

Eurasian Watermilfoil in Maple Lake (# 86-0134)

Wright County, MN

Early-Summer Delineation Survey – June 29, 2021



Survey, Analysis, and Reporting by:

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Prepared for PLM Lake & Land Management Corp. – June 2021

Survey Method & Analysis

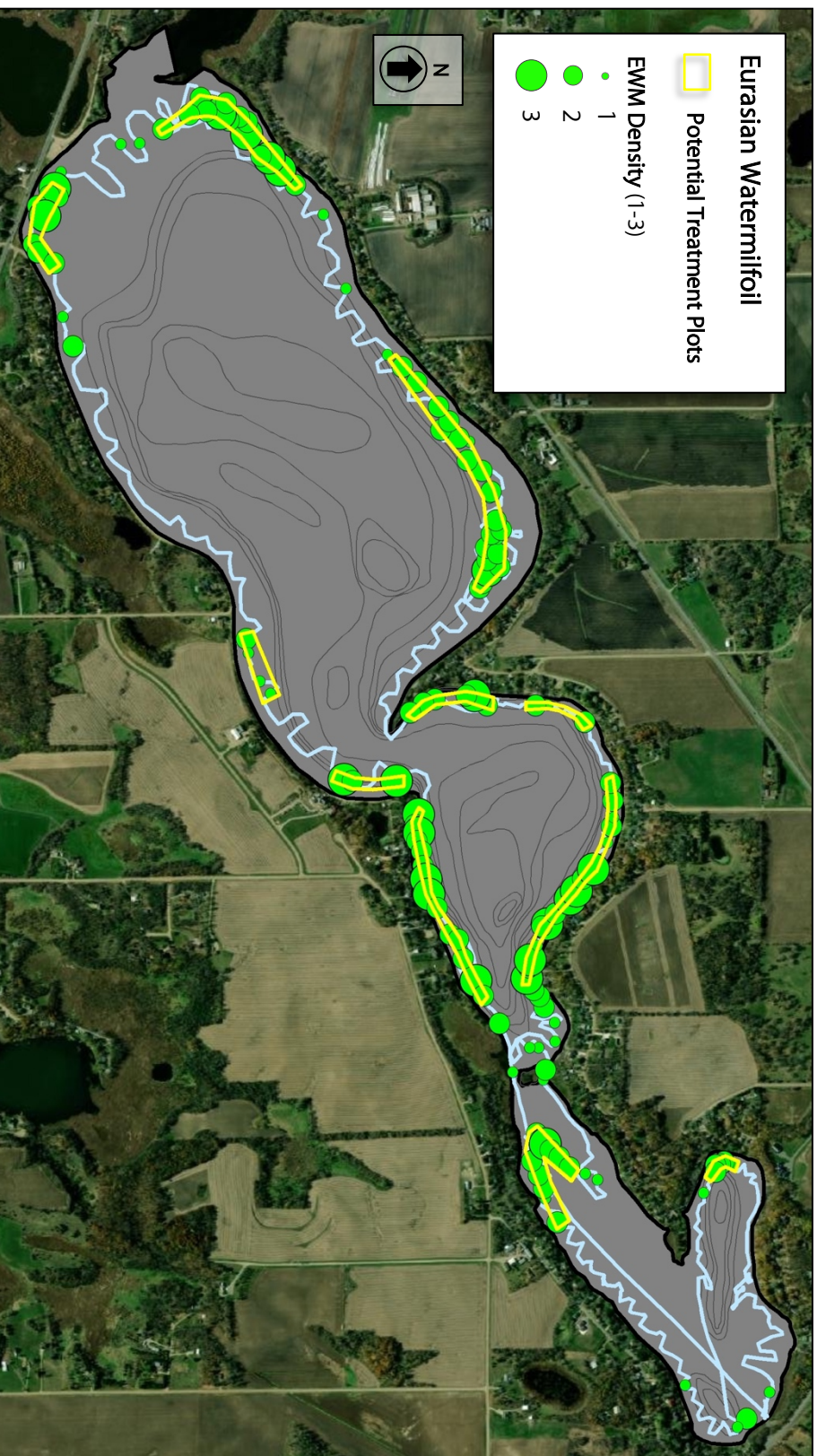
Early-Summer EWM Delineation Survey

Freshwater Scientific Services, LLC completed a delineation survey for Eurasian watermilfoil (EWM) in Maple Lake (#86-0134) on June 29, 2021. During this survey, we navigated a meandering search path over the vegetated portion of the lake. While navigating this path, we used a combination of surface observations, rake tosses, and sonar readings to locate and delineate areas of EWM growth. Sonar and visual assessments were conducted continuously, with subsequent rake tosses to assess EWM abundance at locations where plants were not identifiable from the surface. At each location where EWM was found, we recorded the GPS coordinates, and documented water depth, EWM plant height, and EWM abundance (1 to 3 scale as described below).

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

We entered the recorded locations, water depths, EWM plant heights, and rake densities into desktop GIS software and projected the results over aerial imagery of the lake. We then delineated beds of EWM growth in the surveyed areas, and calculated the area and mean EWM density within each of the delineated beds (using point data).

Maple Lake (#86-0134) Eurasian Watermilfoil Delineation: 2021

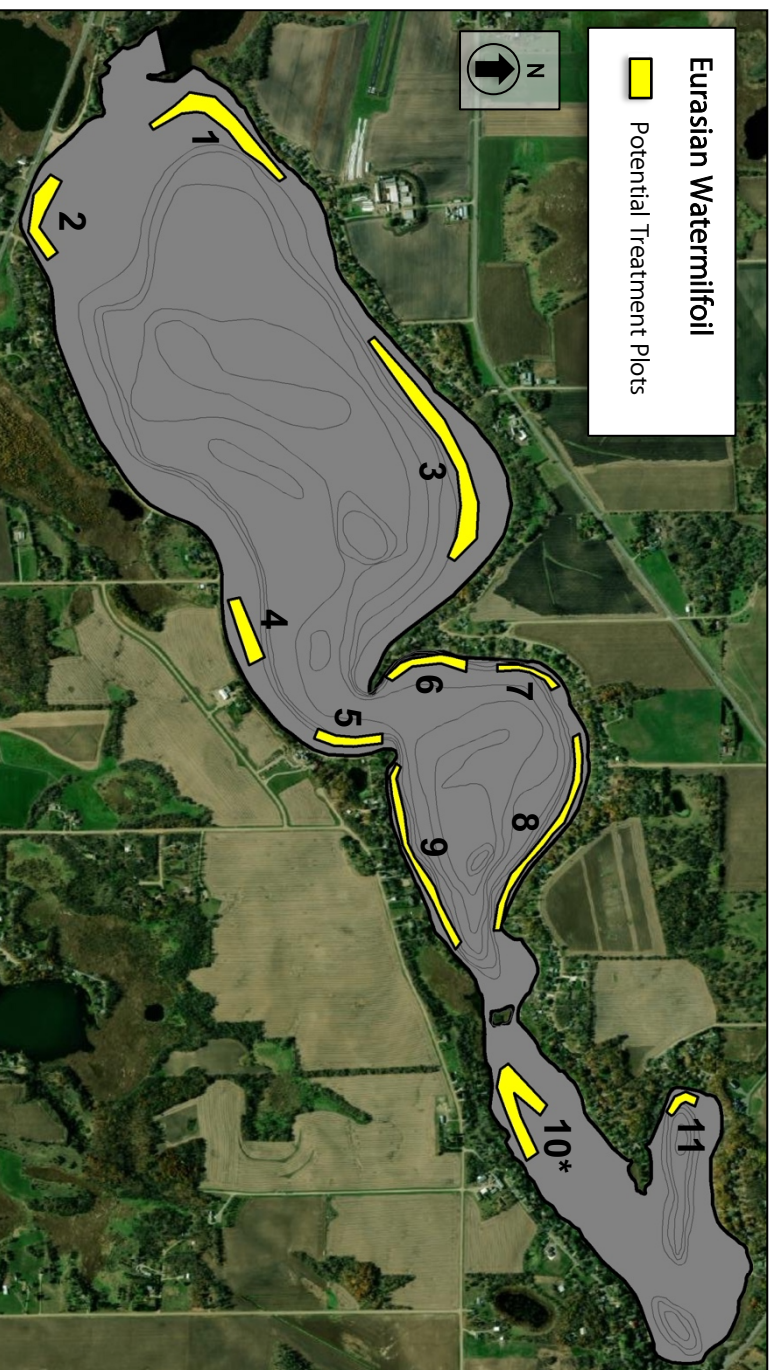


Map produced for PLM Lake & Land Mgmt by:

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Surveyed: June 29, 2021
Methods: Visual, Rake, Sonar
Surveyor: JA Johnson
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Maple Lake (#86-0134) Eurasian Watermilfoil Delineation: 2021



Plot	Area (acres)	Mean Depth (ft)	Mean EWM Density (1-3)
1	5.9	4.5	2.3
2	3.1	5.2	2.3
3	9.1	5.5	1.9
4	2.5	4.4	1.3
5	1.7	4.9	2.7
6	2.0	4.9	2.2
7	1.0	5.1	1.7
8	4.0	5.2	2.2
9	3.8	4.8	2.4
10*	4.9	4.1	2.0
11	0.9	4.9	1.8
Total	38.9 acres		

Note: Several of the identified plots are small or narrow. These plots may experience a substantial amount of herbicide dispersion and drift that could make it difficult to achieve control of EWM. We recommend that you discuss treatment options and feasibility with your applicator.

* Plot 10 is adjacent to beds of waterlilies. The DNR does not allow treatment of EWM within 50 ft of lilies, but may allow a fall treatment in this plot after the lilies begin to senesce.

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