

2019 Eurasian Watermilfoil Delineation

Rush Lake (#71-0147)
Sherburne County, MN

Surveyed June 26, 2019



Survey, Analysis, and Reporting by:

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Funding Provided by:

Three Lake Improvement District – Clear Lake, MN

Purpose of Survey

This survey was conducted to locate and delineate areas of Eurasian watermilfoil (EWM) in Rush Lake (#71-0147). This information will help to guide EWM management in the lake and is required as a part of the DNR permitting process for herbicide treatments or hand-pulling.

Survey Method

EWM Delineation Survey

Freshwater Scientific Services surveyed Rush Lake on June 26, 2019. During this survey, we navigated a meandering path over the vegetated portion of Rush Lake. While navigating this search path, we used a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of EWM growth. When we encountered EWM plants, we marked the location, recorded the water depth, and rated the density of the growth using visual and rake density scores as described in the table below.

Score	Visual	Rake
1	Light / Solitary plants	1-2 stems
2	Moderate / Scattered dense patches	3 to 9 stems
3	Dense / Uniform dense growth	10+ stems

For rake samples, we dragged a sampling rake over approximately 10 square feet of lake bottom and recorded the EWM density based upon the number of plants (stem count) retrieved on the rake. The recorded water depths and density scores were linked to the appropriate GPS locations and then mapped using desktop GIS software.

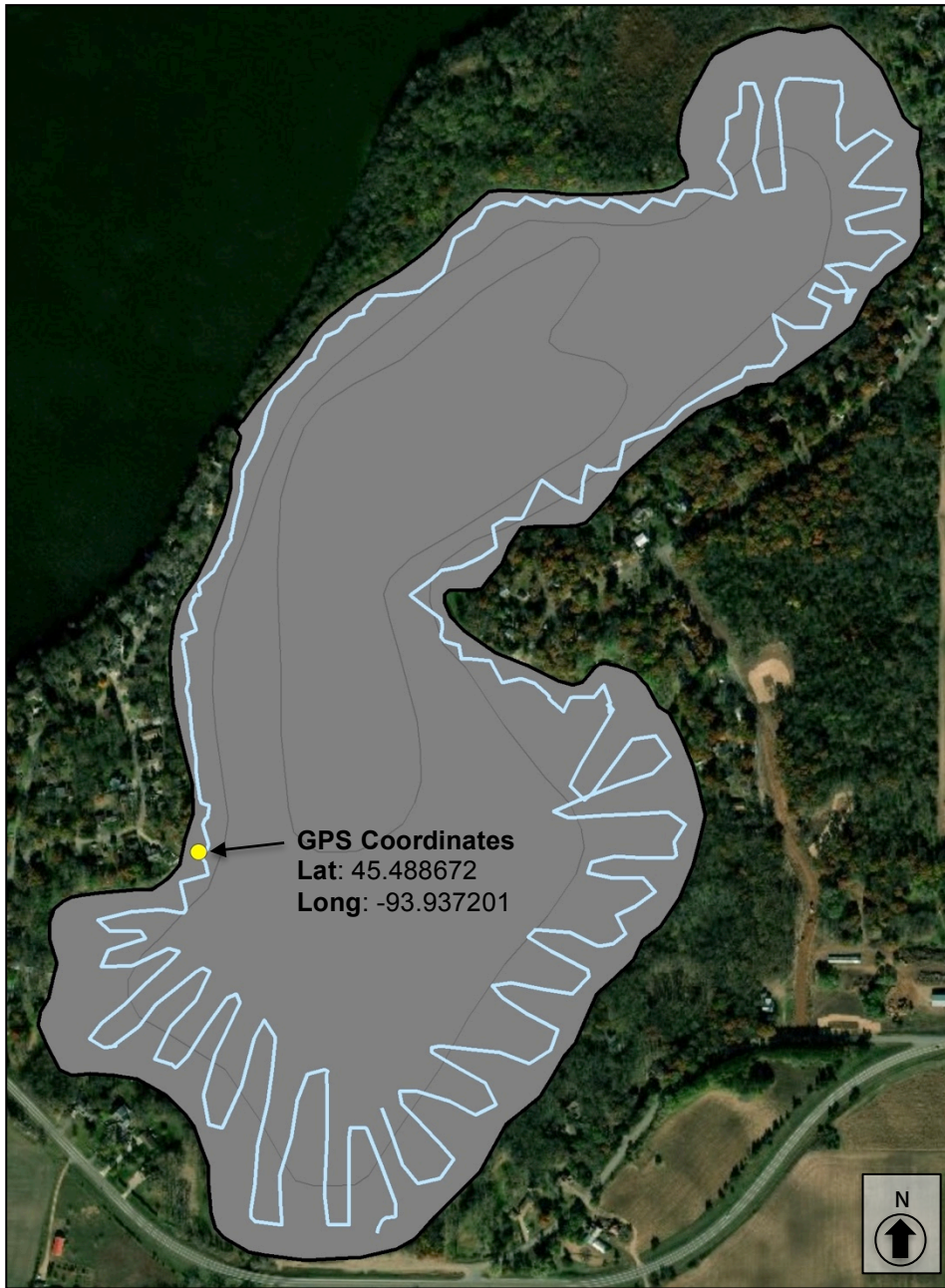
Results & Management Context

We found only one location with EWM during the 2019 survey of Rush Lake. Based upon these results, we recommend that (1) this one location of EWM should be hand-pulled, and (2) no areas of Rush Lake should be treated with herbicide to control EWM.

The long duration of ice cover and deep snow during the winter of 2018-2019 has noticeably affected plant growth in some lakes. Although we found no EWM during the June survey, it is possible that the severe winter delayed EWM growth. We plan to survey the remaining lakes in the chain for EWM in the late summer of 2019. At that time, we will plan to also reinspect portions of Rush Lake for any regrowth of EWM. If we find any substantial areas of EWM during this late-summer inspection of Rush Lake, we will recommend areas to be treated in the fall of 2019.

Rush Lake (#71-0147)

Eurasian Watermilfoil Delineation Survey: June 26, 2019



Eurasian Watermilfoil

— Surveyed Path

Density Rating

- 1
- 2
- 3

Surveyed: June 26, 2019
Method: Visual, Rake, Sonar
Surveyor: JA Johnson

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Online Resources & Contacts

Minnesota Administrative Rules for Aquatic Plant Management

<https://www.revisor.mn.gov/rules/?id=6280>

Minnesota DNR – Aquatic Plant Management Regulations & Permit Application Forms

<http://www.dnr.state.mn.us/apm/index.html>

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