

## Curlyleaf Pondweed in the Briggs Chain of Lakes: 2020

**Briggs Lake** (#71-0146)

**Julia Lake** (#71-0145)

**Rush Lake** (#71-0147)

Surveyed May 4 and June 4, 2020



### Survey, Analysis, and Reporting by:

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## Purpose of Survey

These surveys were conducted to locate and delineate areas of curlyleaf pondweed (*Potamogeton crispus*, henceforth referred to as CLP) in Briggs Lake, Julia Lake, and Rush Lake in the early-spring (pretreatment) and late-spring (posttreatment) of 2020. This information is intended to help guide future CLP management.

## Survey Method

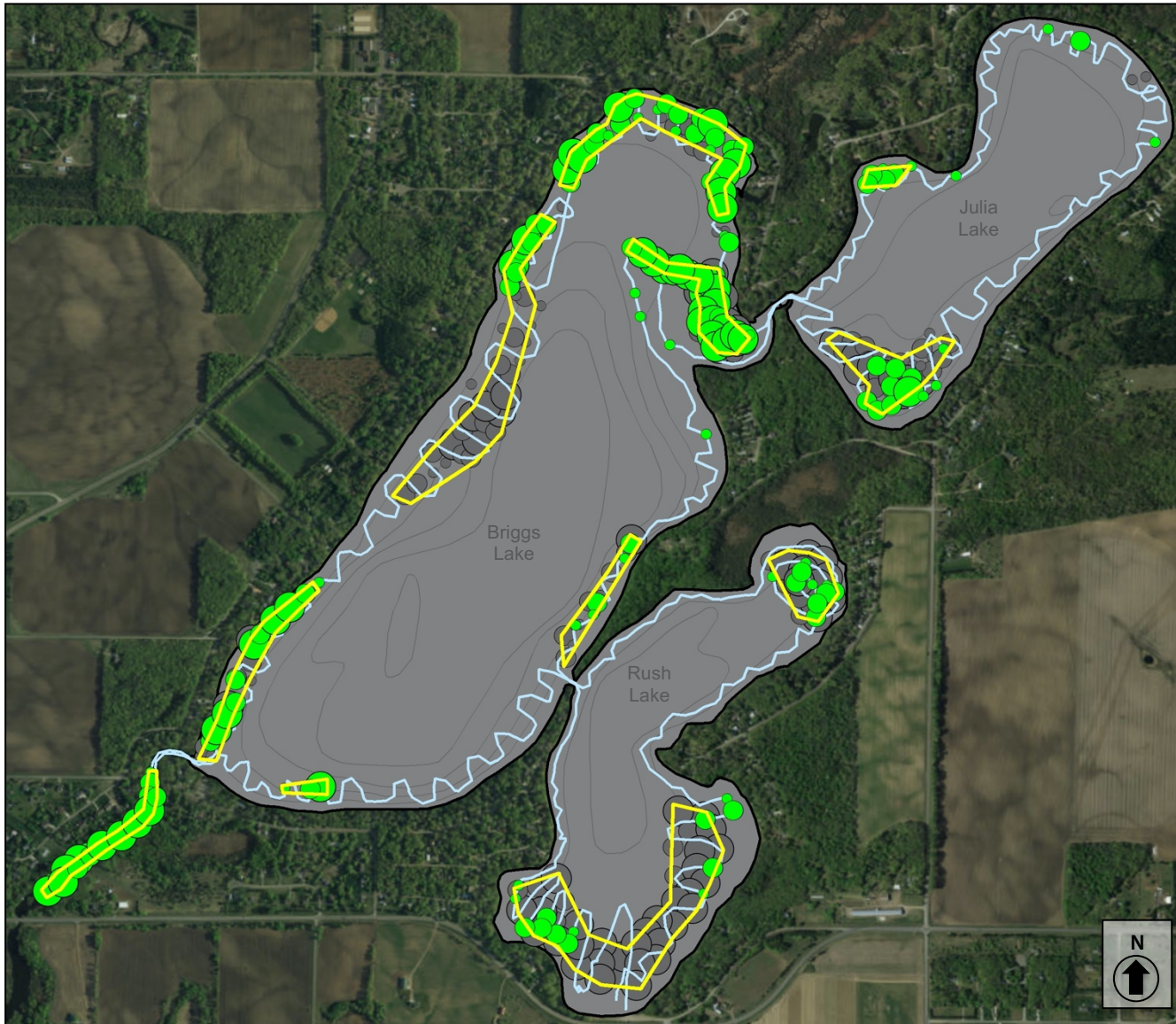
### CLP Delineation Surveys

Freshwater Scientific Services surveyed Rush, Briggs, and Julia Lake on May 4, 2020 (pretreatment, plots only) and again on June 4, 2020 (posttreatment, lake-wide). During each of these surveys, we navigated a meandering search path over the designated portions of each lake. While navigating this search path, we used a combination of surface observations, rake tosses, 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



### Curlyleaf Pondweed

- Search Path
- Treatment Plots

### CLP Density

	1	} June 2020 (posttreatment)
	2	
	3	
	1	} May 2020 (pretreatment)
	2	
	3	

**Surveyed:** May 4 & June 4, 2020  
**Methods:** Visual, Sonar, Rake  
**Surveyor:** JA Johnson



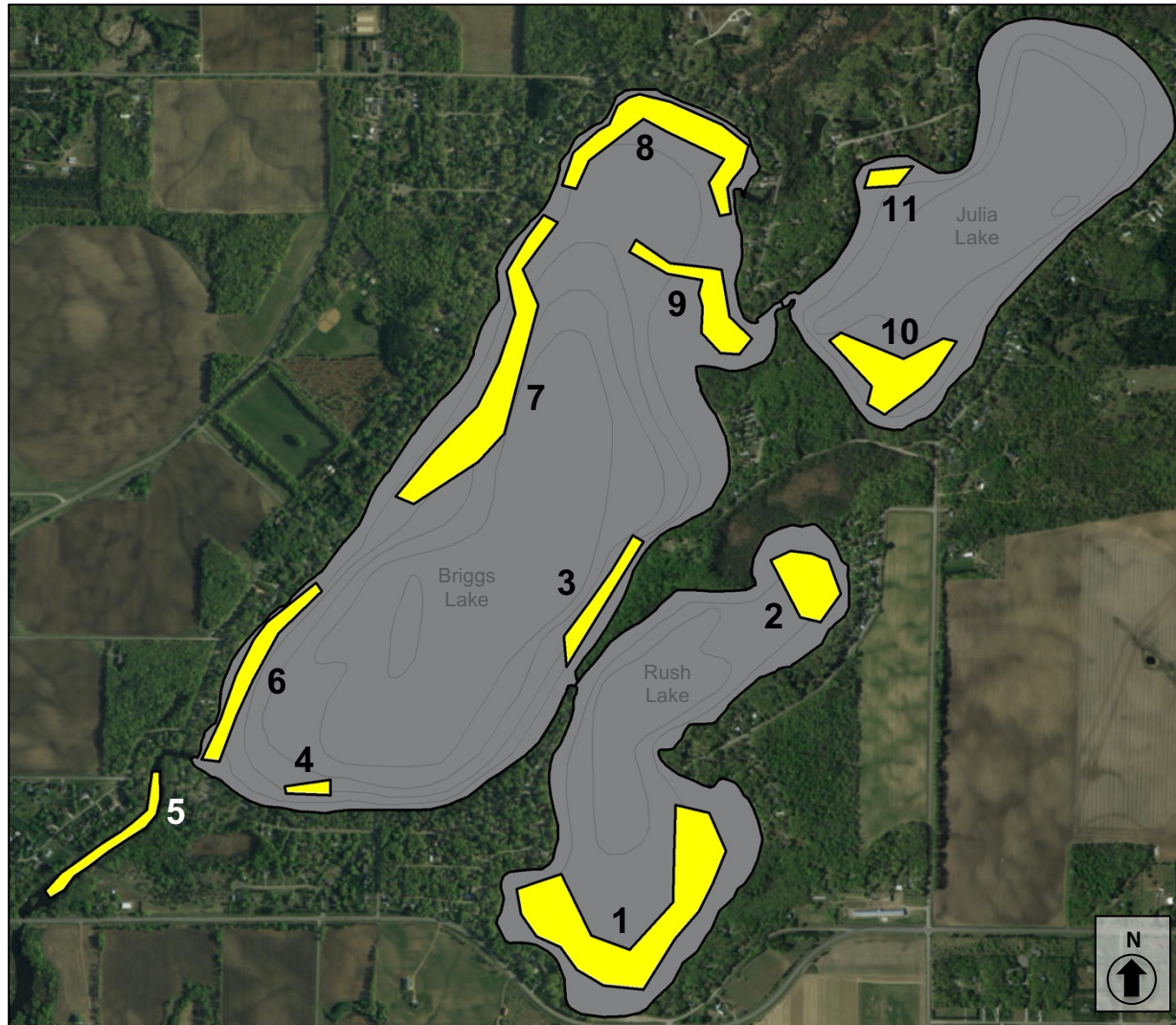
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## Briggs Chain of Lakes 2020 Curlyleaf Pondweed Delineation



### Potential Treatment Plots

Plot	Acres	Mean Depth (ft)	Mean CLP (1-3)
1	25.2	3.4	2.6
2	6.4	2.6	2.3
3	3.9	3.3	1.6
4	1.0	3.2	2.0
5	3.9	2.9	2.4
6	6.6	2.7	2.3
7	17.5	3.7	2.0
8	12.7	3.0	2.0
9	7.0	3.6	2.8
10	9.1	4.9	2.1
11	1.4	4.1	1.8

**Total 94.7**

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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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