Curlyleaf Pondweed in Susan Lake: 2018
(WBIC# 10-0013)
Carver County, MN

Spring Delineation Survey – May 8, 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
Spring Delineation Survey
Freshwater Scientific Services, LLC completed delineation survey for CLP in Susan Lake (#10-0013) on May 8, 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.

<table>
<thead>
<tr>
<th>Score</th>
<th>Visual</th>
<th>Rake</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Light / Solitary plants</td>
<td>1-2 stems</td>
</tr>
<tr>
<td>2</td>
<td>Moderate / Scattered dense patches</td>
<td>3 to 9 stems</td>
</tr>
<tr>
<td>3</td>
<td>Dense / Uniform dense growth</td>
<td>10+ stems</td>
</tr>
</tbody>
</table>

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.
**Susan Lake (#10-0013)**

**Spring Delineation of Curlyleaf Pondweed: May 8, 2018**

Map created for Riley Purgatory Bluff Creek Watershed District by:

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

Curlyleaf Pondweed

Rake Density Rating (0-3)

- 1
- 2
- 3

**Proposed Treatment Plots**

Map created for Riley Purgatory Bluff Creek Watershed District by:

15771 Creekside Lane
Osseo, MN 55369
fixmylake.com
(651) 336-8696
Surveyed: May 8, 2018  
Methods: Rake, Sonar, Visual  
Surveyor: JA Johnson

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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