

## 2019 Early-Spring Curlyleaf Pondweed Delineation

**Bass Lake (# 86-0234)**  
Wright County, MN

Surveyed April 29, 2019



### Survey, Analysis, and Reporting by:

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## Purpose of Survey

This early-spring survey was designed to locate and delineate areas of curlyleaf pondweed (CLP) in portions of Bass Lake (#86-0234) where denser growth has been found in the past 2 years. This information will help to guide CLP management in Bass Lake, and is required as a part of the DNR permitting process.

## Survey Method

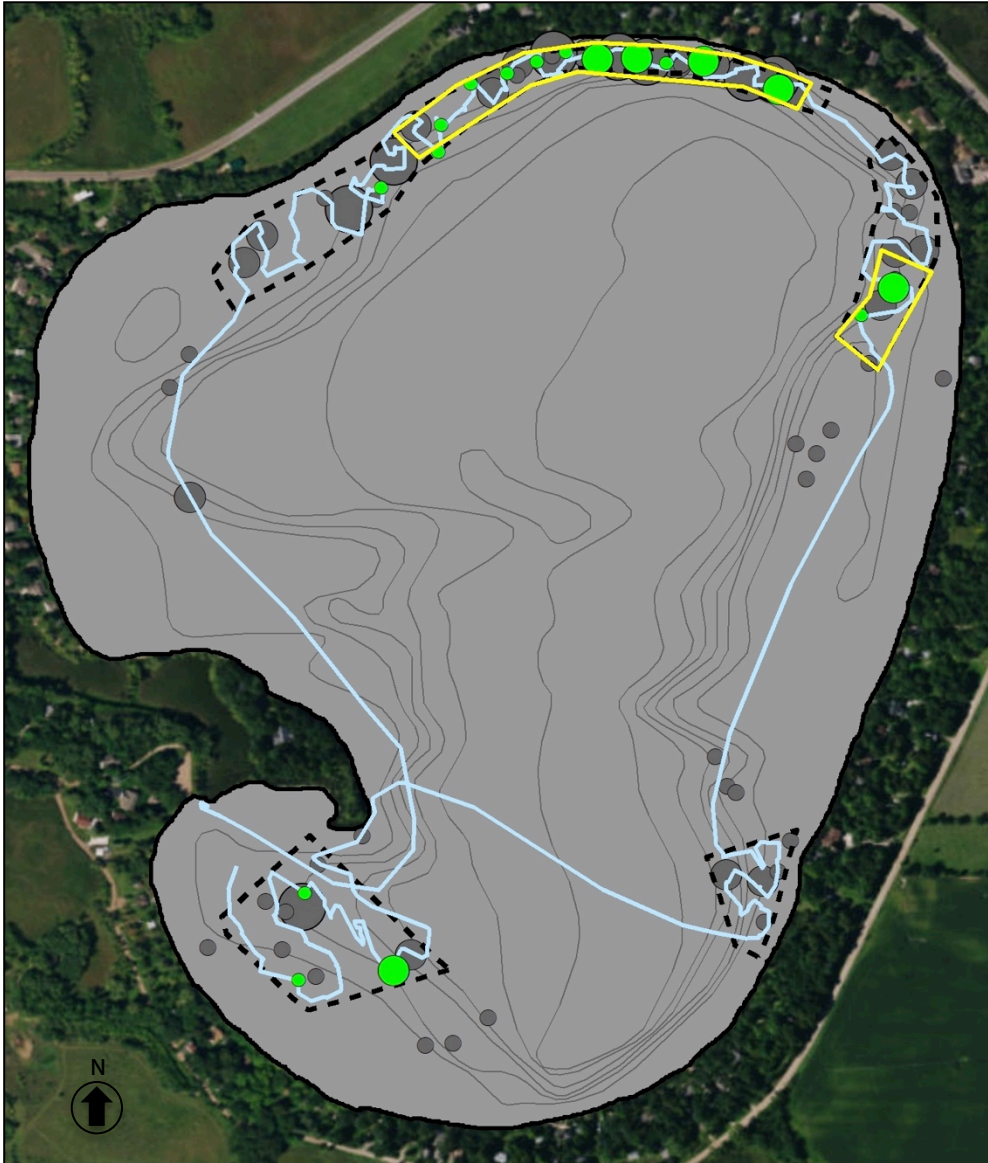
### CLP Delineation Survey

Freshwater Scientific Services surveyed the designated portions of Bass Lake on April 29, 2019. During this survey, we navigated a meandering path over the search areas while using a combination of rake tosses and sonar readings 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 (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.

## 2019 Early-Spring Delineation of Curlyleaf Pondweed Bass Lake (# 86-02324)



**Curlyleaf Pondweed**

- 2017 Plots
- Surveyed Path
- Proposed Plots

**CLP Rake Density**

	1	} April 2019
	2	
	3	
	1	} Jun 2017
	2	
	3	

Surveyed: April 29, 2019  
Methods: Rake, Sonar  
Surveyor: JA Johnson

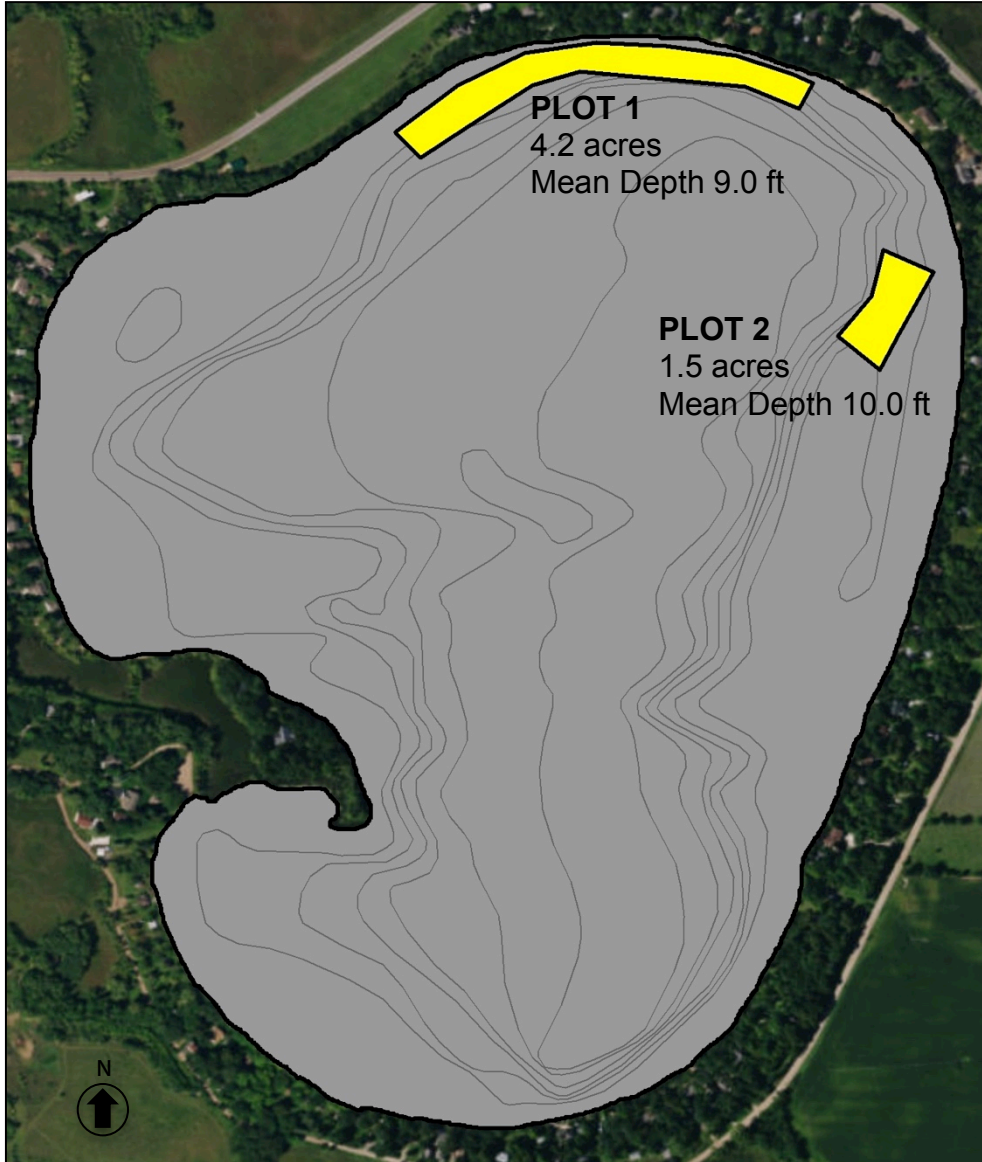



Map produced for the Bass Lake Association of Wright Co. by:



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## 2019 Early-Spring Delineation of Curlyleaf Pondweed Bass Lake (# 86-02324)



 Proposed Plots

Surveyed: April 29, 2019  
Methods: Rake, Sonar  
Surveyor: JA Johnson

 **Certified Lake Manager**  
[www.NALMS.org](http://www.NALMS.org)

Map produced for the  
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SCIENTIFIC SERVICES

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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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