

**November**

**2024**

# **INDIANWOOD LAKE**

**PLANT CONTROL SUMMARY**

**PREPARED FOR:**  
**INDIANWOOD LAKE IMPROVEMENT BOARD**  
**OAKLAND COUNTY, MI**

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Progressive Companies

## **AQUATIC HERBICIDE APPLICATOR**

SOLitude Lake Management Company

## **MECHANICAL HARVESTER**

Oakland Harvesters, LLC

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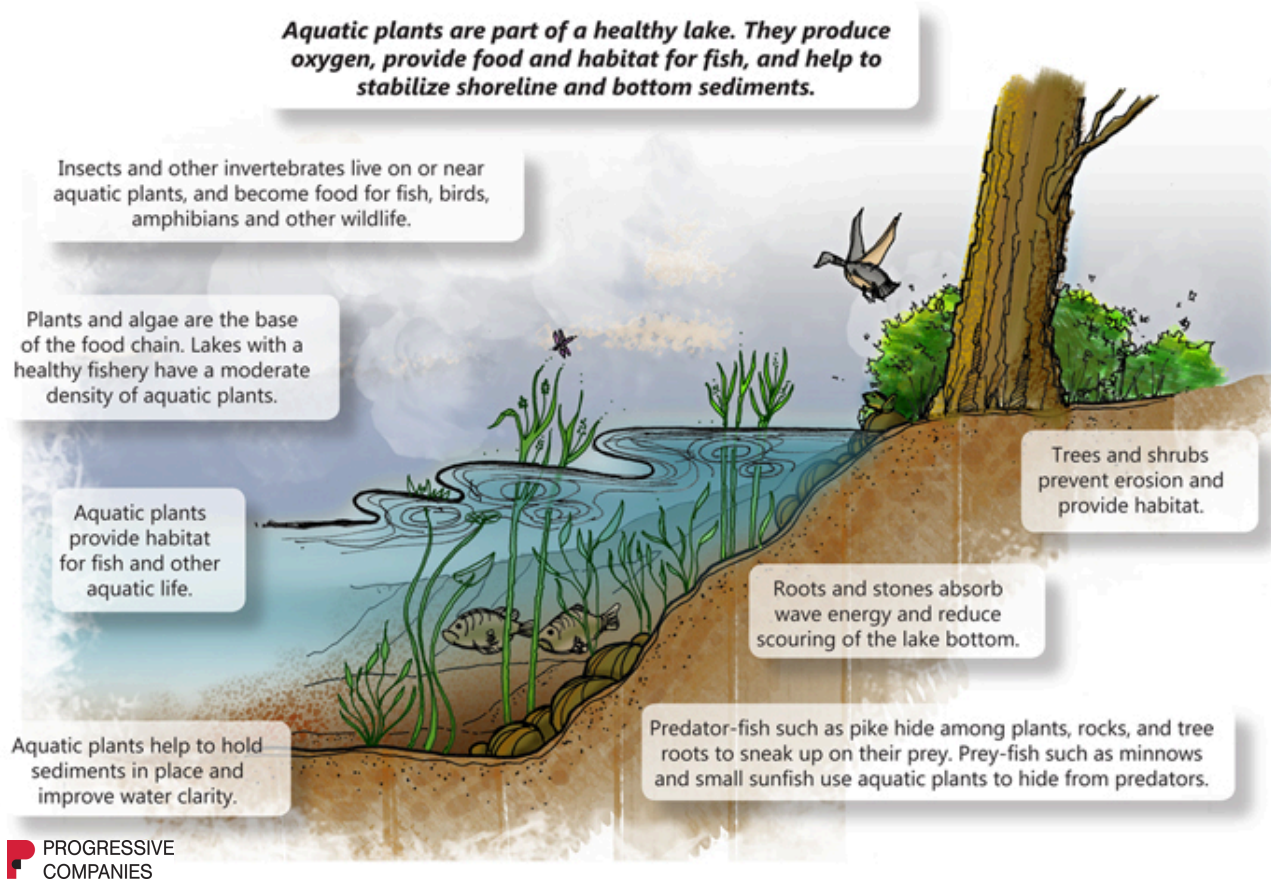


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# PROGRAM SUMMARY

A nuisance aquatic plant control program has been ongoing on Indianwood Lake for several years. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial native plant species. This report contains an overview of plant control activities conducted on Indianwood Lake in 2024.



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 native aquatic plants is important to sustaining a healthy fishery and a healthy lake. Invasive aquatic plant species have negative impacts to the lake's ecosystem. It is important to maintain an active plant control program to reduce the introduction and spread of invasive species within Indianwood Lake. Plant control efforts in 2024 consisted of six aquatic plant surveys, five herbicide applications, and three mechanical plant harvests..

# PLANT CONTROL

Plant control activities are coordinated under the direction of an environmental consultant, Progressive Companies. Scientists 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. GPS reference points are established along the shoreline and offshore areas of the lake. These waypoints are used to accurately identify the location of invasive and nuisance plant growth areas.



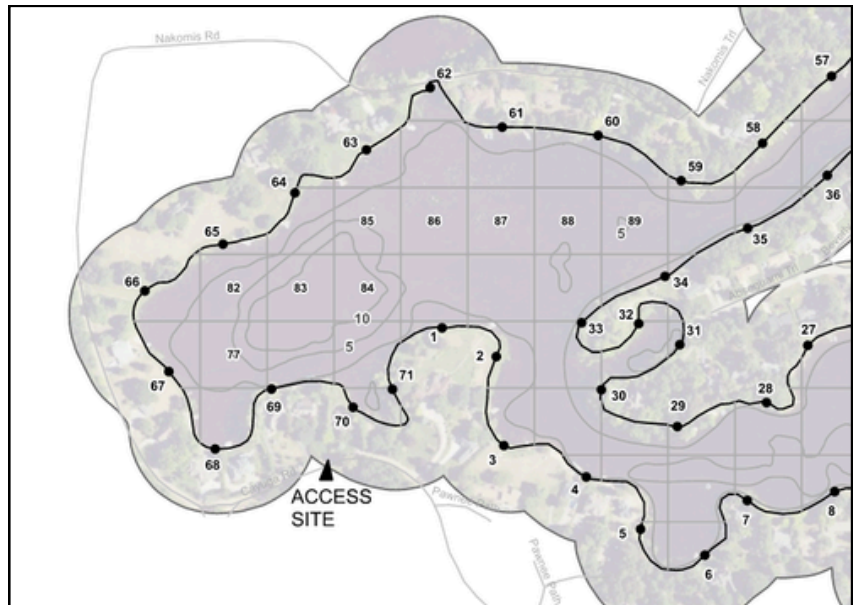
Eurasian milfoil  
*Myriophyllum spicatum*



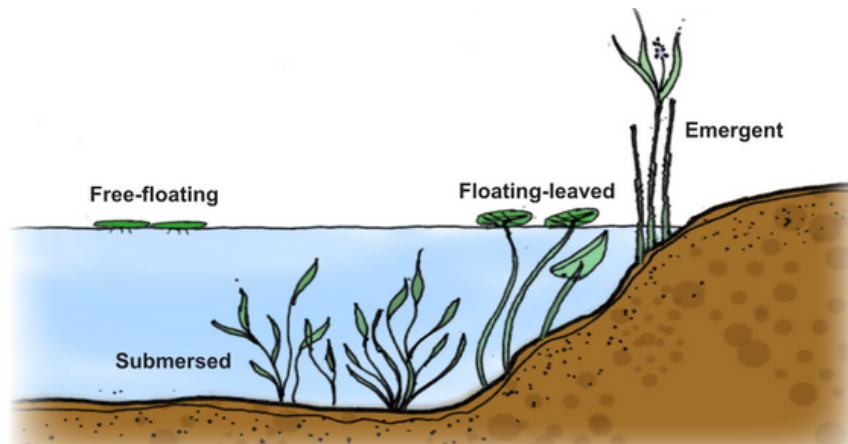
Curly-leaf pondweed  
*Potamogeton crispus*



Starry stonewort  
*Nitellopsis obtusa*



Primary plants targeted for control in Indianwood Lake include Eurasian milfoil, curly-leaf pondweed, and starry stonewort. These plants are non-native (exotic) species that tend to be highly invasive and have the potential to spread quickly if left unchecked. Plant control activities conducted on the lake in 2024 are summarized in Table 1.





# PLANT CONTROL

**TABLE 1. INDIANWOOD LAKE 2024 PLANT CONTROL ACTIVITIES**

Date	Plants Targeted	Acreage
April 30	Herbicide: starry stonewort, algae	29.25
May 9	Herbicide: starry stonewort, curly-leaf, hybrid milfoil	10.00
May 30	Herbicide: algae	18.75
June 10	Harvesting: starry stonewort, nuisance natives	41.50
July 16	Harvesting: starry stonewort, nuisance natives	19.00
August 6	Herbicide: starry stonewort, algae	25.00
August 30	Harvesting: starry stonewort, nuisance natives	32.75
Septmber 23	Herbicide: hybrid milfoil, <i>Phragmites</i> , nuisance natives	2.00
Total		<b>178.25</b>

In 2024, 85 acres of Indianwood Lake were treated with aquatic herbicides throughout the season. Hybrid milfoil was treated with the systemic herbicides, ProcellaCOR and Triclopyr, for season-long control. A curly-leaf pondweed treatment occurred on May 9 using contact herbicides which provided control of the invasive plant. Starry stonewort and nuisance algae were treated with copper products. A total of 93.25 acres of mechanical harvesting was performed on the lake. Harvesting addressed nuisance native growth areas as well as some starry stonewort.

Early season treatment of curly-leaf pondweed and hybrid milfoil should continue. The first harvest should take place during peak growth (late May/ early June). Ongoing harvesting throughout the growing season should continue on the lake. Harvesting of nuisance aquatic vegetation helps to reduce muck development and oxygen consumption within Indianwood Lake.

# PLANT INVENTORY SURVEY

In addition to the surveys of the lake to identify invasive plant locations, a detailed vegetation survey of Indianwood Lake was conducted on August 13 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, one free-floating species, and six emergent species were found in the lake. Indianwood Lake maintains a good diversity of beneficial, native plant species.

**TABLE 2. INDIANWOOD LAKE 2024 PLANT INVENTORY DATA**

Common Name	Scientific Name	Group	Percentage of sites where present
Whitestem pondweed	<i>Potamogeton praelongus</i>	Submersed	88
Mini bladderwort	<i>Utricularia minor</i>	Submersed	79
<i>Chara</i>	<i>Chara</i> sp.	Submersed	50
Starry stonewort	<i>Nitellopsis obtusa</i>	Submersed	48
Bladderwort	<i>Utricularia vulgaris</i>	Submersed	47
Wild celery	<i>Vallisneria americana</i>	Submersed	41
Illinois pondweed	<i>Potamogeton illinoensis</i>	Submersed	17
Sago pondweed	<i>Stuckenia pectinata</i>	Submersed	12
Flat-stem pondweed	<i>Potamogeton zosteriformis</i>	Submersed	3
Eurasian milfoil	<i>Myriophyllum spicatum</i>	Submersed	2
Thin-leaf pondweed	<i>Potamogeton</i> sp.	Submersed	2
Curly-leaf pondweed	<i>Potamogeton crispus</i>	Submersed	2
Watermeal	<i>Wolffia punctata</i>	Free-floating	5
White waterlily	<i>Nymphaea odorata</i>	Floating-leaved	81
Yellow waterlily	<i>Nuphar</i> sp.	Floating-leaved	10
<i>Iris</i>	<i>Iris</i> sp.	Emergent	41
Cattail	<i>Typha</i> sp.	Emergent	17
Purple loosestrife	<i>Lythrum salicaria</i>	Emergent	16
Swamp loosestrife	<i>Decodon verticillatus</i>	Emergent	10
<i>Phragmites</i>	<i>Phragmites australis</i>	Emergent	7
Bulrush	<i>Schoenoplectus</i> sp.	Emergent	2

Exotic invasive species