

Curlyleaf Pondweed in Riley Lake: 2018

(WBIC# 10-0002)

Carver County, MN

Spring Delineation Survey – May 9, 2018



Survey, Analysis, and Reporting by:

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



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 Riley Lake (#10-0002) on May 9, 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.

Spring Delineation of Curlyleaf Pondweed: May 9, 2018



Curlyleaf Pondweed
Rake Density Rating (0-3)

- 1
- 2
- 3

□ Proposed Treatment Plots

Surveyed: May 9, 2018
Methods: Rake, Sonar, Visual
Surveyor: JA Johnson



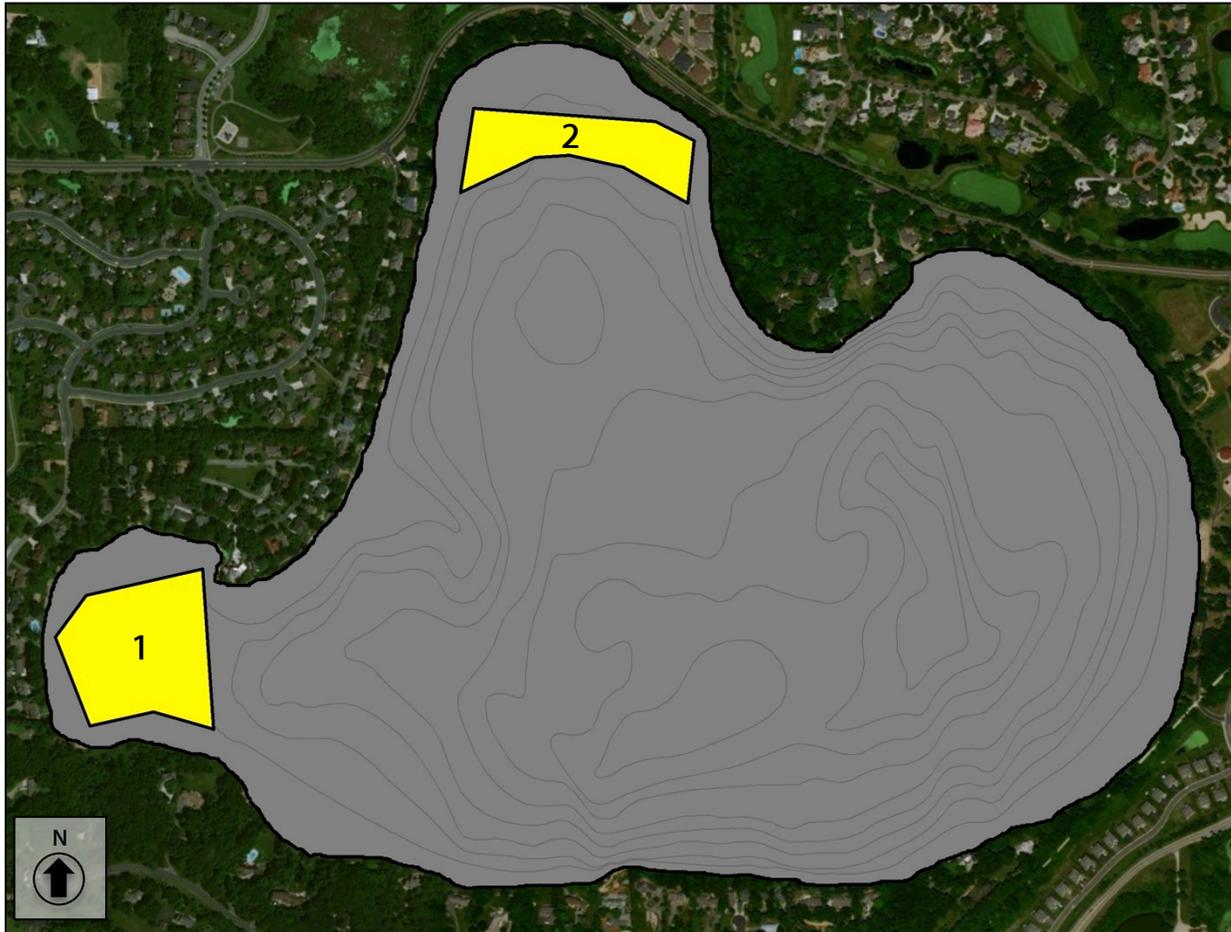
Map created for Riley Purgatory Bluff Creek
Watershed District by:



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

Riley Lake (#10-0002)

Spring Delineation of Curlyleaf Pondweed: May 9, 2018



Curlyleaf Pondweed

 Proposed Treatment Plots

Plot	Area (acres)	Avg Depth (ft)	Avg CLP Density (0-3)
1	9.5	5.4	1.9
2	6.2	6.8	1.2

Surveyed: May 9, 2018
 Methods: Rake, Sonar, Visual
 Surveyor: JA Johnson



Map created for Riley Purgatory Bluff Creek Watershed District by:



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

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>

Keegan Lund

Invasive Species Specialist

Minnesota DNR

keegan.lund@state.mn.us

(651) 259-5828

Wendy Crowell

ALS Management Coordinator

Minnesota DNR

wendy.crowell@state.mn.us

(651) 259-5085