



Reference Number: 2025-1578

MNDNR PERMITTING AND REPORTING SYSTEM

REVISION 20211001

APP ID 87258

Invasive	Aquatic Plant	Management	Permit Application
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Project Name: Cross Lake, Pine County, CLP

IAPM Specialist: Richard Rezanka

Date Submitted to DNR: 5/8/2025 5:25:27PM

DNR Region: Northeast Region 2

Area: Grand Rapids IAPM

Address: Minnesota Department of Natural Resources

Email: Richard.Rezanka@state.mn.us

1201 E Hwy 2

Phone: 218-999-7805

Grand Rapids, MN, 55744

Applicant Details (Individuals and Organizations associated with the permit application)

Rachel Wheeler - Landowner or Government Unit	Address: 710 7th Ave NE, Pine City, MN 55063 Phone: 612-723-8578
Spencer Richards - Contact (representing Aquatic Conservation Services) (submitted application)	Address: 46340 Beach Rd, Harris, MN 55032 Phone: 763-257-5852 Email: aquaticconservationservices@gmail.com
Aquatic Conservation Services - Agent	Address: 46340 Beach Rd, Harris, MN 55032 Phone: 763-257-5852

Location and Water Resource



Water Resource: Lake: Cross (58011900) - Public

Waters Basin

County: Pine

Type of Work

Which of the following are you applying for?

Offshore: further than 150 feet from the shoreline, or lakewide

Type of Work (continued)

	Pro	pos	ed 7	Frea	tment
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Treatment

Method	Area	Species	Device	Pesti	cide	Dimensions	Company
Pesticide Control	Offshore	Curly-leaf Pondweed	(N/A)	Flumiga		9.40 acres	Aquatic Conservation Services
Additional D	etails						
What is the primary re	eason for the pro	posed aquatic plant cont	rol?		Contro	ol invasive species	
Is any portion of the proposed control area within 150-feet of the shore?			Yes				
Signature form will be the last 2 years	mailed or all CU	RRENT signatures were	provided within		Yes		and the second s
I will share the proposed treatment areas by:				Attach	ed is a map and GIS file fo	or the area(s)	

Mechanical

If possible, please upload a single .zip file of the Geographical Digital Data showing the location(s) and dimensions of the proposed treatment area(s). The file should include all necessary electronic files that can be used by DNR to re-create polygons, waypoints, track logs, etc.

CrossCLP26Apr2025.pdf

previous year)

Requested Area

Attached is a map and GIS file for the area(s) proposed for treatment (we only want a map and GIS that is actually being proposed – either spring delineation or a delineation from a

Commercial

Acknowledgement (By the party who submitted the permit application)



I attest that:

- I possess the authority to undertake the work described in the application, or I am acting as a duly authorized agent, AND
- •There are no easements or other restrictions on the land that would prohibit the proposed activities from being authorized under a permit, AND
- •The information submitted and the statements made concerning this application are true and correct to the best of my knowledge.
 - -My application is complete and the submitted map represents the actual areas that are proposed for treatment.

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2025 Curlyleaf Pondweed Delineation

Cross Lake (# 58-0119) Pine County, MN

Surveyed April 26, 2025



Surveyed by:

Krista Espelien – Environs

Analysis & Reporting by:

James A. Johnson – Aquatic Ecologist, Freshwater Scientific Services



Purpose of Survey

This spring survey was conducted to delineate areas of curlyleaf pondweed (CLP) in Cross Lake (#58-0119). The reported results are intended to assess the extent and density of CLP in the lake and guide future management decisions.

Survey Method

CLP Delineation Survey

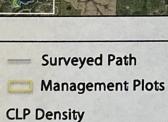
We surveyed Cross Lake on April 26, 2025. During this survey, we navigated a meandering path over the portion of the lake from shore out to roughly the 10-ft contour. While navigating this search path, we used a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of CLP growth. When we encountered CLP plants, we marked the location, recorded the water depth, and rated the density of the growth using 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.

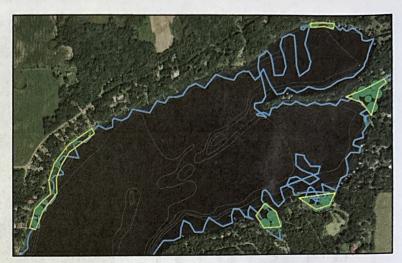
Cross Lake (#58-0119) 2025 Curlyleaf Pondweed Delineation





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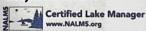
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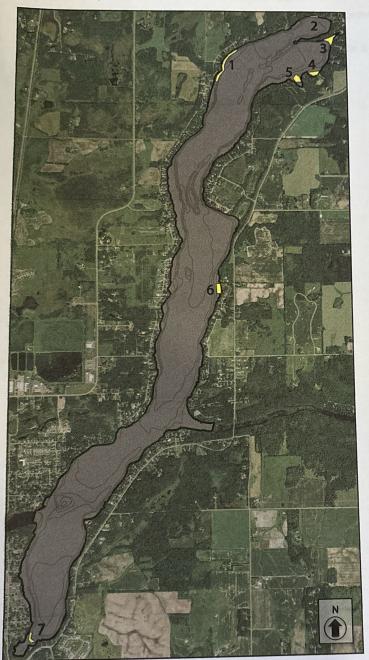
Surveyed: April 26, 2025 Methods: Visual, Sonar, Rake Surveyor: K Espelien Analyst: JA Johnson





CLP in Cross Lake (Pine Co, MN) - April 2025

Cross Lake (#58-0119) 2025 Curlyleaf Pondweed Delineation



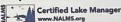


Management Plots

Plot	Area (acres)	Mean Depth (ft)	Mean CLP Density (1-3)
1	2.8	3.5	1.6
2	0.4	3.6	2.0
3	1.7	2.7	2.2
4	1.1	2.6	2.2
5	1.3	3.4	2.4
6	1.3	3.4	1.7
7	8.0	3.7	1.3

Total 9.4 acres

Surveyed: April 26, 2025 Methods: Visual, Sonar, Rake Surveyor: K Espelien Analyst: JA Johnson





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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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