

Curlyleaf Pondweed in Mitchell Lake: 2018

(WBIC# 27-0070)

Hennepin County, MN

Spring Delineation Survey – May 17, 2018



Survey, Analysis, and Reporting by:

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Prepared for Riley Purgatory Bluff Creek Watershed District – May 2018

Survey & Analysis Methods

Spring Delineation Survey

Freshwater Scientific Services, LLC completed delineation survey for CLP in Mitchell Lake (#27-0070) on May 17, 2018. During this survey, we navigated a meandering search path over the littoral portion of the lake while using a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of CLP growth. When we encountered CLP, 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.

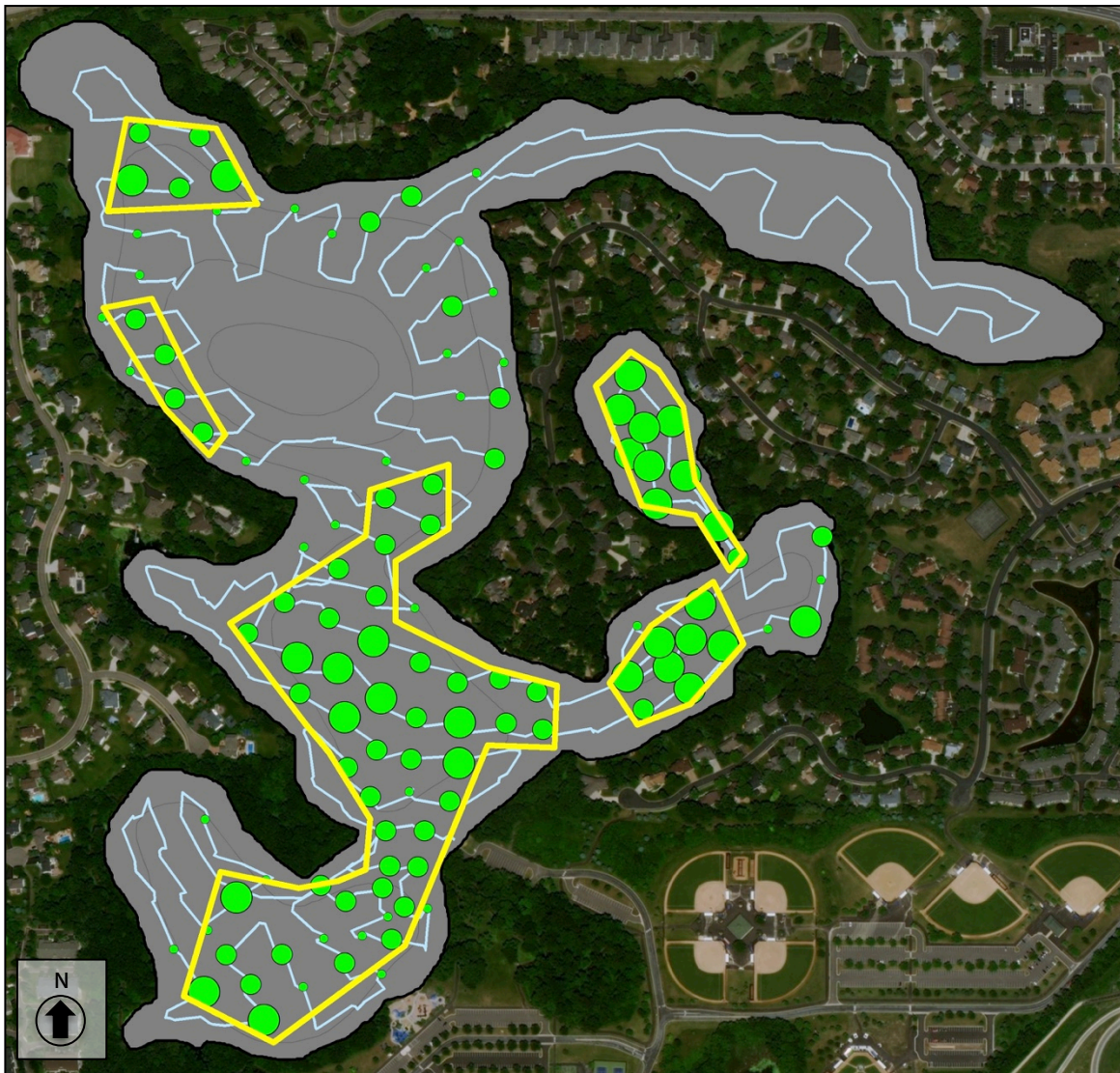
Score	Visual	Rake
1	Light / Solitary plants	1-2 stems
2	Moderate / Scattered dense patches	3 to 9 stems
3	Dense / Uniform dense growth	10+ stems

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

Mitchell Lake (#27-0070)

CLP in Mitchell Lake (Hennepin Co, MN) – May 2018

Spring Delineation of Curlyleaf Pondweed: May 17, 2018



Curlyleaf Pondweed

- Search Path
- Rake Density Rating (0-3)
 - 1
 - 2
 - 3
- Proposed Treatment Plots

Surveyed: May 17, 2018
Methods: Rake, Sonar, Visual
Surveyor: JA Johnson



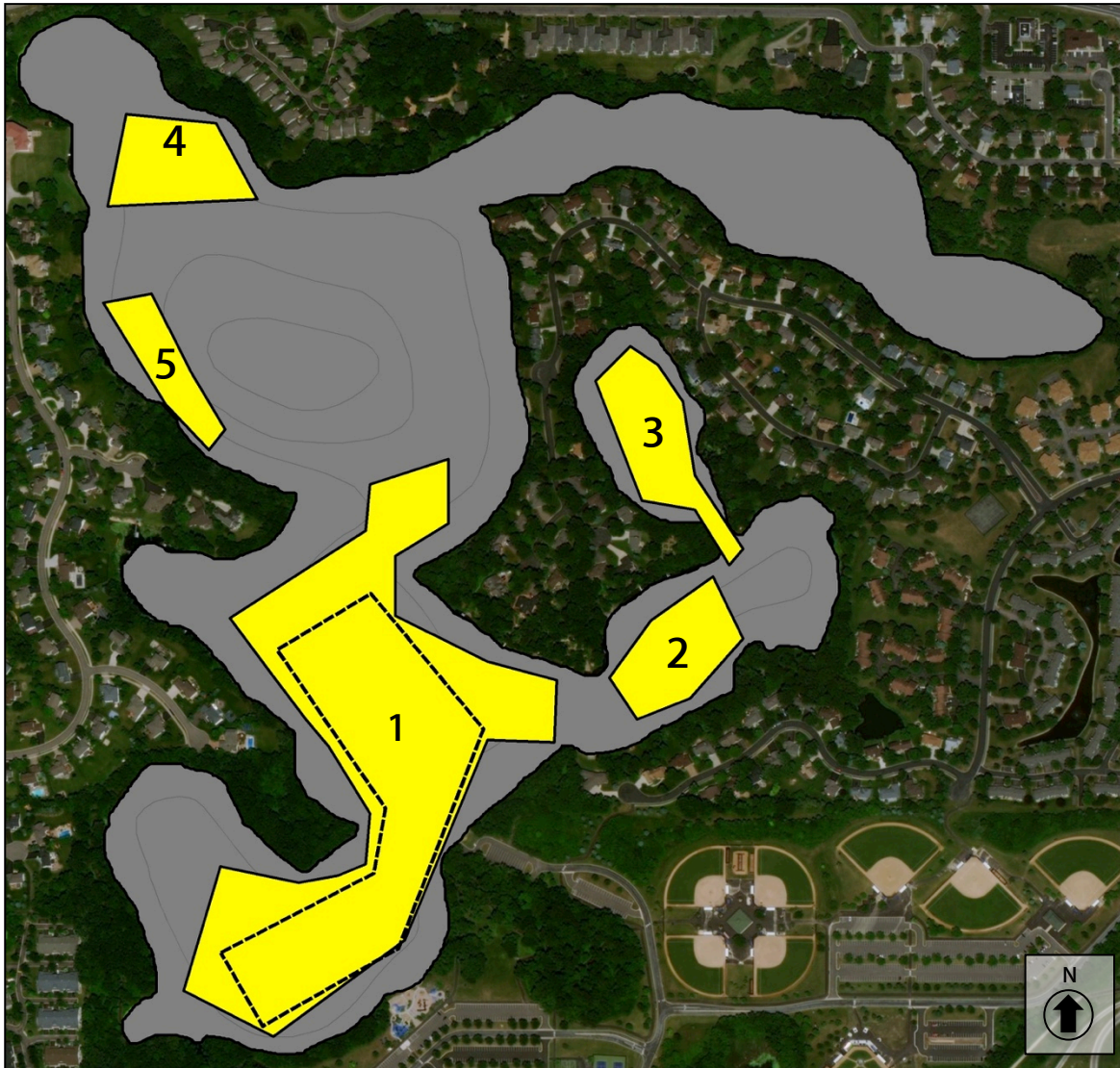
Map created for Riley Purgatory Bluff Creek Watershed District by:



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Mitchell Lake (#27-0070)

Spring Delineation of Curlyleaf Pondweed: May 17, 2018



Curlyleaf Pondweed

- Proposed Treatment Plots
- Primary Plot (15%/13.0 acres)

Plot	Area (acres)	Avg Depth (ft)	Avg CLP Density (0-3)
1	24.7	7.8	2.1
2	3.0	6.4	2.9
3	3.4	5.3	2.9
4	3.0	6.3	2.4
5	1.9	7.9	2.0

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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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