

# Curlyleaf Pondweed in Red Rock Lake: 2018

(WBIC# 27-0076)

Hennepin County, MN

Spring Delineation Survey – May 8, 2018



## Survey, Analysis, and Reporting by:

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Prepared for Riley Purgatory Bluff Creek Watershed District – May 2018

## Survey & Analysis Methods

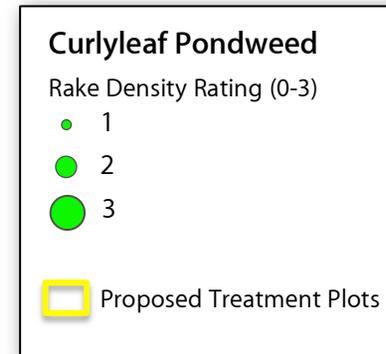
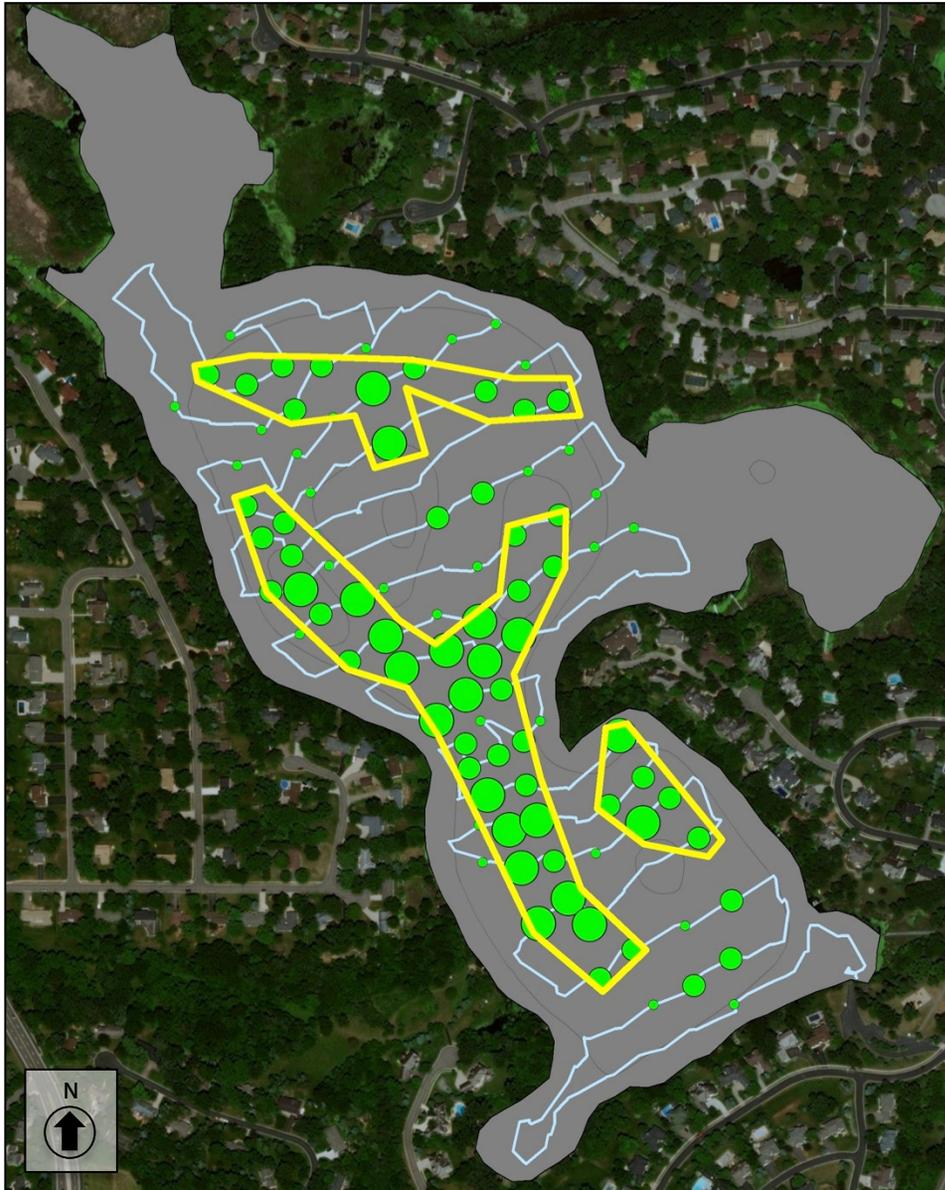
### Spring Delineation Survey

Freshwater Scientific Services, LLC completed delineation survey for CLP in Red Rock Lake (#27-0076) on May 8, 2018. During this survey, we navigated a meandering search path over the littoral portion of the lake (excluding shallow bays) 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.

**Red Rock Lake (#27-0076-00)**  
**Spring Delineation of Curlyleaf Pondweed: May 8, 2018**



Surveyed: May 8, 2018  
Methods: Rake, Sonar, Visual  
Surveyor: JA Johnson



Map created for Riley Purgatory Bluff Creek Watershed District by:



**Red Rock Lake (#27-0076-00)**  
**Spring Delineation of Curlyleaf Pondweed: May 8, 2018**



**Curlyleaf Pondweed**

 Proposed Treatment Plots

Plot	Area (acres)	Avg Depth (ft)	Avg CLP Density (0-3)
1	13.0	8.6	2.4
2	5.1	8.7	2.1
3	2.2	7.2	2.3

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Map created for Riley Purgatory Bluff Creek Watershed 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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