

Eurasian Watermilfoil in Maple Lake (# 86-0134) Wright County, MN

Early-Summer Delineation Survey – June 22, 2022



Survey, Analysis, and Reporting by:

James A. Johnson – *Aquatic Ecologist, Freshwater Scientific Services, LLC*



Prepared for PLM Lake & Land Management Corp. – June 2022

Survey Method & Analysis

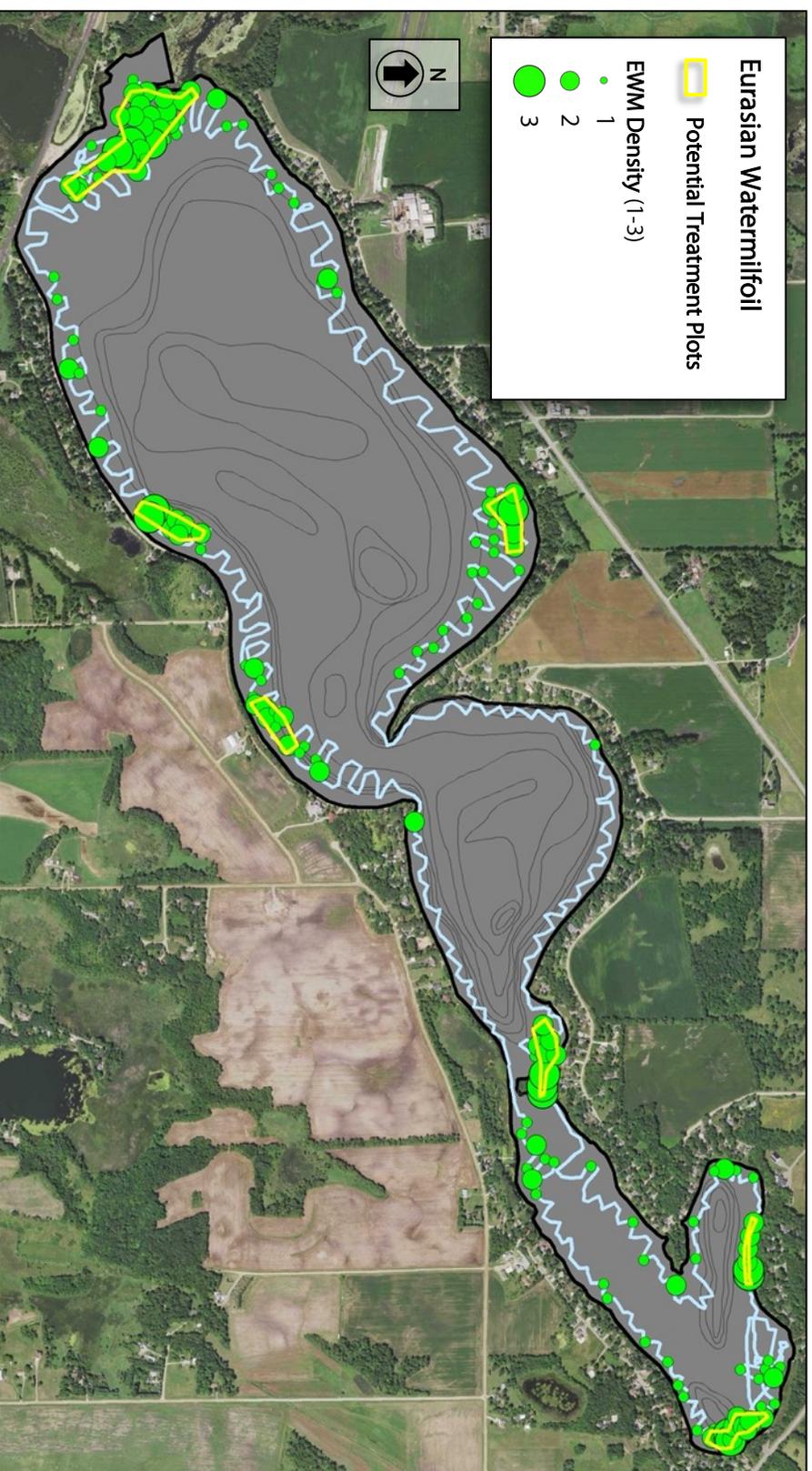
Early-Summer EWM Delineation Survey

Freshwater Scientific Services, LLC completed a delineation survey for Eurasian watermilfoil (EWM) in Maple Lake (#86-0134) on June 22, 2022. 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, 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, and density ratings 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, mean depth, and mean EWM density within each of the delineated beds (using point data).

Maple Lake (#86-0134) 2022 Eurasian Watermilfoil Delineation



Surveyed: June 22, 2022

Methods: Visual, Rake, Sonar

Surveyor: JA Johnson

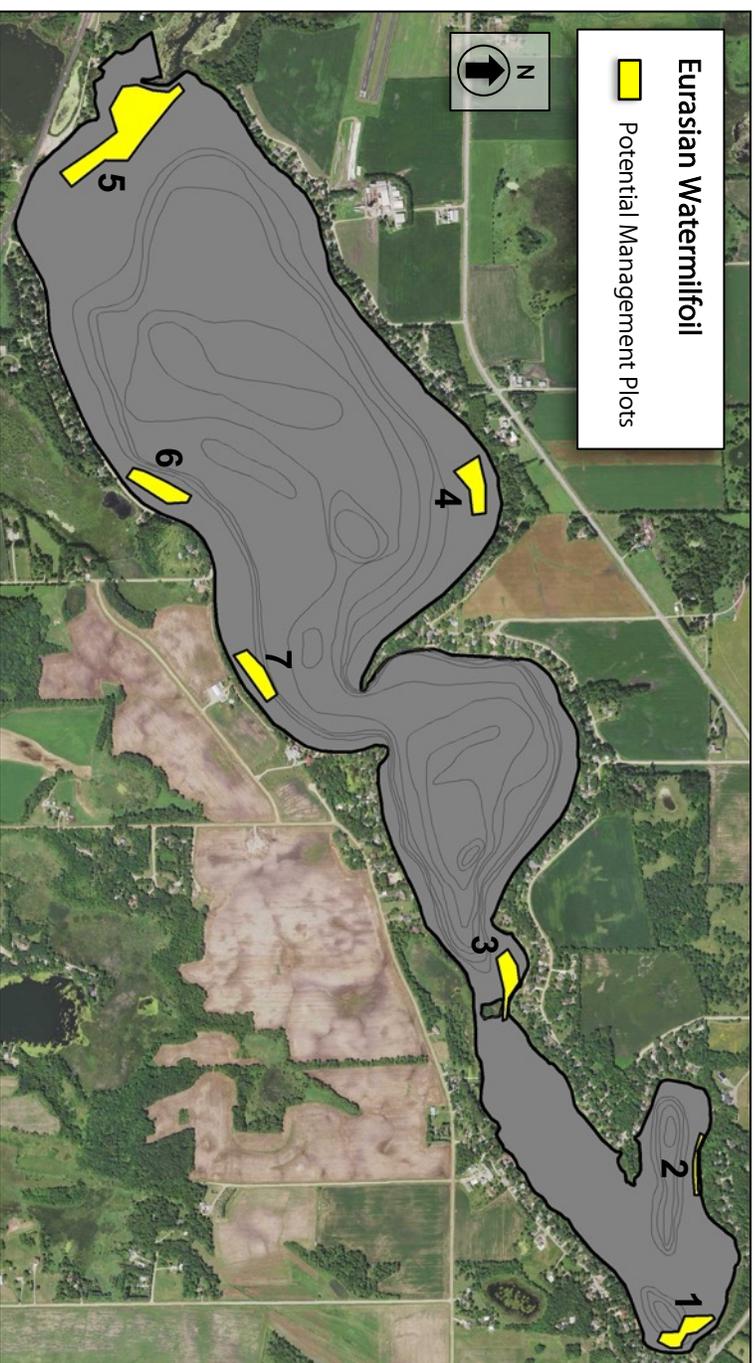


Map produced for PLM Lake & Land Mgmt by:



15771 Creekside Lane
Osseo, MN 55369
fixmylake.com
(651) 336-8696

Maple Lake (#86-0134) 2022 Eurasian Watermilfoil Management Plots



Plot	Area (acres)	Mean Depth (ft)	Mean EWM Density (1-3)
1	2.1	4.3	2.0
2	0.7	3.9	2.1
3	2.0	3.4	1.3
4	2.6	4.3	2.4
5	10.5	6.3	1.3
6	2.6	5.7	1.3
7	2.2	4.9	1.8
Total	22.7 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.

Surveyed: June 22, 2022
 Methods: Visual, Rake, Sonar
 Surveyor: JA Johnson
 Certified Lake Manager
www.NALMS.org

Map produced for: PLM Lake & Land Mgmt by:

 15771 Creekside Lane
 Osseo, MN 55369
fxmnylake.com
 (651) 336-8696