



Hodunk-Messenger Lake Chain Aquatic Plant Control Program 2021 Activity Summary

A publication of the Hodunk-Messenger Lake Improvement Board

Hodunk-Messenger Lake Board

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Coldwater, MI 49036

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Branch County Drain Commissioner

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Lake Chain Resident Representative

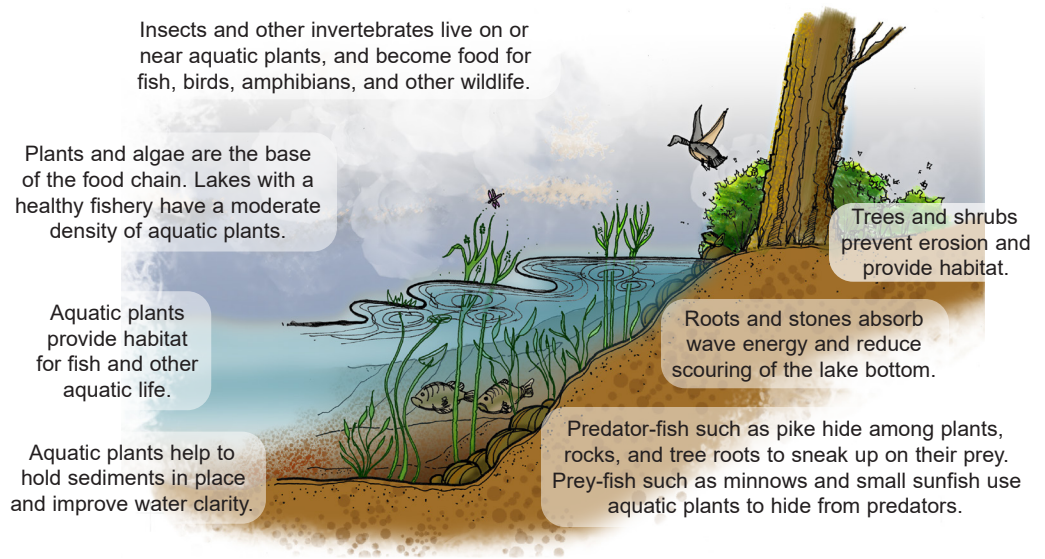
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Coldwater Township Representative

Candy Cox
Girard Township Representative

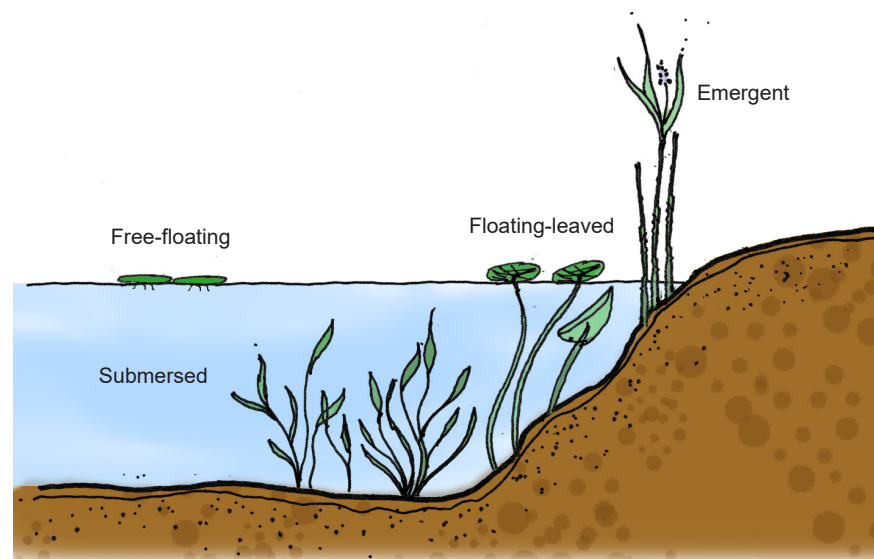
Randall Hazelbaker
Branch County Commissioner

For the past several years, a nuisance plant control program has been ongoing on the Hodunk-Messenger Lake Chain. 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 the Hodunk-Messenger Lake Chain in 2021.

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.



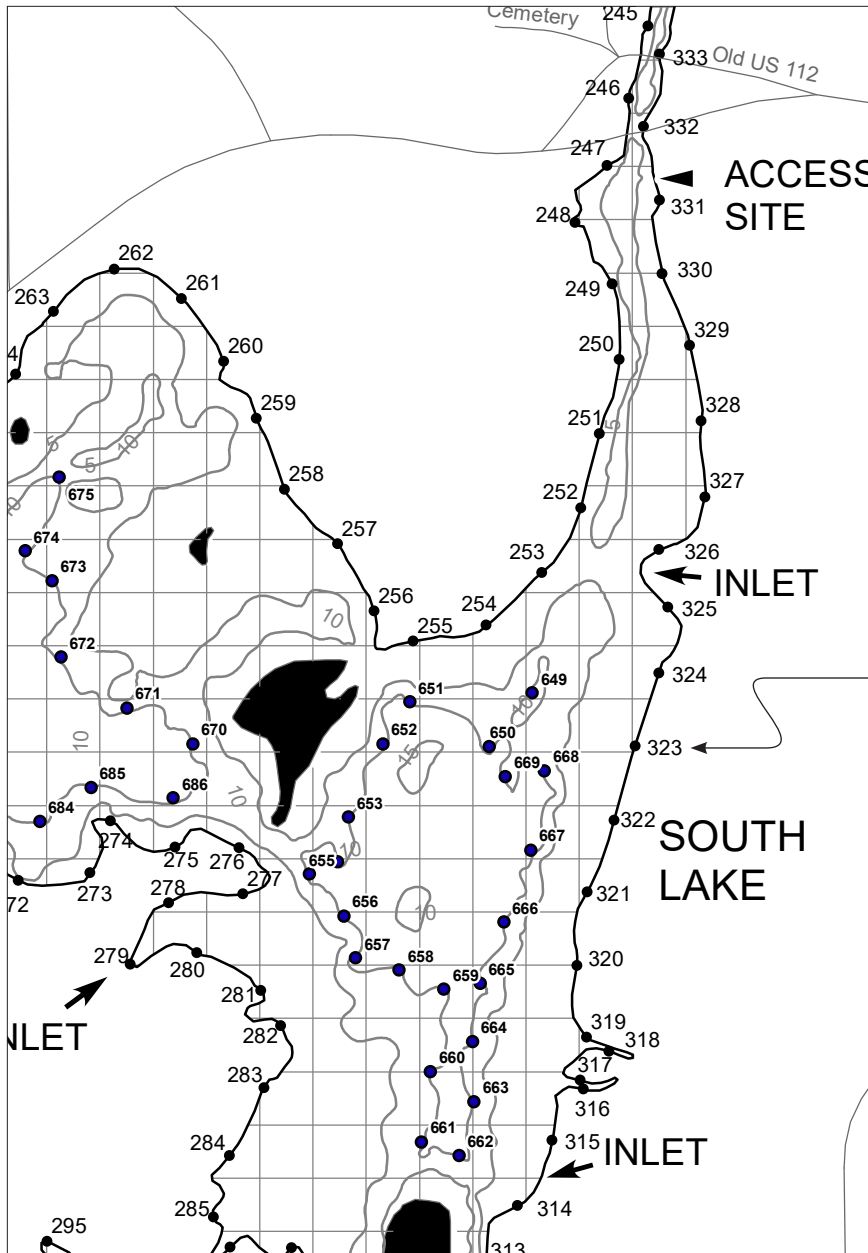
Environmental Consultant
Progressive AE

Herbicide Applicator
PLM Lake and Land Management Corp.

Harvesting Contractor
Savin Lakes Services

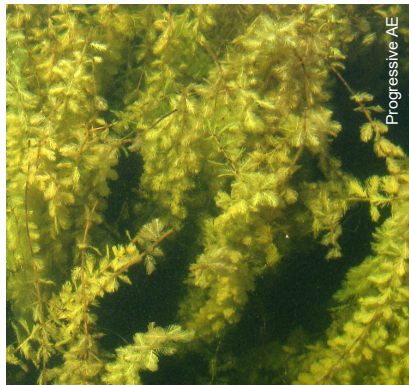
Plant control activities are coordinated under the direction of an environmental consultant, Progressive AE. Biologists from Progressive conduct GPS-guided surveys of the lake to identify problem areas, and georeferenced plant control maps are provided to the plant control contractor.

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GPS reference points established along the shoreline and drop-off areas of the Hodunk-Messenger Lake Chain are used to guide plant surveys and to accurately identify the location of nuisance plant growth areas.

Plant control in the Hodunk-Messenger Lake Chain involves the select use of herbicides and mechanical harvesting to control invasive plant growth. Primary plants targeted for control in the Hodunk-Messenger Lake Chain 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*)

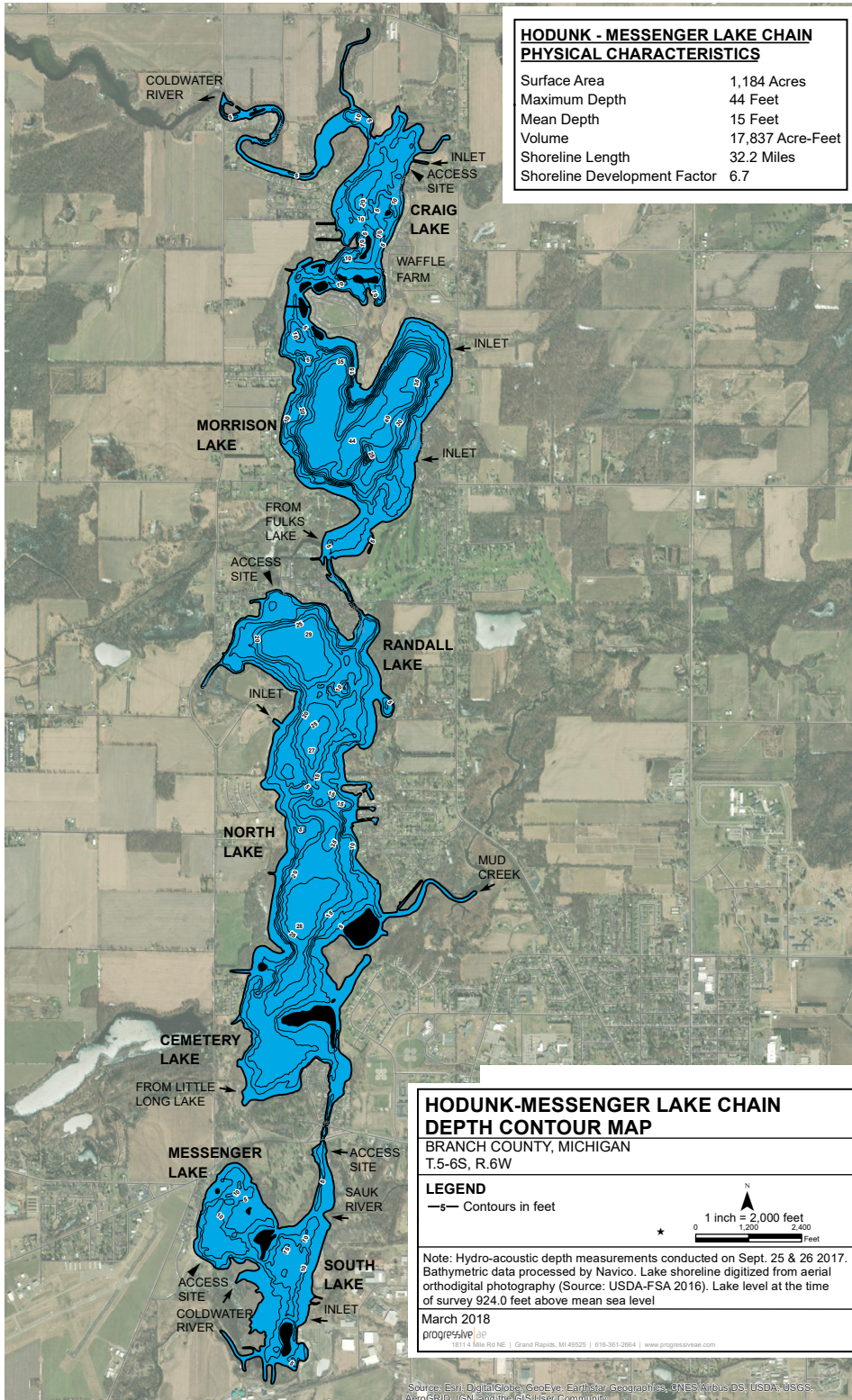
Plant control activities conducted on the Hodunk-Messneger Lake Chain in 2021 are summarized in the table below.

**HODUNK-MESSENGER LAKE CHAIN
2021 NUISANCE AQUATIC PLANT CONTROL SUMMARY**

Work Type	Date	Plants Targeted	Acres
Survey	May 10		
Herbicide	May 18	E. milfoil, curly-leaf pondweed, starry stonewort, nuisance natives	116
Survey	June 7		
Harvesting	June 14-18	Nuisance natives, starry stonewort	34
Herbicide	June 15	E. milfoil, curly-leaf pondweed, nuisance natives, starry stonewort, algae	33
Survey	June 21		
Herbicide	June 30	E. milfoil, starry stonewort nuisance natives	7
Survey	July 19		
Herbicide	July 22	E. milfoil, curly leaf pondweed, starry stonewort, nuisance natives, algae	61
Survey	August 18		
Herbicide	August 25	E. milfoil, nuisance natives, algae starry stonewort	45
Total			296

Depth Contour Map

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High-definition hydro-acoustic mapping of the Hondunk-Messenger Lake Chain was conducted in 2017 by Progresseve AE and processed data was used to create bathymetric mapping.