



# Van Norman Lake Aquatic Plant Control Program 2023 Activity Summary

A publication of the Van Norman Lake Improvement Board

## Van Norman Lake Improvement Board

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For the past several years, a nuisance plant control program has been ongoing on Van Norman 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 Van Norman 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 density of aquatic plants.

Aquatic plants provide habitat for fish and other aquatic life.

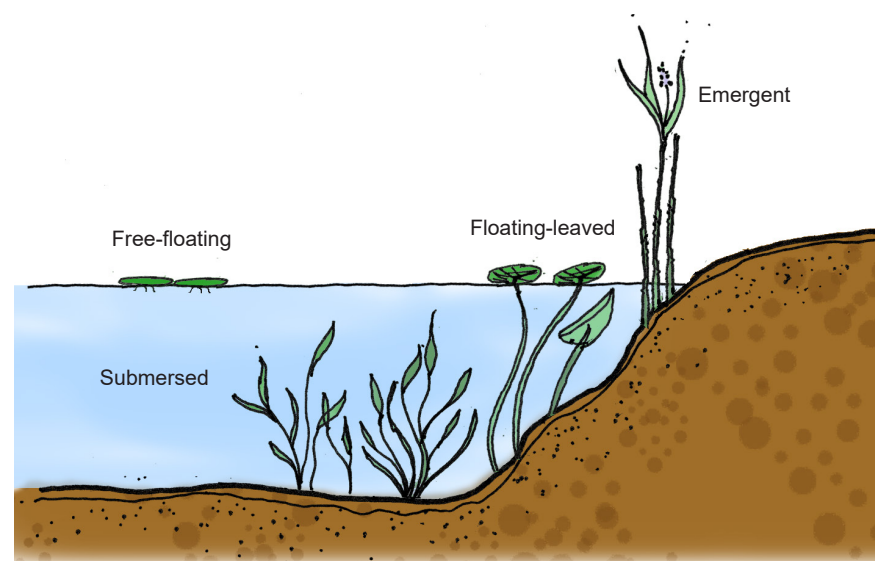
Aquatic plants help to hold sediments in place and improve water clarity.

Trees and shrubs prevent erosion and provide habitat.

Roots and stones absorb wave energy and reduce scouring of the lake bottom.

Predator-fish such as pike hide among plants, rocks, and tree roots to sneak up on their prey. Prey-fish such as minnows and small sunfish use 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.



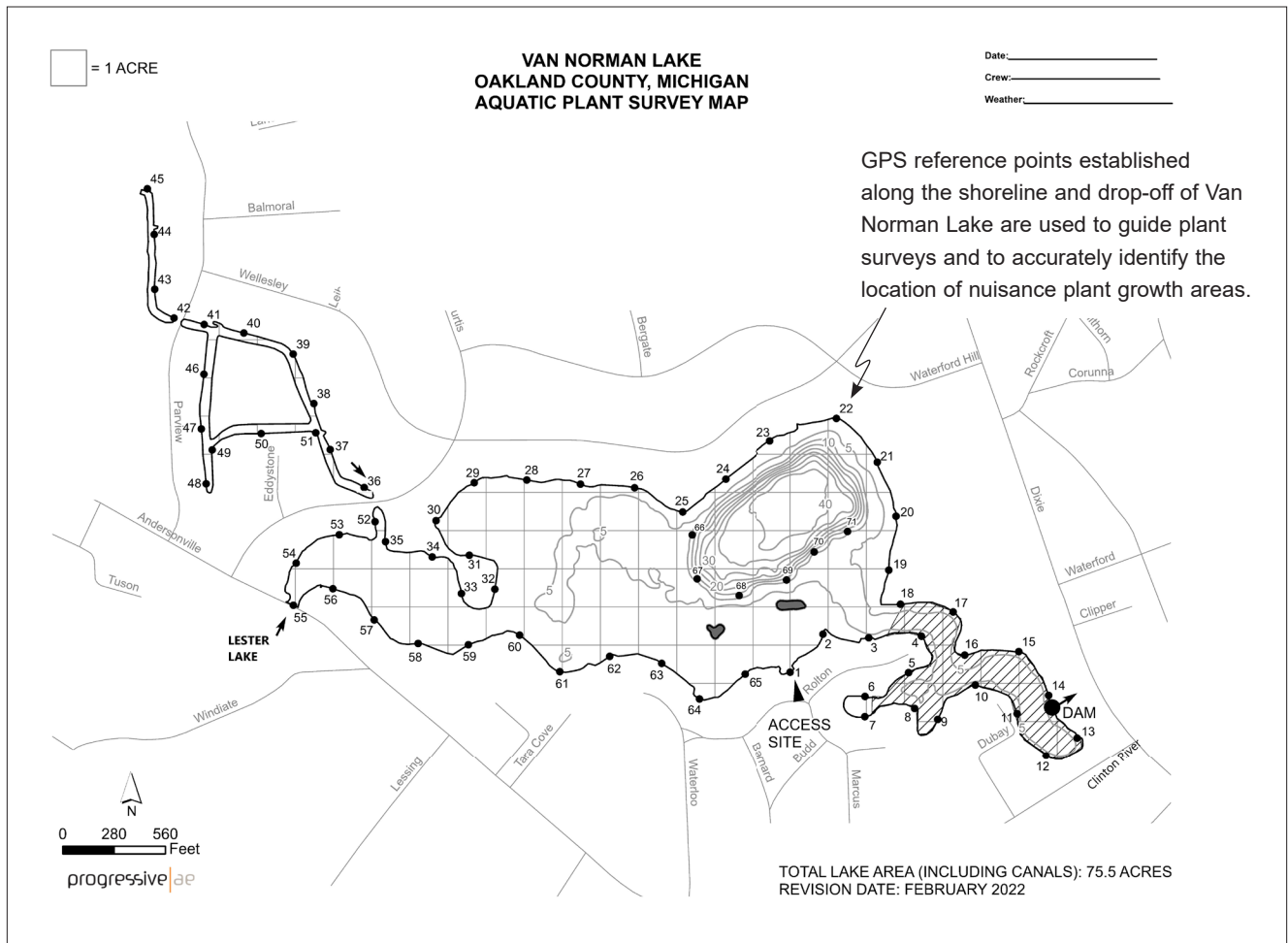
*Environmental Consultant*  
Progressive AE

*Herbicide Applicator*  
PLM Lake and Land Management

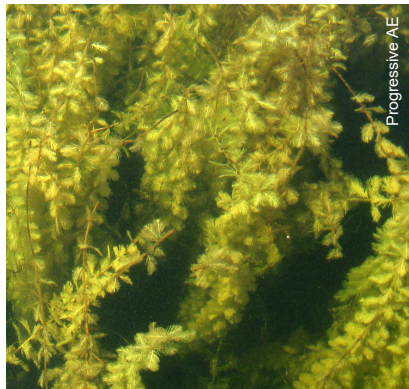
*Harvesting Contractor*  
Oakland Harvesters

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.

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Plant control in Van Norman Lake involves the select use of herbicides and mechanical harvesting to control invasive plant growth. Primary plants targeted for control in Van Norman Lake include Eurasian milfoil and starry stonewort. 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*)



Starry stonewort (*Nitellopsis obtusa*)

Plant control activities conducted on Van Norman Lake in 2023 are summarized in the table below. Total managed areas of the lake were reduced by about 11 percent from 2022.

**VAN NORMAN LAKE  
2023 NUISANCE AQUATIC PLANT CONTROL SUMMARY**

Work Type	Date	Plants Targeted	Acres
Survey	May 1		
Herbicide	May 11	Milfoil	6.25
Survey	May 24		
Herbicide	June 1	Starry stonewort	8.00
Survey	June 19		
Herbicide	June 27	Milfoil, starry stonewort, algae, natives	12.50
Harvesting	July 5	Starry stonewort, natives	15.00
Survey	August 10		
Harvest	August 21	Starry stonewort, natives	11.50
Survey	August 25		
<b>Total</b>			<b>53.25</b>

# End-of-year Aquatic Plant Survey

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In addition to the surveys of the lake to identify invasive plant locations, a vegetation survey of Van Norman Lake was conducted on August 10 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, 12 submersed species, two floating-leaved species, and eight emergent species were found in the lake. Van Norman Lake maintains a good diversity of beneficial, native plants species.

## VAN NORMAN LAKE AQUATIC PLANTS

August 10, 2023

Common Name	Scientific Name	Group	Percent of Sites Where Present
Chara	<i>Chara</i> sp.	Submersed	85
Wild celery	<i>Vallisneria americana</i>	Submersed	65
Illinois pondweed	<i>Potamogeton illinoensis</i>	Submersed	46
Whitestem pondweed	<i>Potamogeton praelongus</i>	Submersed	42
Thin-leaf pondweed	<i>Potamogeton</i> sp.	Submersed	38
Starry stonewort*	<i>Nitellopsis obtusa</i>	Submersed	35
Variable pondweed	<i>Potamogeton gramineus</i>	Submersed	25
Eurasian milfoil*	<i>Myriophyllum spicatum</i>	Submersed	8
Richardson's pondweed	<i>Potamogeton richardsonii</i>	Submersed	4
Variable-leaf milfoil	<i>Myriophyllum heterophyllum</i>	Submersed	4
Flat-stem pondweed	<i>Potamogeton zosteriformis</i>	Submersed	2
Curly-leaf pondweed	<i>Potamogeton crispus</i>	Submersed	2
White waterlily	<i>Nymphaea odorata</i>	Floating-leaved	60
Yellow waterlily	<i>Nuphar</i> sp.	Floating-leaved	42
Iris	<i>Iris</i> sp.	Emergent	56
Arrowhead	<i>Sagittaria latifolia</i>	Emergent	33
Purple loosestrife*	<i>Lythrum salicaria</i>	Emergent	33
Cattail	<i>Typha</i> sp.	Emergent	13
Flowering rush*	<i>Butomus umbellatus</i>	Emergent	10
Bulrush	<i>Schoenoplectus</i> sp.	Emergent	10
Swamp loosestrife	<i>Decodon verticillatus</i>	Emergent	4
Phragmites*	<i>Phragmites australis</i>	Emergent	4

\* Invasive exotic species