

Curlyleaf Pondweed in the Briggs Chain of Lakes: 2020

Briggs Lake (#71-0146)

Julia Lake (#71-0145)

Rush Lake (#71-0147)

Surveyed May 4, 2020



Survey, Analysis, and Reporting by:

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Purpose of Survey

These pretreatment surveys were designed to locate and delineate areas of curlyleaf pondweed (*Potamogeton crispus*, henceforth referred to as CLP) in Briggs Lake, Julia Lake, and Rush Lake during the early-spring of 2020. This information will help to guide CLP management in 2020 and is required as a part of the DNR permitting process.

Survey Method

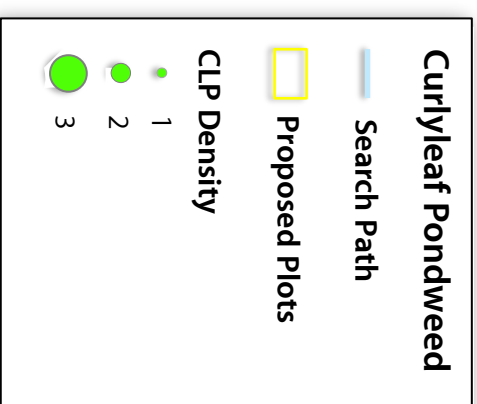
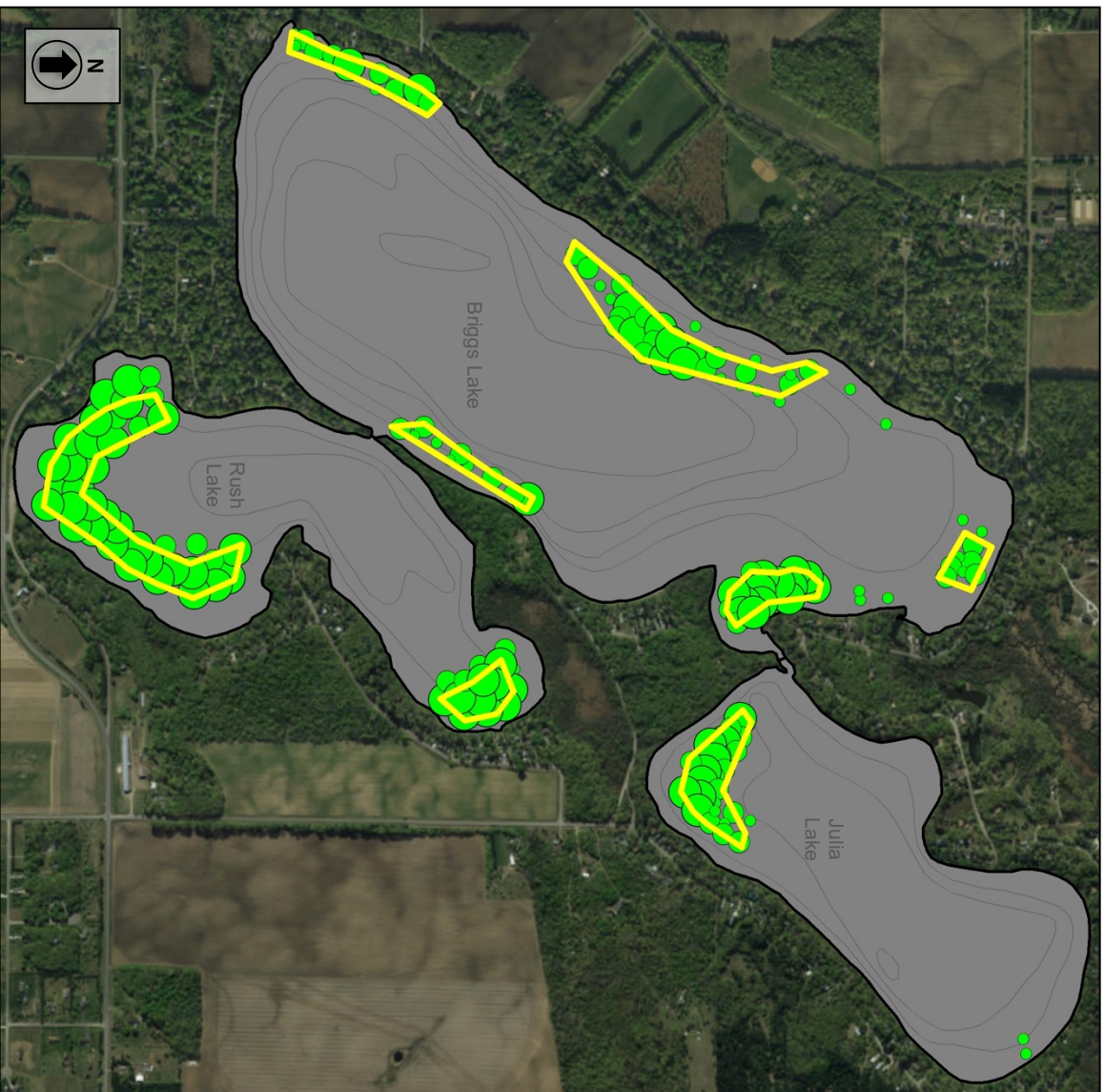
CLP Delineation Surveys

Freshwater Scientific Services surveyed Rush, Briggs, and Julia Lake on May 4, 2020. During each of these surveys, we navigated a meandering search path over designated portions of each lake where denser CLP has been found in the past. While navigating this search path, we used a combination of rake tosses, surface observations, and sonar readings, to locate and delineate areas of CLP growth. Sonar and visual assessments were conducted continuously, with subsequent rake tosses to assess CLP abundance at locations where plants were not identifiable from the surface. When we encountered CLP plants, 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 (stem count) retrieved on the rake. The recorded water depths and density scores were linked to the appropriate GPS locations and then mapped using desktop GIS software.

Briggs Chain of Lakes 2020 Curlyleaf Pondweed Delineation Survey



Surveyed: May 4, 2020

Methods: Rake, Visual, Sonar

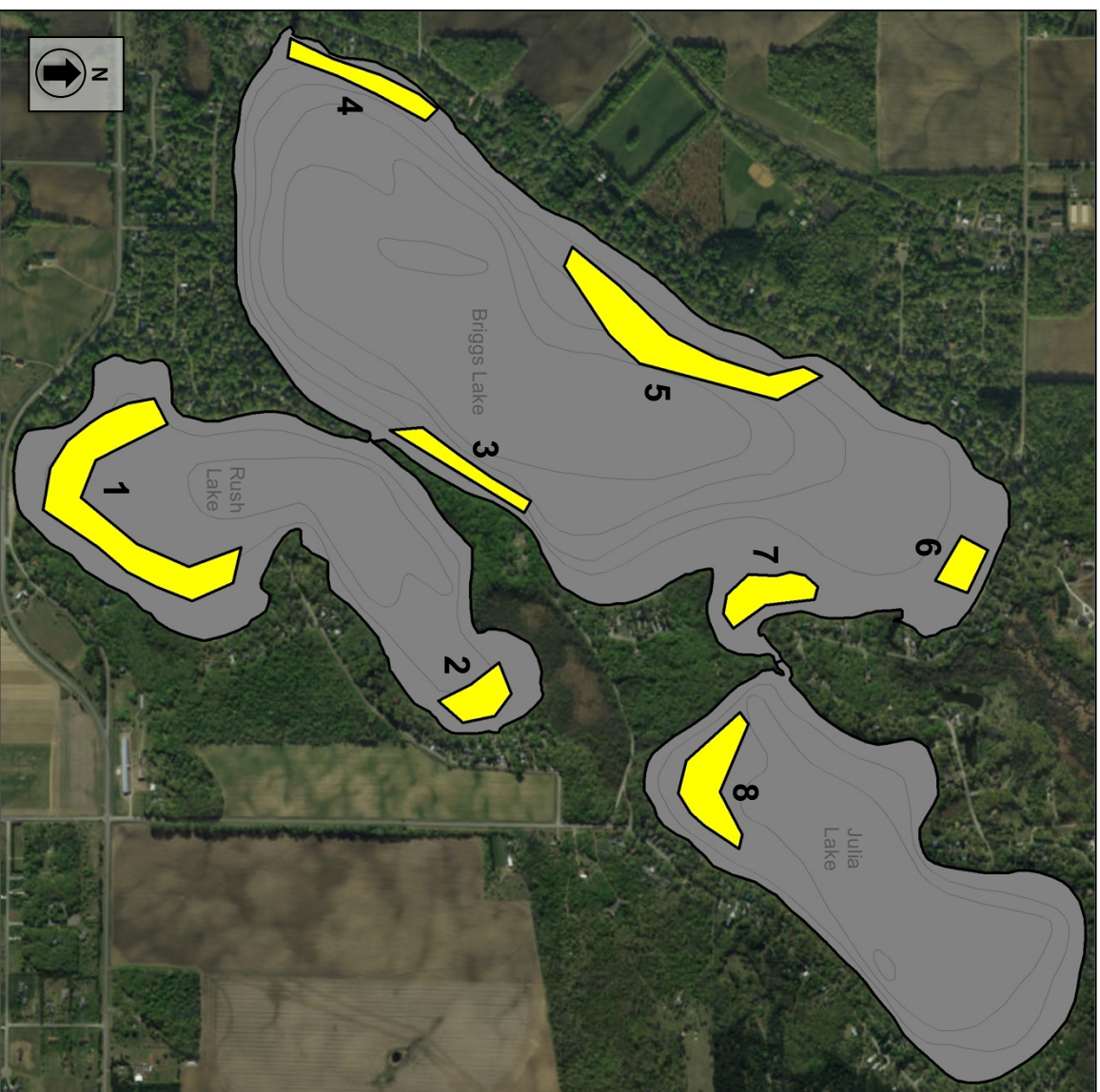
Surveyor: JA Johnson

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Map produced for the
Three Lake Improvement District by:


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Proposed 2020 Treatment Plots

Plot	Acres	Mean Depth (#)	Mean CLP (1-3)
1	20.0	3.5	2.9
2	4.0	2.6	3.0
3	3.9	3.5	1.7
4	4.9	3.0	2.0
5	15.4	4.2	2.0
6	2.8	4.7	1.6
7	5.0	3.4	2.7
8	8.0	5.3	2.2
Total	64.0		

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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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