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2021 Eurasian Watermilfoil Delineation

Lake Pulaski (# 86-0053) Wright County, MN

Surveyed June 11, 2021



Survey, Analysis, and Reporting by:James A. Johnson – *Aquatic Ecologist, Freshwater Scientific Services, LLC*



Purpose of Survey

This late-spring survey was designed to locate and delineate areas of Eurasian watermilfoil (EWM) in the vegetated portion of Lake Pulaski (#86-0053) prior to treatment in 2021. This information will help to guide EWM management in Lake Pulaski, and is required as a part of the DNR permitting process.

Survey Method

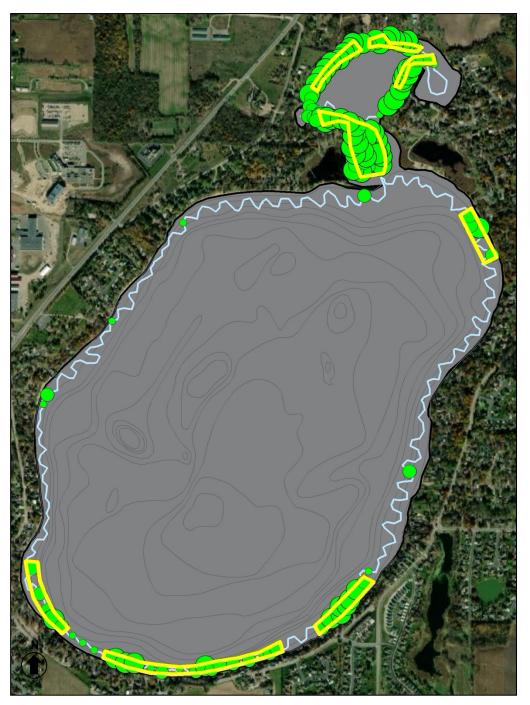
EWM Delineation Survey

Freshwater Scientific Services surveyed vegetated areas of Lake Pulaski on June 11, 2021. During this survey, we navigated a meandering path over the search area while using a combination of surface observations, rake tosses, and sonar readings to locate and delineate areas of EWM growth. When we encountered EWM, 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.

Lake Pulaski (# 86-0053) Eurasian Watermilfoil Delineation: 2021



Surveyed Path
Proposed Plots

EWM Density
1
2
3

Surveyed: June 11, 2021 Methods: Visual, Rake, Sonar Surveyor: JA Johnson



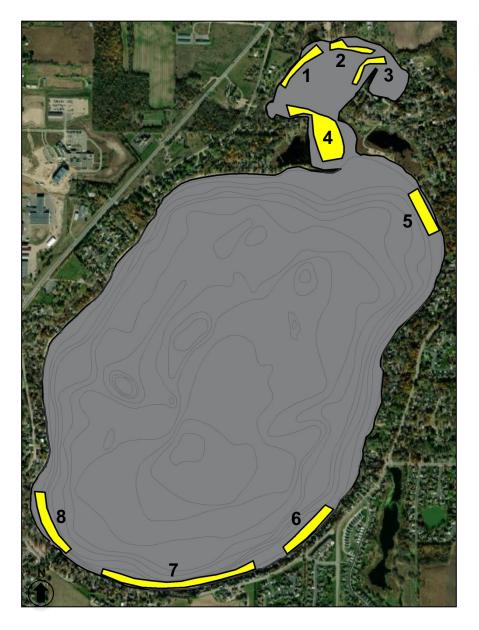
Map produced for PLM Lake & Land Management Corp. by:



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Note: In the northern portion of the lake (Little Pulaski), there are substantial areas of dense EWM in close proximity to water lilies. The DNR does not allow treatment within 50 ft of lilies, so some of these areas are not marked for treatment. We recommend that you contact your DNR AIS Specialist and applicator to discuss the possibility of treating these additional areas in the fall after the lilies start to senesce.

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Proposed Plots	
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Plot	Area (acres)	Mean Depth (ft)	Mean EWM Density (1-3)
1	2.1	5.0	2.5
2	1.5	5.0	2.6
3	1.4	5.5	2.5
4	7.6	4.7	2.7
5	3.2	5.0	2.0
6	3.5	4.9	2.8
7	6.3	5.9	2.1
8	3.7	7.3	1.5

Total 29.3 acres

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Map produced for the Pulaski Lake Improvement District by:



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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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