October 2026

DIXIE LAKE

PLANT CONTROL SUMMARY

PREPARED FOR:
DIXIE LAKE IMPROVEMENT BOARD
OAKLAND COUNTY, MI

PROGRESSIVE COMPANIES

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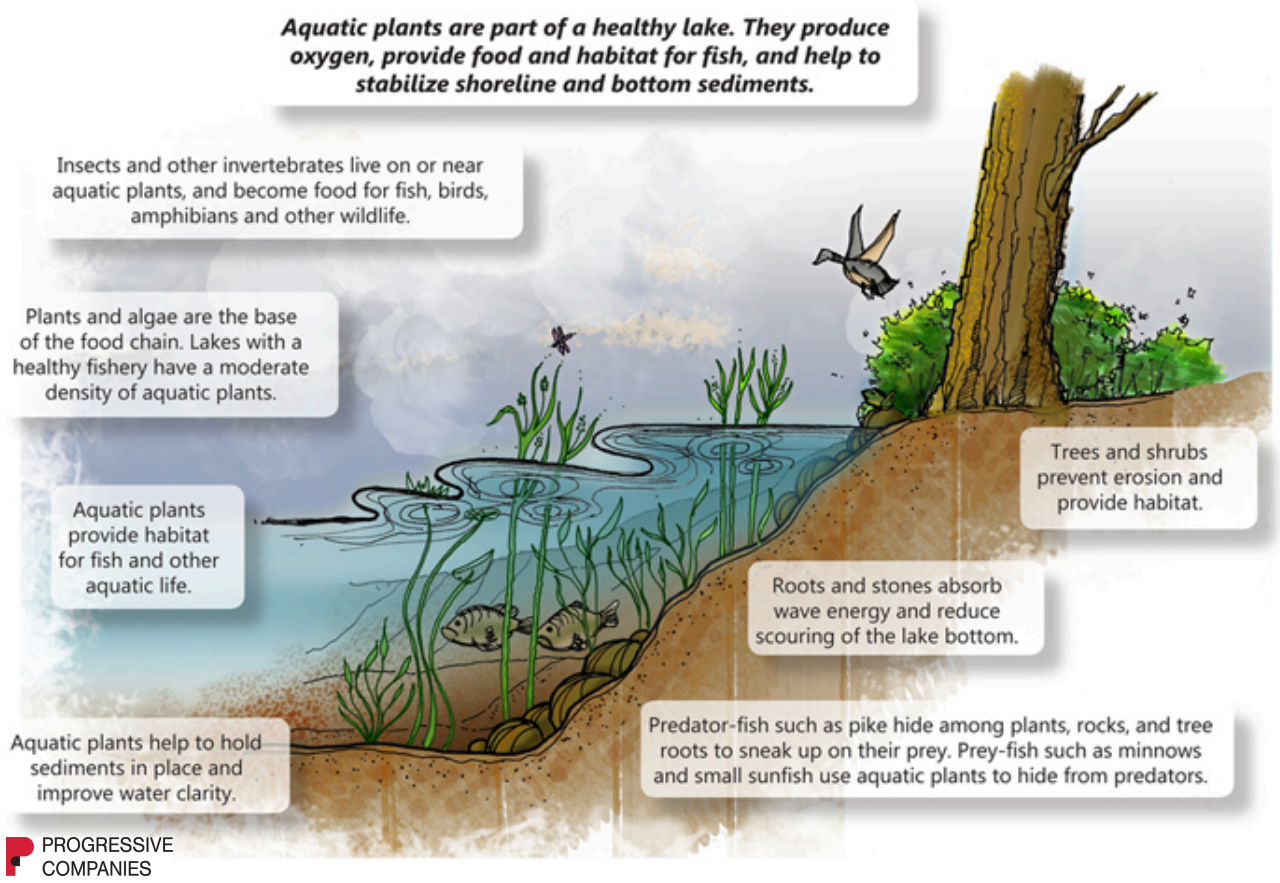
MECHANICAL HARVESTER

Oakland Harvesters, LLC.



PROGRAM SUMMARY

A nuisance aquatic plant control program has been ongoing on Dixie Lake for many 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 Dixie Lake in 2026.



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 on the lake's ecosystem. It is important to maintain an active plant control program to reduce the establishment and spread of invasive species within Dixie Lake. Plant control efforts in 2026 consisted of eight aquatic plant surveys, four aquatic herbicide applications, and three mechanical harvest events.

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 drop-off 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 Dixie 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 2026 are summarized in Table 1.

In Michigan, an Aquatic Nuisance Control (ANC) permit must be acquired from the Department of Environment, Great Lakes, and Energy (EGLE) before herbicides are applied to inland lakes. The permit lists the herbicides that are approved for use, maximum dose rates, use restrictions, and indicates specific areas of the lake where herbicides may be applied. Permit requirements are designed to protect public health and the environment. The contracted herbicide applicator on Dixie Lake, Aqua-Weed Control, holds the ANC permit for the lake.

PLANT CONTROL

TABLE 1. DIXIE LAKE 2026 PLANT CONTROL ACTIVITIES

Date	Work Type	Plants Targeted	Acreage
May 4	Survey	NA	-
May 12	Herbicide Treatment	E. milfoil, curly-leaf, starry, algae	33.50
May 28	Survey	NA	-
June 1	Herbicide Treatment	Algae	8.00
June 3	Survey	NA	-
June 15	Mechanical Harvesting	Starry, nuisance natives	26.50
June 22	Harvest Inspection	NA	-
July 1	Herbicide Treatment	Algae	25.00
July 20	Survey	NA	-
July 27	Herbicide Treatment	E. milfoil, starry, nuisance natives, loosestrife	21.80
August 4	Survey	NA	-
August 13	Mechanical Harvesting	Starry, nuisance natives	29.25
August 24	Survey	NA	-
September 15	Herbicide Treatment	*Phragmites*	2.00
September 18	Survey	NA	-
September 28	Mechanical Harvesting	Starry, nuisance natives	25.50
Total			**171.55**

In 2026, 171.55 acres of Dixie Lake were managed with aquatic herbicides and mechanical harvesting throughout the season. This is almost double the management efforts compared to 2025. The increased management of the lake is a result of the highly productive growing season. Atypical plant and algae growth was observed throughout the months of May-September, likely a result of abnormally high water temperatures.

Invasive Eurasian milfoil and curly-leaf pondweed have become of increasing concern over the past several years. Prior systemic control methods have started to lose their effect and a full lake treatment should be considered to reduce the current population for future maintenance of the lake. Dixie Lake is not a candidate for fluridone, which has been utilized in the past, due to a resistant strain of milfoil recently found within the lake. An alternative full lake systemic herbicide, penoxsulam, will be considered in 2027, pending cost.

PLANT INVENTORY SURVEY

In addition to the surveys of the lake to identify invasive plant locations, a detailed vegetation survey of Dixie Lake was conducted on September 18 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, 16 submersed species, one free-floating species, two floating-leaved species, and five emergent species were found in the lake. Dixie Lake maintains a good diversity of beneficial native plant species.

TABLE 2. DIXIE LAKE 2026 PLANT INVENTORY DATA

Common Name	Scientific Name	Group	Percentage of sites where present
Starry stonewort	*Nitellopsis obtusa*	Submersed	64
Variable pondweed	*Potamogeton gramineus*	Submersed	58
Eurasian milfoil	*Myriophyllum spicatum*	Submersed	48
Wild celery	*Vallisneria americana*	Submersed	45
Chara	*Chara* sp.	Submersed	42
Sago pondweed	*Stuckenia pectinata*	Submersed	34
Illinois pondweed	*Potamogeton illinoensis*	Submersed	16
Bladderwort	*Utricularia vulgaris*	Submersed	14
Slender naiad	*Najas flexilis*	Submersed	7
Brittle-leaf naiad	*Najas minor*	Submersed	4
Whitestem pondweed	*Potamogeton praelongus*	Submersed	4
Thin-leaf pondweed	*Potamogeton* sp.	Submersed	4
Variable-leaf milfoil	*Myriophyllum heterophyllum*	Submersed	2
Water stargrass	*Heteranthera dubia*	Submersed	1
Curly-leaf pondweed	*Potamogeton crispus*	Submersed	1
Elodea	*Elodea canadensis*	Submersed	1
Duckweed	*Lemna minor*	Free-floating	1
White waterlily	*Nymphaea odorata*	Floating-leaved	47
Yellow waterlily	*Nuphar* sp.	Floating-leaved	5
Cattail	*Typha* sp.	Emergent	17
Swamp loosestrife	*Decodon verticillatus*	Emergent	17
Bulrush	*Schoenoplectus* sp.	Emergent	7
Phragmites	*Phragmites australis*	Emergent	5
Iris	*Iris* sp.	Emergent	2

Exotic invasive species