABEEK LAKE 2023 NUISANCE AQUATIC PLANT CONTROL SUMMARY

Work Type	Date	Plants Targeted	Acres
Survey	June 8		
Herbicide	June 15	Eurasian milfoil	5
Survey	August 21		
Herbicide	September 7	Eurasian milfoil, phragmites	9
Total			14

In addition to the surveys of the lake to identify invasive plant locations, a vegetation survey of Wabeek Lake was conducted on August 21st to evaluate the type and abundance of all plants in the lake. The table below lists each plant species observed during the survey and the relative abundance of each. At the time of the survey, two submersed species, two floating-leaved species, and seven emergent species were found in the lake. Wabeek lake has poor diversity and abundance of native submersed plants.

## WABEEK LAKE AQUATIC PLANTS AUGUST 21, 2023

Common Name	Scientific Name	Group	Percent of Sites Where Present
Eurasian milfoil*	Myriophyllum spicatum	Submersed	100
Illinois pondweed	Potamogeton illinoensis	Submersed	6
White waterlily	Nymphaea odorata	Floating-leaved	65
Yellow waterlily	Nuphar sp.	Floating-leaved	59
Swamp loosestrife	Decodon verticillatus	Emergent	82
Cattail	<i>Typha</i> sp.	Emergent	71
Bulrush	Schoenoplectus sp.	Emergent	53
Purple loosestrife*	Lythrum salicaria	Emergent	41
Pickerelweed	Pontederia cordata	Emergent	35
Phragmites*	Phragmites australis	Emergent	29
Arrowhead	Sagittaria latifolia	Emergent	6

Exotic invasive species\*