

Three Lake Improvements District [TLID] 2020 Annual Report

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A. Status of All Projects in the District

- The TLID was formed with three overall goals:
- Prevent, control and manage Aquatic Invasive Species [AIS]
- Address water quality issues
- Stabilize water levels

One of the initial issues to be addressed by the TLID was management and control of Curly Leaf Pondweed [CLP], present in the three lakes for over 15 years. Prior to the TLID the Briggs Lake Association [BLCA] was responsible for CLP. Starting in 2016 and continuing through 2020. The TLID took responsibility for, surveying CLP and managing with herbicide treatments applied in May. In 2020 the TLID contracted with Lake Management to survey and treat 64 acres of affected areas on Briggs, Rush and Julia Lakes. The treated area was increased to the maximum allowed by the DNR, as has been in past years. Last years reduced spraying (late ice out, heavy snow load) may have also contributed to the larger area due to late growth of CLP after survey and treatment.

In 2014, shortly before the TLID was formed by the county in 2016, Eurasian Water Milfoil was discovered in Rush Lake at the south end of the lake close to the public landing. In 2020 the TLID again contracted with James Johnson of Freshwater Scientific to survey the three lakes for EWM. The survey showed favorable results in that no EWM was found in Rush Lake or the other two adjoining lakes this year. Last year almost no EWM was found and only hand pulling was required. Finding no EWM in 2020 points towards successful management. This is now a two-year trend that we hope to build on but will continue to survey and treat as needed in the years to follow.

The TLID, with the assistance from James Johnson of Fresh Water Scientific finished the third leg of the Point Intercept Survey on Briggs in support of the Lake Vegetative Management plan. This now puts the district on a path to monitor and complete surveys every five years as has been recommended.

The TLID board worked with Sherburne Soil and Water Conservation District and the Briggs Lake Chain Association to commission a second water stabilization project report from Wenck Engineering. Several potential projects were identified to reduce the high-water events of the Briggs Lake Chain. These included sights upriver that may act as collection points before the water enters the Elk River near the lake chain. Continued evaluation of the report and discussions will be needed with the DNR, landowners, SWCD and stake holders of the lakes will need to take place in order to form a plan of action.

B. Financial Condition of the District

At the annual TLID meeting in August 2020 the membership unanimously passed the 2021 budget of \$32,760 this is a reduction in actual projected expenses due to grants received from the DNR and SWCD. The 2021 budget includes \$2,000 for administrative expenses and \$30,760 for AIS projects and \$5,000 for future work on a water stabilization study. The 2021 assessment will be \$75.66. The TLID financial report for 2020, as of August 2020, showed expenses of \$38,794, deposits of \$54,878, and a balance of \$69,356. Grants of \$12,650 from DNR and \$2,841 were received from Sherburne SWCD.

C. Business Transactions

- The 2020 TLID assessment was \$75.66 for 433 parcels.
- Insurance coverage for TLID Directors was \$1,175
- Payments to Lake Management for CLP treatment was \$23,360
- Payment to Freshwater Scientific for CLP, EWM and point intercept survey was \$10,550.

D. Discussion of Directors' Intentions for Succeeding Years

The TLID will continue in its AIS detection and management activities: surveys, herbicide treatments for CLP and EWM. No evidence of EWM was detected this year, but prudent planning dictates surveys for the next five years.

The TLID will explore, in collaboration with Sherburne SWCD, BLCA and DNR options on water stabilization of the lake chain. In addition, the TLID will monitor progress of phosphorus reduction projects in the county and state. Lastly the TLID will work with other agencies to monitor and prevent the spread of additional AIS in the lake system. This will include the Golden Clam survey on Briggs Lake, and research done by the University of Minnesota on new treatment methods to eradicate AIS species.

E. Other Matters Affecting Interests of the District

Surveys for EWM include all four lakes in the Briggs Lake chain, but only Briggs, Rush and Julia surveys are paid by the TLID. Survey expenses for Big Elk are paid by the BLCA, which includes Big Elk Lake. Unfortunately, EWM was discovered in Big Elk Lake in September 2020. Big Elk volunteers undertook a rapid response plan of hand pulling; they will monitor next year for required actions.

The TLID will closely coordinate with the Healthy Lakes Committee of the BLCA in other AIS activities such as AIS rapid response. One goal is to have in place a written Rapid Response Plan to put into action if additional AIS are found. The local Sherburne COLA and SWCD will be active partners in developing this plan.

Appendices

- A) Property owners mail notice of annual meeting / Newspaper announcement
- B) 2020 Annual Meeting Minutes (Draft)
- C) Resolution to certify 2020 assessment
- D) TLID 2020 Financial Report / 2021 Approved Budget
- E) Eurasian Watermilfoil Delineation Reports / Invoice
- F) CLP Survey before / after treatment / Invoice
- G) MN DNR Permits 2020 / Lake Management Invoice for herbicide treatment
- H) SWCD grants
- I) DNR AIS grants
- J) Briggs Lake Point Intercept Survey

A)

Three Lake Improvement District Notice of Annual Meeting

To: All Property Owners within the Three Lake Improvement District
From: Three Lake Improvement District Board of Directors
Date: August 15, 2020

Notice is hereby given that the annual meeting of the Three Lake Improvement District, a Lake Improvement District established by Order of the Sherburne County Board of Commissioners, pursuant to Minn Statute 103B501 et seq., will be held on Saturday August 15, 2020, at 10:00 AM at the Palmer Township Hall, 4180 105th Ave, Clear Lake, MN. Registration to vote starts at 9:30 AM.

In complying with the COVID 19 state guidance, the meeting will be held outdoors rain or shine. Masks will be required to be worn and hand sanitizer will be available. Please bring your own chair.

The purpose of the meeting is to:

- Approve minutes of 2019 Annual Meeting
- Review the status of 2020 Aquatic Invasive Species [AIS] management
- Review Water Stabilization
- Approve the proposed 2021 Three Lake Improvement District budget; approve projects having a cost to the district in excess of \$5000
- Elect directors to fill two vacancies
- Consider such other business as may properly come before the district

Those eligible to vote on the proposed budget and directors are property owners whose name appears on the latest Sherburne County tax statement.

Election of Directors are as follows:

Current term	Current Director	Status of Term [following annual meeting]
3 year term	Walt Munsterman	2 years remaining No election
3 year term	Scott Ruitter	2 years remaining No election
3 year term	Mike Flanery	To be filled by member election in August for 3 year term
3 year term	Harry Ernzer	1 years remaining No election
3 year term	Diane Stangler	1 years remaining No election
3 year term	Nancy Hahne	2 years remaining No election
3 year term	Steve Demeules	(Term Limit)To be filled by member election in August for 3 year term

Note: two board positions will be open for election. Although desirable to have balanced representation from all three lakes, the TLID by-laws do not require it. There are no "slots" to fill for each lake.

All seven board members must be property owners within the TLID, and a majority [four] must reside within the district. The following documents for the 2020 Annual Meeting can be found on the TLID website link at" briggslakechainassociation.com

- 2020 Annual Meeting Agenda
- Minutes of 2019 Annual Meeting
- Proposed budget for 2021
- Lake Vegetation Management Plan
- Point Intercept Surveys
- AIS Surveys for Curly Leaf Pondweed and Eurasian Water Milfoil
- Financial report for 2020
- Absentee ballot for director election
- Board Member Application

THREE LAKE IMPROVEMENT DISTRICT [TLID]
Annual Meeting August 15, 2020
10:00 AM
Palmer Township Hall

The Three Lake Improvement District [TLID] will hold its annual meeting at 10:00 AM on Saturday August 15, 2020 at the Palmer Township Hall. All property owners on Rush, Julia, Briggs and the Bayou, as members of the TLID, are invited to attend. The meeting agenda will include the discussion and adoption of 2021 projects, approval of the 2021 budget, election of TLID directors and any other business that may come before the TLID. In complying with the COVID 19 state guidance, the meeting will be held outdoors rain or shine. Masks will be required to be worn and hand sanitizer will be available. Please bring your own chair.

B)

Meeting Minutes for 2020 TLID Annual Meeting – August 15th

Meeting called to order by Scott Ruiter at 10am at the Palmer Township Hall parking lot with the Pledge of Allegiance. 27 Members were present including the board members.

Directors in Attendance: Scott Ruiter, Walt Munsterman, Harry Ernzer, Steve Demules, Diane Stangler, Nancy Hahne, Mike Flanery, and Advisor Kenzie Phelps.

Adoption of the Agenda: Motion to approve by Rosalie Musachio, 2nd by John Schnell. Motion passes.

Introduction of Board Members – Scott Ruiter thanked Steve Demules for his years of service to the TLID.

Adoption of the 2019 Annual Meeting Minutes: Motion to approve by Rosalie Musachio, 2nd by Brad Kipp. Motion passes.

Treasures Report – Harry Ernzer went over the current balance of the TLID which stands at \$84,355.53 (including the \$15,000 in the contingency fund). Beginning balance in August of 2019 was \$68,271.21, total income was \$54,878.01 and total expenses to were \$38,793.69. Motion to approve by John Schnell, 2nd by Rosalie Musachio. Motion passes.

Officers Reports:

Chairperson: Scott Ruiter thanked everyone for coming and outlined what we would be discussing at the meeting. 2021 Projects, elect new Directors, and the grants we received this year.

Vice Chairperson: Walt Munsterman reminded the attendees state their name and to address the board with questions and/or comments.

Lake Surveys: Point-Intercept Surveys have been done on all lakes. These reports identify the aquatic plants in each lake. Each lake will be surveyed every 5 years. The reports are available on the website.

New Business:

2021 Projects – Curly Leaf Pondweed, Eurasian Water Milfoil (continue to manage), Water Level Stabilization, Algae Reduction, Boat Access Monitoring.

Proposed 2021 Budget – The budget is lower due to 2020 DNR grants for AIS treatments. 2021 assessment will be \$75.66. 2021 Budget is attached.

John Reber from Julia asked why we needed to access as much for 2021 since we had a healthy balance in the checkbook. It was explained that we have some unpaid expenses yet, and the DNR grants cannot be counted on for budgetary purposes.

Motion to approve the 2021 budget made by John Reber , 2nd by Rosalie Musachio. Motion passes.

Election of new Board Members: Kenzie Phelps went over the election of board members. John Schnell from Briggs and Mike Flanery from Julia were introduced and gave a background on themselves. Motion passed

Next Annual TLID meeting will be August 21, 2021

Meeting was adjourned at 10:56am.

C)

Resolution 01-20

Resolution Certifying 2021 TLID Assessment

Whereas, pursuant to proper notice duly given as required by law, the Three Lake Improvement District as met and certified the assessment roll for the 2021 TLID services and activities.

Now Therefore, the Board of Directors of the Three Lake Improvement District, Palmer Township, Sherburne County, pursuant to Minnesota Statue 103B501 Lake Improvement Districts, hereby orders that all parcels as per 2021 TLID Assessment List (433) be assess in the amount of \$75.66 for services and activities provided in 2021.

Be it Resolved by the Three Lake Improvement District Board of Directors that the Sherburne County Auditor/Treasurers Office be authorized to place an assessment of \$32,760 on the 2021 Sherburne County Tax rolls as shown in Exhibit A.

Said attachment is attached and shall be called the 2021 TLID Assessment List.

Adopted by the TLID Board of Directors date September 2020.

Attest: Three Lake Improvement District



Nancy Hahne, Secretary



Scott Ruiter, Chair

D)

TLID 2020 FINANCIALS

AUGUST 2019 BALANCE

\$ 68,271.21

INCOME:

DNR GRANT \$ 11,700.00
SWCD GRANTS \$ 2,840.63
COUNTY ASSESSMENTS \$ 40,337.38

\$ 54,878.01

\$ 123,149.22

DISBURSEMENTS:

TRAINING \$ 45.00
MAILING \$ 165.00
MEETING NOTICE \$ 68.40
LIABILITY INSURANCE \$ 1,175.00
LAKE SURVEYS \$ 8,220.00
PID REFUND \$ 101.39
WATER STABILIZATION
STUDY \$ 1,717.50
WEED SPRAYING \$ 23,360.00
BOAT INSPECTIONS \$ 3,800.00
CURLEY LEAF NOTICE
(CITIZEN PAPER) \$ 141.40

TOTAL

\$ 38,793.69

BALANCE AUGUST 2020

\$ 84,355.53

CONTINGENCY FUND

\$ 15,000.00

AVAILABLE FUNDS

\$ 69,355.53

**TLID
2021 Budget
8/15/2020**

<u>Expenses</u>	Dollars	Cost per Parcel
Office supplies (annual meeting mailing)	\$ 600	
Insurance	\$ 1,400	
<u>Proposed Projects: AIS Management</u>		
Lake Surveys (CLP, EWM, LVMP)	\$ 5,900	\$ 13.63
AIS Herbicide Treatments (*Reduced amount due to 2020 DNR Grants*)	\$ 8,360	\$ 19.31
EWM Hand Pulling	\$ 2,500	\$ 5.77
Boat Landing Inspections	\$ 4,000	\$ 9.24
TOTAL	\$ 22,760	\$ 52.56
<u>Proposed Projects: Water Stabilization</u>		
Fund Wenck Report Suggestions for for Future Water Stabilization	\$ 5,000	\$ 11.55
<u>Proposed: Contingency Fund</u>		
Contingency Fund per by laws	\$ 5,000	\$ 11.55
Proposed Total	\$ 32,760	
Parcels / Assessment	433	\$ 75.66

E)

Eurasian Watermilfoil in the Briggs Lake Chain: 2020

Rush Lake (#71-0147)

Briggs Lake (#71-0146)

Julia Lake (#71-0145)

Big Elk Lake (#71-0141)

2020 Surveys: July 15, August 11, & September 18



Survey, Analysis, and Reporting by:

James A. Johnson – *Aquatic Ecologist, Freshwater Scientific Services, LLC*



Purpose of Survey

These surveys were designed to locate and delineate areas of Eurasian watermilfoil (*Myriophyllum spicatum*, henceforth referred to as EWM) in Briggs Lake, Julia Lake, Rush Lake, and Big Elk Lake in the summer of 2020. At the request of the Three Lake Improvement District, Rush Lake was surveyed in July to help guide any summer herbicide treatments, while the remaining lakes were surveyed in the late summer (Aug/Sep). These later surveys maximized the likelihood of finding any small areas of EWM by allowing any EWM time to grow to the water surface where it would be more easily found.

Survey Method

EWM Delineation Surveys

Freshwater Scientific Services surveyed Rush Lake on Jul 15 and Briggs, Julia, and Big Elk Lake on Sep 18, 2020, with an additional EWM search of Briggs Lake during the point-intercept plant survey conducted on Aug 11. During each of these surveys, we navigated a meandering transect over the portion of each lake that supported plants (generally <10 ft). In all, we surveyed a total path length of 38 miles across all 4 lakes. While navigating these search paths, we used a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of EWM growth. Sonar and visual assessments were conducted continuously, with subsequent rake tosses to assess EWM abundance at locations where plants were not identifiable from the surface.

Results & Management Context

EWM in the Briggs Chain

During the 2020 surveys, we did not find any areas of EWM in the northern three lakes of the chain, however, we did find a new, localized area of EWM growth in Big Elk Lake. Although these findings suggest that the management of EWM in Rush Lake over the past few years has been extremely effective, the new infestation of EWM in Big Elk is concerning. This new area of EWM is near the outlet channel on the southeast shore of Big Elk; an area that regularly experiences substantial water movement, with particularly high flows during wet periods. Consequently, this area will need to use management strategies that account for this high water exchange, such as treating only during low-flow periods, using fast-acting contact herbicides (such as diquat or procellacor), dosing the area multiple times over a short period of time (split treatments) to maintain the required concentration and exposure time for EWM control, or using hand-pulling to remove EWM plants.

Despite the successful control of EWM in Rush Lake, it is likely that some EWM remains in the lake, so we may see some patches of EWM reestablish from remaining roots or seeds in the coming years. To help ensure that any reestablished areas of EWM are managed before they can expand, we highly recommend that TLID continues to conduct annual surveys to locate any EWM in the lakes, with a focus on the areas of Rush Lake and Big Elk Lake that have experienced EWM growth in the past 5 years.

Briggs Lake Chain

2020 Eurasian Watermilfoil Search & Delineation Survey



Surveyed Path
(38 miles)

EWM Density

- 1 (light)
- 2 (moderate)

■ Management Plot (2.2 ac)

Surveyed: Jul-Sep 2020
Methods: Visual, Sonar, Rake
Surveyor: JA Johnson

 **Certified Lake Manager**
www.NALMS.org

Map produced for the
Three Lake Improvement District by:



15771 Creekside Lane
Osseo, MN 55369
fixmylake.com
(651) 336-8696

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>

Christine Jurek

Invasive Species Specialist

Minnesota DNR

christine.jurek@state.mn.us

(320) 223-7847

Wendy Crowell

AIS Management Coordinator

Minnesota DNR

wendy.crowell@state.mn.us

(651) 259-5085

INVOICE #2020-94

PROJECT

Aquatic Plant Surveys

Client: Three Lake Improvement District

COMPLETED SERVICES

Services	Cost
• Rush (July)	\$ 950
• Rush, Julia, Briggs (Sep)	\$ 2,450
• Big Elk (Sep)	\$ 800
<i>Point-Intercept Aquatic Plant Survey</i>	
• Brians	3,050

PAYMENT

Invoice #: 2020-94

Amount Due: \$ 7,250

Date Due: Nov 30, 2020

Send full payment for the amount due to our office by the indicated due date.
We will assess a 1.5% late fee for each month left unpaid.

Freshwater Scientific Services, LLC
15771 Creekside Lane
Osseo, MN 55369

F)

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:

James A. Johnson – *Aquatic Ecologist, Freshwater Scientific Services, LLC*



Certified Lake Manager
www.NALMS.org

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

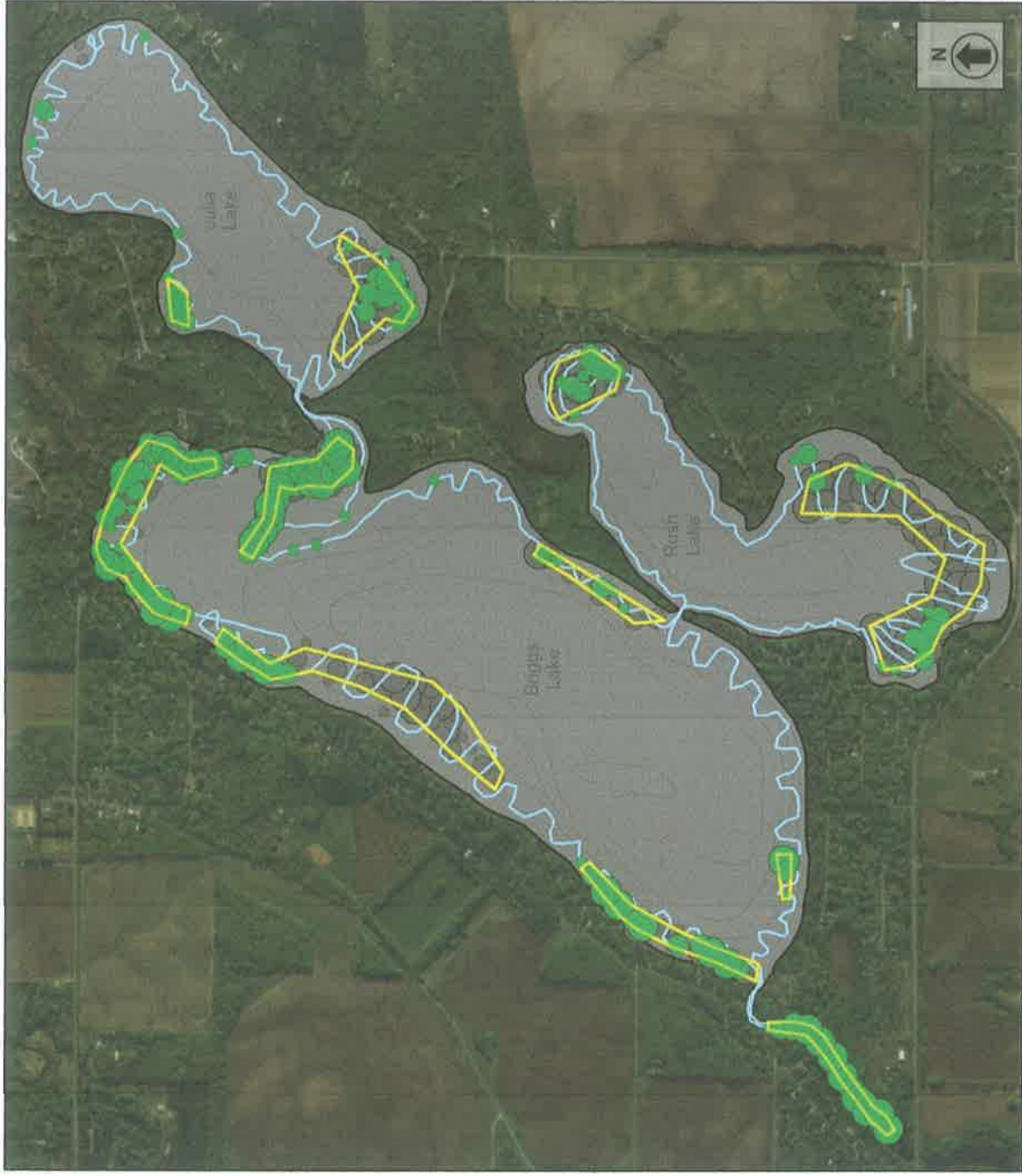
CLP Delineation Surveys

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 (post-treatment)
●	2	
●	3	
●	1	May 2020 (pre-treatment)
●	2	
●	3	

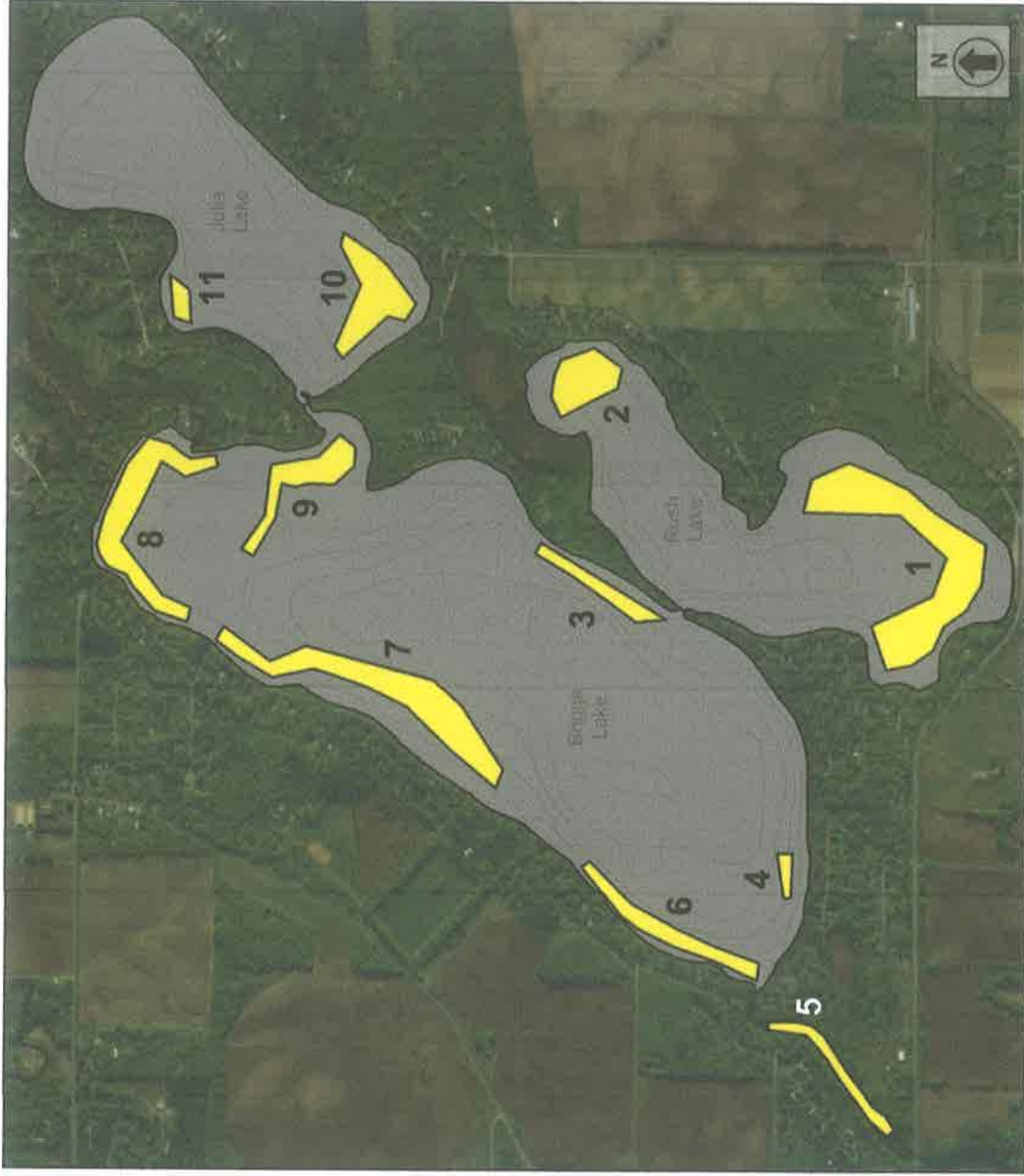
Surveyed: May 4 & June 4, 2020
Methods: Visual, Sonar, Rake
Surveyor: JA Johnson



Map produced for the
Three Lake Improvement District by:



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

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



Map produced for the
 Three Lake Improvement District by:



15771 Creekside Lane
 Osseo, MN 55369
 fixmylake.com
 (651) 336-8696

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>

Christine Jurek

Invasive Species Specialist

Minnesota DNR

christine.jurek@state.mn.us

(320) 223-7847

Wendy Crowell

AIS Management Coordinator

Minnesota DNR

wendy.crowell@state.mn.us

(651) 259-5085

INVOICE #2020-41

June 29, 2020

PROJECT

Late-Spring (Posttreatment) CLP Delineation Surveys
Client:

COMPLETED SERVICES

CLP Delineation Surveys

• Rush	\$ 700
• Julia	\$ 700
• Briggs	1,050

PAYMENT

Invoice #: 2020-41

Amount Due: \$ 2,450

Date Due: July 31, 2020

Send full payment for the amount due to our office by the indicated due date.
We will assess a 1.5% late fee for each month left unpaid.

Freshwater Scientific Services, LLC
15771 Creekside Lane
Osseo, MN 55369

INVOICE #2020-16

PROJECT

Early-Spring (Pretreatment) CLP Delineation Surveys
Client: Three Lake Improvement District

COMPLETED SERVICES

CLP Delineation Surveys (Rush, Julia, & Briggs)	\$ 1,600
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PAYMENT

Invoice #: 2020-16

Amount Due: \$ 1,600

Date Due: June 10, 2020

Send full payment for the amount due to our office by the indicated due date.
We will assess a 1.5% late fee for each month left unpaid.

Freshwater Scientific Services, LLC
15771 Creekside Lane
Osseo, MN 55369



**DEPARTMENT OF
NATURAL RESOURCES**
MNDNR PERMITTING AND REPORTING SYSTEM

**Permit Number
2018-0672**

G) **INVASIVE AQUATIC PLANT MANAGEMENT PERMIT
(RENEWED)**
EXPIRATION DATE: 05/31/2020

Contact the Authorized Issuer (listed below) if you have any questions regarding this permit.

The Commissioner of the Natural Resources, pursuant to authority by law, hereby **GRANTS THIS PERMIT** to the person whose name appears below, for the purpose specified, dates inclusive as shown, in the conditions hereinafter set forth:

Project Name: Julia, Sherburne, CLP		Control Method: Pesticide Control
County: Sherburne	Watershed: Mississippi River - St. Cloud	Resource: Julia (71014500)
Permittee: THREE LAKE IMPROVEMENT DISTRICT CONTACT: RUITER, SCOTT 4180 105TH AVE CLEAR LAKE, MN 55319 (320) 743-3365 Lake Address (if different):		Authorized Agent: LAKE MANAGEMENT /CLEARWATER CUTTING CONTACT: AHLGREN, BETH 10400 185TH STREET N. MARINE ON ST. CROIX, MN 55047 (651) 433-3283

Authorized Control Area:
Pesticide control of curly-leaf pondweed is permitted within the area identified on the attached map up to 8.0 acres.

Authorized Action:
Pesticide control of curly-leaf pondweed. One treatment with Aquathol K (Endothall) to be applied by a licensed commercial applicator as per instructions on the product label for selective control of curly-leaf pondweed. It is recommended that treatments be done when water temperatures are above 50 degrees F, are increasing, and less than 60 degrees F.

Treatment signs must be posted in accordance with the DNR posting instructions.

Do not treat these properties (based on opted out letter response):

4440 115th Avenue, Clear Lake, MN 55319
11519 42nd Street SE, Clear Lake, MN 55319

Issued Date: 05/13/2020	Effective Date: 05/13/2020	Expiration Date: 05/31/2020
Authorized Issuer: Christine Jurek	Title: Aquatic Invasive Species Specialist	Email Address: Christine.Jurek@state.mn.us
		Phone Number: 320-223-7847

This permit is granted **subject to the following CONDITIONS:**



**DEPARTMENT OF
NATURAL RESOURCES**
MNDNR PERMITTING AND REPORTING SYSTEM

**Permit Number
2018-0671**

**INVASIVE AQUATIC PLANT MANAGEMENT PERMIT
(RENEWED)
EXPIRATION DATE: 05/31/2020**

Contact the Authorized Issuer (listed below) if you have any questions regarding this permit.

The Commissioner of the Natural Resources, pursuant to authority by law, hereby **GRANTS THIS PERMIT** to the person whose name appears below, for the purpose specified, dates inclusive as shown, in the conditions hereinafter set forth:

Project Name: Rush, Sherburne, CLP		Control Method: Pesticide Control
County: Sherburne	Watershed: Mississippi River - St. Cloud	Resource: Rush (71014700)
Permittee: THREE LAKE IMPROVEMENT DISTRICT CONTACT: RUITER, SCOTT 4180 105TH AVE CLEAR LAKE, MN 55319 (320) 743-3365		Authorized Agent: LAKE MANAGEMENT /CLEARWATER CUTTING CONTACT: AHLGREN, BETH 10400 185TH STREET N. MARINE ON ST. CROIX, MN 55047 (651) 433-3283
Lake Address (if different):		

Authorized Control Area:
Pesticide control of curly-leaf pondweed is permitted within the area identified on the attached map up to 24.0 acres.

Authorized Action:
Pesticide control of curly-leaf pondweed. One treatment with Aquathol K (Endothall) to be applied by a licensed commercial applicator as per instructions on the product label for selective control of curly-leaf pondweed. It is recommended that treatments be done when water temperatures are above 50 degrees F, are increasing, and less than 60 degrees F.

Treatment signs must be posted in accordance with the DNR posting instructions.

Issued Date: 05/13/2020	Effective Date: 05/13/2020	Expiration Date: 05/31/2020
Authorized Issuer: Christine Jurek	Title: Aquatic Invasive Species Specialist	Email Address: Christine.Jurek@state.mn.us
		Phone Number: 320-223-7847

This permit is granted **subject to the following CONDITIONS:**

NOTICE OF CONTROL DATES: The permittee or their agent must notify the DNR of the planned treatment date(s) at least 48 hours prior to treatment. Failure to notify prior to beginning work or violation of other terms and conditions of this permit, including failure to remove signs in a timely manner, shall be grounds for revocation of this permit or refusal to renew. Notify: Christine Jurek, Christine.Jurek@state.mn.us, 320-223-7847 or submit a new treatment notification through MPARS.

ANNUAL SURVEY: The permittee or their agent must complete an annual survey indicating the actual treatment dates no later than December 31st. The survey will be sent to you in the fall.



**DEPARTMENT OF
NATURAL RESOURCES**
MNDNR PERMITTING AND REPORTING SYSTEM

**Permit Number
2018-0670**

**INVASIVE AQUATIC PLANT MANAGEMENT PERMIT
(RENEWED)
EXPIRATION DATE: 05/31/2020**

Contact the Authorized Issuer (listed below) if you have any questions regarding this permit.

The Commissioner of the Natural Resources, pursuant to authority by law, hereby **GRANTS THIS PERMIT** to the person whose name appears below, for the purpose specified, dates inclusive as shown, in the conditions hereinafter set forth:

Project Name: Briggs, Sherburne, CLP		Control Method: Pesticide Control
County: Sherburne	Watershed: Mississippi River - St. Cloud	Resource: Briggs (71014600)
Permittee: THREE LAKE IMPROVEMENT DISTRICT CONTACT: RUITER, SCOTT 4180 105TH AVE CLEAR LAKE, MN 55319 (320) 743-3365 Lake Address (if different):		Authorized Agent: LAKE MANAGEMENT /CLEARWATER CUTTING CONTACT: AHLGREN, BETH 10400 185TH STREET N. MARINE ON ST. CROIX, MN 55047 (651) 433-3283

Authorized Control Area:
Pesticide control of curly-leaf pondweed is permitted within the area identified on the attached map up to 32.1 acres.

Authorized Action:
Pesticide control of curly-leaf pondweed. One treatment with Aquathol K (Endothal) to be applied by a licensed commercial applicator as per instructions on the product label for selective control of curly-leaf pondweed. It is recommended that treatments be done when water temperatures are above 50 degrees F, are increasing, and less than 60 degrees F.

Treatment signs must be posted in accordance with the DNR posting instructions.

Issued Date: 05/13/2020	Effective Date: 05/13/2020	Expiration Date: 05/31/2020
Authorized Issuer: Christine Jurek	Title: Aquatic Invasive Species Specialist	Email Address: Christine.Jurek@state.mn.us
		Phone Number: 320-223-7847

This permit is granted subject to the following CONDITIONS:

NOTICE OF CONTROL DATES: The permittee or their agent must notify the DNR of the planned treatment date(s) at least 48 hours prior to treatment. Failure to notify prior to beginning work or violation of other terms and conditions of this permit, including failure to remove signs in a timely manner, shall be grounds for revocation of this permit or refusal to renew. Notify: Christine Jurek, Christine.Jurek@state.mn.us, 320-223-7847 or submit a new treatment notification through MPARS.

ANNUAL SURVEY: The permittee or their agent must complete an annual survey indicating the actual treatment dates no later than December 31st. The survey will be sent to you in the fall.



LAKE MANAGEMENT, Inc.
10400 185th Street North
Marine on St. Croix, MN
55047
651-433-3283-Voice
651-433-5316-Fax

Invoice
 Invoice Number
 39362
 Invoice Date
 Jan 17, 2020
 Page
 1

Sold To:

Three Lake Improvement Dist.
 4180 105th Ave
 Clear Lake, MN 55319

Amount Paid

ThreeLakeImprovement

Return Upper Portion with Payment

Customer ID	Customer PO	Payment Terms	Sales Rep ID	Due Date
ThreeLakeImprov	BRJ CLP 2020	Net 30 Days		2/16/20
Description				Amount
5/15/20 - Briggs Lake - Application of Aquathol K by sub-surface injection for curlyleaf pondweed control - 32 acres @ \$365.00/acre				11,680.00
5/15/20 - Rush Lake - Application of Aquathol K by sub-surface injection for curlyleaf pondweed control - 24 acres @ \$365.00/acre				8,760.00
5/15/20 - Julia - Application of Aquathol K by sub-surface injection for curlyleaf pondweed control - 8 acres @ \$365.00/acre				2,920.00

	Subtotal	23,360.00
	Sales Tax	
	Total Invoice Amount	23,360.00
Check No	Payment Received	0.00
	TOTAL	23,360.00

Finance charge is 1 1/2% per month



Sherburne County Aquatic Invasive Species (AIS)

Grant Application Form

Section 1: Application Type

Management Planning

AIS Management

AIS Volunteer

Section 2: Project Information

Project Title: TLID AIS Contain and Control:Planning

Waterbody Name: TLID (Rush, Julia, Briggs and Bayou)

Approximate Start Date (4/1/2020 unless otherwise stated) 4-1-2020

Project Completed by (12/1/2020 unless otherwise stated) 12-1-2020

Section 3: Applicant Information

Applicant Name (Organization): TLID (Three Lake Improvement District)

Contact Person: Contact Person Scott Ruitter

Contact Person Title: Chairperson

Address: TLID 4180 105th ave Unit C Clear Lake MN, 55319

Phone Number: 320-743-3365

Email scott.ruitter@aam.com

Does the applicant organization or waterbody have a management plan on file with Sherburne SWCD? (Lake Management Plan, AIS Management Plan, Aquatic Plant Management Plan, etc.)

 Yes
 No

Year in which plan was created / last updated: 2019

Is there supporting financial assistance from another entity for this project? If Yes, Fill in below:

 Yes No

Organization Name

Contribution Amount

TLID

\$12,800

Section 4: Project Budget and Incentive Request

If completing an AIS Management Planning application or AIS Control Grant application, complete Part A below (budget table) for your project. If you are completing an AIS Incentive Award Grant application, skip the budget table and complete Part B.

Part A: AIS Management Planning and AIS Control Grants

Fill out the table below to outline a budget for your project. Include all applicable costs related to your project, volunteer donated time or materials, and any donations your organization has received for the outlined work to be completed.

- "Cash costs" are expenses associated with your project (herbicide application, necessary parts & supplies, contractor costs, etc.). This program is offered as a cost-share grant, so no "in-kind" is required of the applicant.

Activity or Expense Description	Cash Costs
Lake Surveys (Fresh Water Scientific)	\$12,800
CLP, EWM, Briggs Point Intercept	
Totals	\$12,800

Part B: AIS Volunteer Incentive Grants

- 50 hours (\$500 award level) 75 hours (\$825 award level) 100 hours (\$1,200 award level)

Section 5: Project Description

1. Describe your project below. What are your project goals, what protocols or guidelines will be followed and who are the people/groups involved?

Goals:

1) Accurate and timely identification, location and AIS density. Currently only Curly Leaf Pondweed (CPL) and Eurasian Water Milfoil (EWM.) 2) Continue managing CLP as per survey and DNR permit; contain or diminish CLP on all three lakes. 3) Manage and contain EWM to Rush Lake; prevent EWM from spreading through channel to Briggs and Lake Julia by hand pulling and herbicide treatments.

Guidelines:

A) Surveying by Freshwater Scientific as per TLID contract and DNR permits. B) Completing a point intercept study on Briggs Lake to support the current Lake Vegetative Management Plan. Meet five year TLID management plan.

C) All TLID activities were pre-approved by members at the TLID Annual meeting in 2019.

2. Briefly describe your organization's history of AIS and water quality management. Will the proposed project assist your organization in reaching certain AIS or lake management goals? What volunteer-based or other programs is your organization involved with?

Over 16 years of CLP management. Over 11 years of volunteer water quality testing and water quality improvement projects.

In 2019, a point intercept study was completed on Julia Lake.

After the discovery of EWM in Rush lake in 2014 the BLCA took responsibility of planning for and managing EWM. Since its inception, the TLID (2015) has been responsible for EWM and CLP management and planning.

TLID was formed to address aquatic invasive species and these planning activities are critical for the TLID goals.

Other organization involvement includes the BLCA, SWDC, DNR, Sherburne County, COLA, Elk River Watershed (transitioning to 1W1P), Palmer Township, MPCA.

The TLID continues to work with the BLCA to continue the past practice of shoreline restoration, free native plant bank and other conservation projects.

Section 6: Certification

This formal request for financial assistance from Sherburne County is submitted on behalf of my affiliated organization to direct the activities described below on the proposed waterbody indicated in Section 2. I certify that I am authorized to submit this proposal on behalf of the organization named in Section 2 and upon receiving a funded request will complete this outlined project as described herein this application.

Signature

Scott Ruitter

Date

1-14-2020

Note: If submitting this request by email, please type your name on the signature line. Your email message will be used as an electronic signature.

From: Dan Cibulka <dcibulka@sherburneswcd.org>
Sent: Thursday, March 12, 2020 3:23 PM
To: Scott Ruiter <Scott.Ruiter@grede.com>
Cc: Francine Larson <flarson@sherburneswcd.org>
Subject: TLID 2020 AIS Grant Application

Scott,

Congratulations, the TLID's grant application for Briggs Point-Intercept survey ranked well and received approval from the Sherburne SWCD Board Supervisors at our meeting this morning! Your award summary is as follows:

AIS-FY20-02: AIS Control and Contain Project: Planning (Award = \$2,287.50)

I'm attaching a contract that includes the same language as past year's contracts. Please review and contact me with any questions. You'll sign on page 2 under "Organization Representative's Signature". Once you return the contracts (scanning and emailing is fine, or you can mail or drop off) I will then sign as the Technical Representative, and Francine will sign within the last row as the SWCD Manager.

As discussed previously, your control grant application and EWM/CLP delineations were not considered due to successful funding being obtained from the DNR. If you have any difficulties with the DNR grants please let me know.

Please note today is my last day in the office before a vacation, I'll be returning on March 24th so if your contracts are returned by then we should hopefully be able to sign and turn around checks that week.

Thanks again for supporting our AIS program and we look forward to more successful projects this year!
Dan



Dan Cibulka
Senior Water Resource Specialist

dcibulka@sherburneswcd.org
763-220-3434 x 103

Sherburne Soil & Water Conservation District
425 Jackson Ave NW
Elk River, MN 55330
763-220-3434
www.sherburneswcd.org



I)

Dear Scott Ruiter:

I have reviewed your request for reimbursement for curly-leaf pondweed treatment of Briggs (32 acres, \$4800), Julia (8 acres, \$3300), and Rush (24 acres, \$3600), and I have approved payment for each. You should receive payment within 30 days. I hope your treatments were successful!

Sincerely,

Jake Walsh, Ph.D.

Invasive Species Grants & Research Coordinator | Ecological & Water Resources

Minnesota Department of Natural Resources

500 Lafayette Road

St. Paul, MN 55155

Cell Phone: 651-724-2439

Office Phone: 651-259-5164

Email: Jake.Walsh@state.mn.us

mndnr.gov

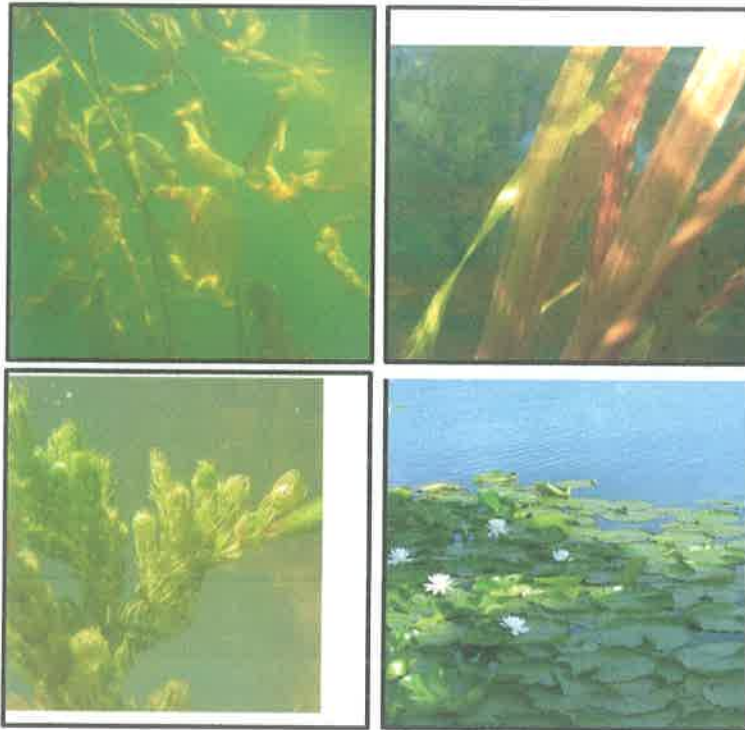


J)

Aquatic Plant Community of Briggs Lake: 2020

Briggs Lake (#71-0146)
Sherburne County, MN

Surveyed August 11, 2020



Survey, Analysis, and Reporting by:

James A. Johnson – Aquatic Ecologist, Freshwater Scientific Services, LLC



Certified Lake Manager
www.NALMS.org

Funding Provided by:

Three Lake Improvement District – Clear Lake, MN

Survey & Analysis Methods

Point-Intercept Survey

Freshwater Scientific Services, LLC surveyed plants in Briggs Lake on Aug 11, 2020 using the point-intercept method described by Madsen (1999). This survey incorporated assessments at a total of 254 sample points arranged in a uniform grid (65-m spacing; Figs 1 and 2). We generated these sample points using desktop GIS software to project a grid of points over an aerial images of the lake. We then loaded the selected sample locations onto a handheld GPS unit (Garmin GPSMAP-78) for navigation to each point while in the field.

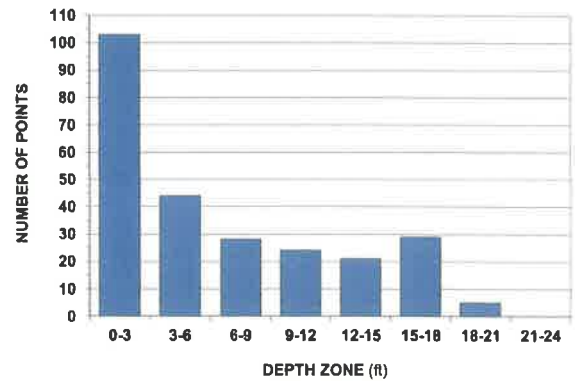
At each designated sample location, we collected plants using a double-headed, 14-tine rake on a on a rope. For each rake sample, we dragged the rake over the lake bottom for approximately 5 ft before retrieving. Retrieved plants were piled on top of the rake head and assigned density scores from 1 to 4 based upon rake head coverage (Table 3) for each individual species and for all plants collectively.

We calculated the littoral frequency (≤ 15 ft, % occurrence) and littoral mean density score (plant abundance) for each encountered plant species (Table 1), as well as lake-wide and littoral community metrics (Table 2). We also used desktop GIS software to map the distribution and abundance of plants in the lake (pages 5–11). Additional species that were observed floating or growing in the vicinity of a sample point but not retrieved on the rake were given a rating of zero for that location. These “zero” species were noted as being in the vicinity on the plant distribution maps (shown as an “X”), but “zero” ratings were excluded from calculations of plant community metrics and statistics (not treated as denoting presence). At each location, we also documented water depth and overall plant height.

Figure 1. Designated sample locations for the 2020 Briggs Lake plant survey.



Figure 2. Sampling effort (number of locations sampled) within successive 3-ft depth zones



Results

Statistical Summary of Findings





Table 1. Littoral frequency (% occurrence) and abundance (mean density score) of plant species found in Briggs Lake (Sherburne Co., MN) during the 2020 plant survey. % Occurrence and Mean Density (1-4 scale) were calculated using all littoral points (water depth ≤15 ft).

PLANT TAXA	COMMON NAME	% OCCURRENCE	MEAN DENSITY
SUBMERSED TAXA			
<i>Najas flexilis</i>	Slender naiad	29	0.4
<i>Ceratophyllum demersum</i>	Coontail	27	0.5
<i>Myriophyllum sibiricum</i>	Northern watermilfoil	23	0.4
<i>Chara</i> sp.	Muskgrass	19	0.3
<i>Heteranthera dubia</i>	Water stargrass	18	0.3
<i>Potamogeton foliosus</i>	Leafy pondweed	18	0.2
<i>Potamogeton richardsonii</i>	Clasping-leaf pondweed	5	0.1
<i>Elodea canadensis</i>	Canadian waterweed	4	<0.1
<i>Vallisneria americana</i>	Wild celery	4	<0.1
<i>Stuckenia pectinata</i>	Sago pondweed	3	<0.1
<i>Potamogeton crispus</i>	Curly-leaf pondweed	2	<0.1
<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	P	–
FLOATING TAXA			
<i>Nymphaea odorata</i>	White waterlily	4	<0.1
<i>Wolffia columbiana</i>	Common watermeal	4	<0.1
<i>Spirodela polyrhiza</i>	Large Duckweed	4	<0.1
<i>Lemna minor</i>	Small duckweed	3	<0.1
<i>Nuphar variegata</i>	Bull-head pond-lily	1	<0.1
EMERGENT TAXA			
<i>Schoenoplectus acutus</i>	Hardstem bulrush	2	<0.1
<i>Sagittaria</i> sp.	Arrowhead	P	<0.1

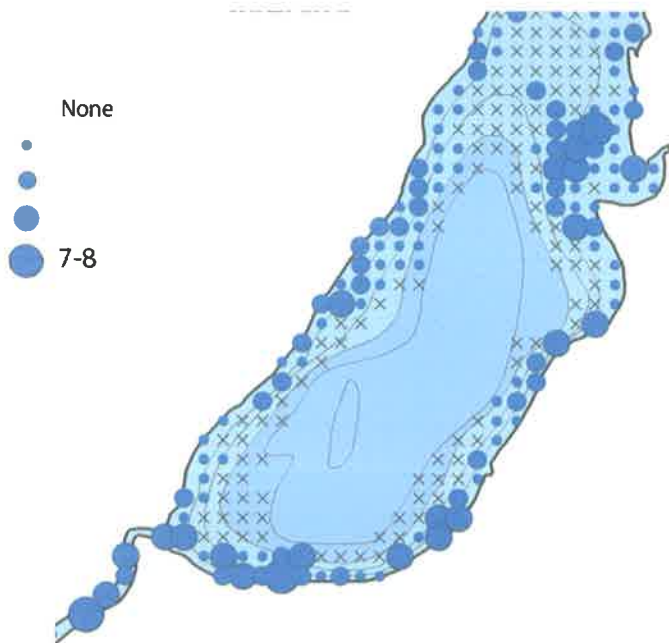
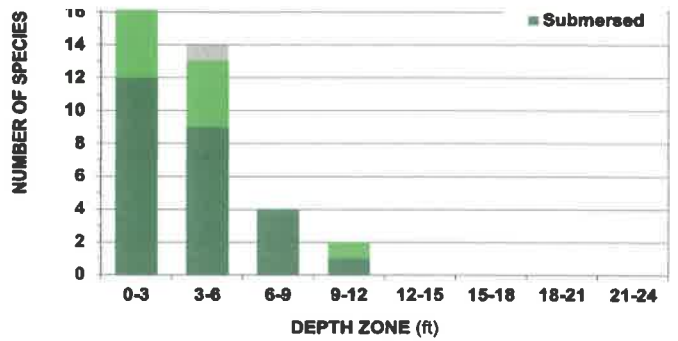
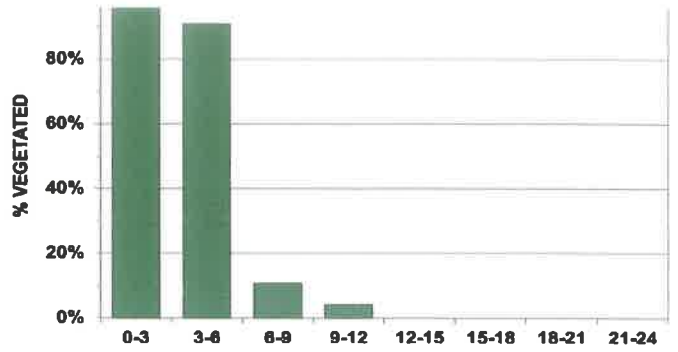
Table 2. Summary of Briggs Lake plant community metrics from 2020 survey.

AUG 2020	
WHOLE-LAKE METRICS	
Lake Area (acres)	412
Total Points Sampled	254
% Points Vegetated	57%
% Points Veg. to Surface	10%
Max Depth of Growth (95%)	5.8 ft
Native Submersed Taxa	11
Native Floating/Emergent Taxa	8
Non-Native Submersed Taxa	1
LITTORAL METRICS (≤ 15 ft)	
Littoral Area (acres)	273
Littoral Points Sampled	227
% Littoral Points Vegetated	64%
Mean Plant Height (ft)	0.9
% of Max Littoral Biovolume	28%
Mean Native Taxa / Point	1.7
Simpson's Diversity	89
Floristic Quality (FQI)	20.3
AMCI Score (Nichols et al. 2000)	42.0

Table 3. Overview of rake density scores used to document plant abundance during point-intercept surveys.

Density Score	Rake Coverage	Description
1		Only a few plants retrieved
2		Full length of rake head covered, but tines only partially covered
3		Plants completely cover the rake head and tines
4		Enough plants to cover rake head and tines multiple times

Briggs Lake – Aquatic Plant Community



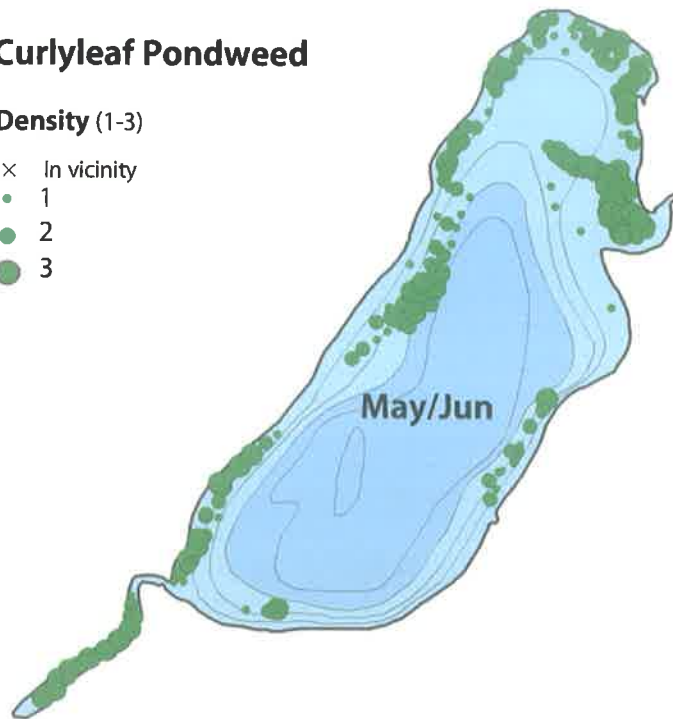

Certified Lake Manager
www.NALMS.org

Briggs Lake – Invasive Aquatic Plants

Curlyleaf Pondweed

Density (1-3)

- × In vicinity
- 1
- 2
- 3



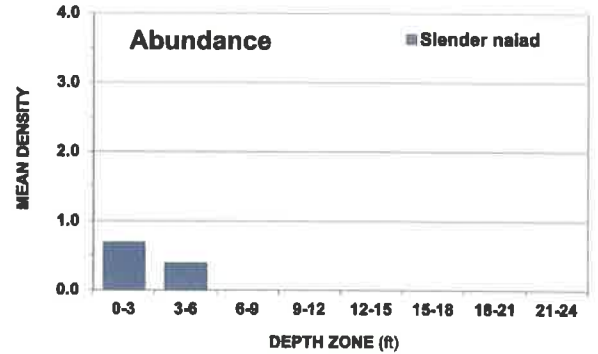
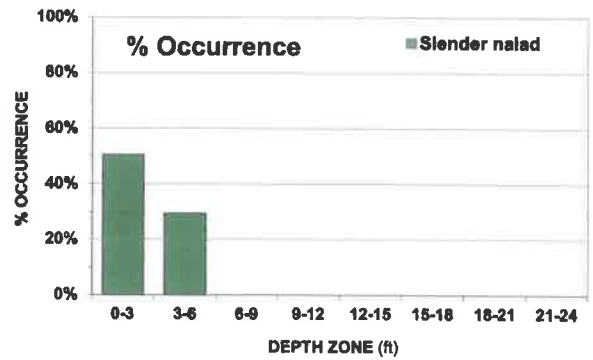
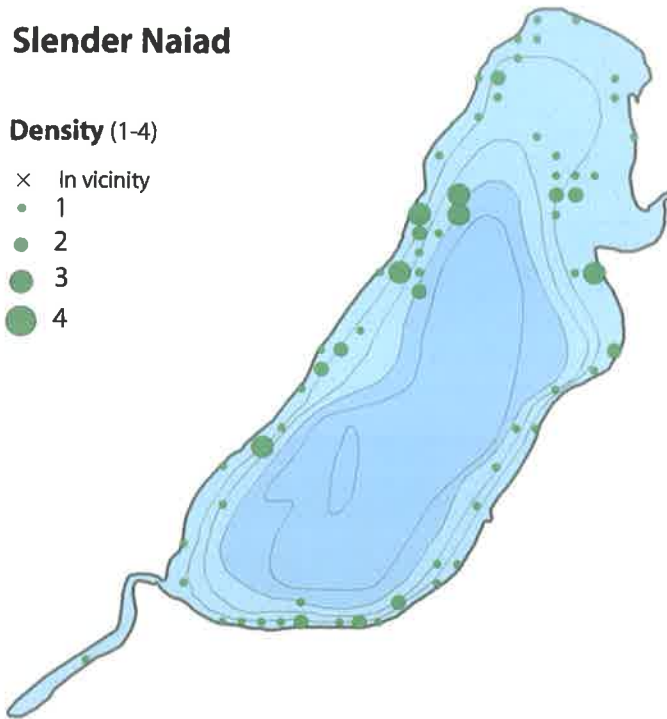
Curlyleaf pondweed naturally dies off in the late spring. Although we found a few locations with curlyleaf during this late-summer survey, the map to the left (from May and June surveys) is a more accurate assessment of curlyleaf in Briggs Lake. For more detail, see the 2020 curlyleaf pondweed delineation survey report for the Briggs Chain.

Briggs Lake – Native Aquatic Plants (Submersed)

Slender Naiad

Density (1-4)

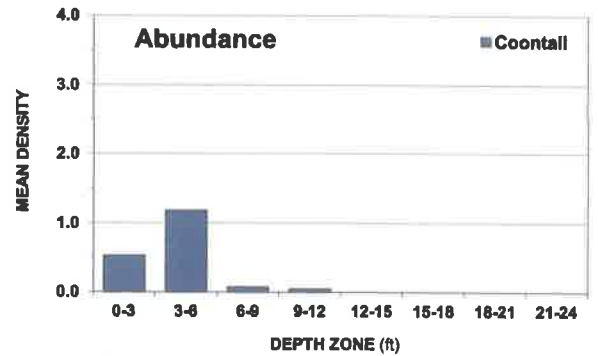
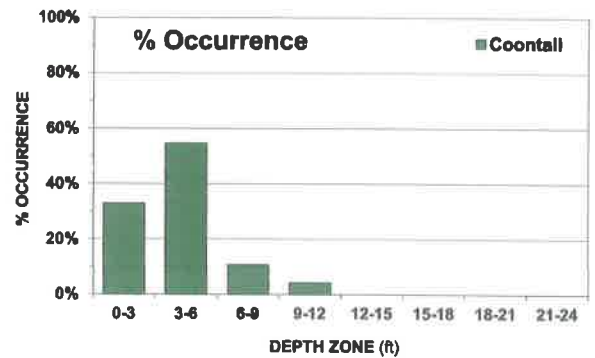
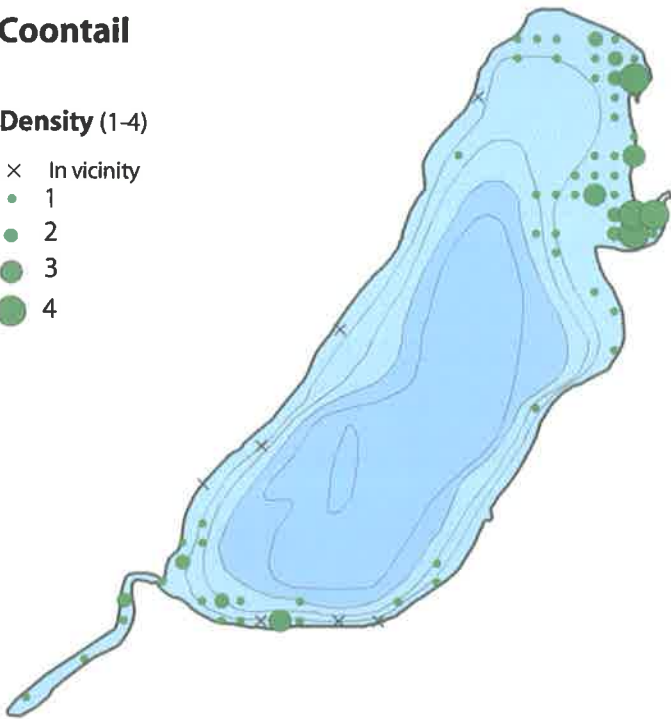
- × In vicinity
- 1
- 2
- 3
- 4



Coontail

Density (1-4)

- × In vicinity
- 1
- 2
- 3
- 4

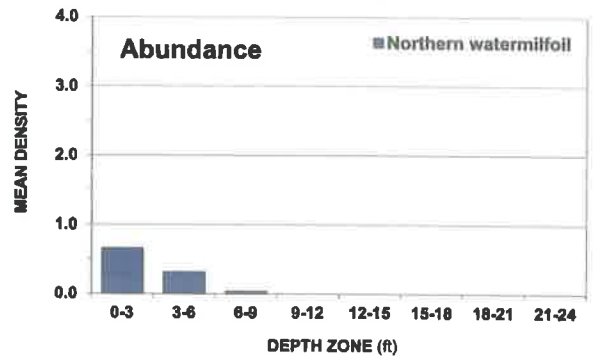
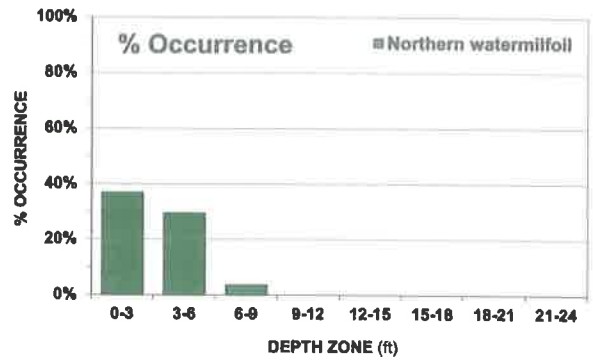
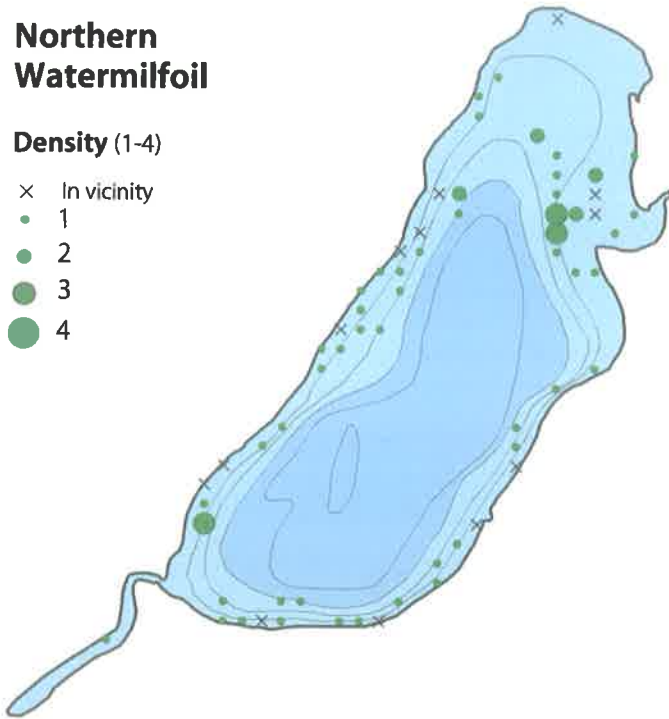


Briggs Lake – Native Aquatic Plants (Submersed)

Northern Watermilfoil

Density (1-4)

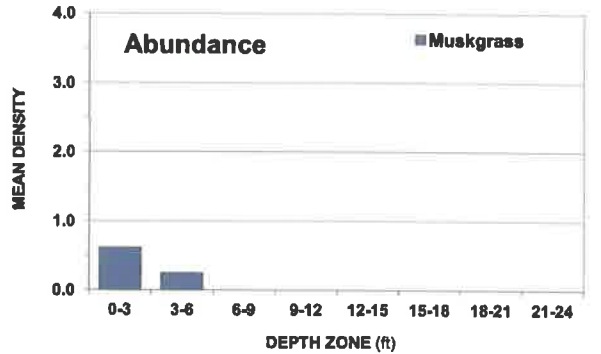
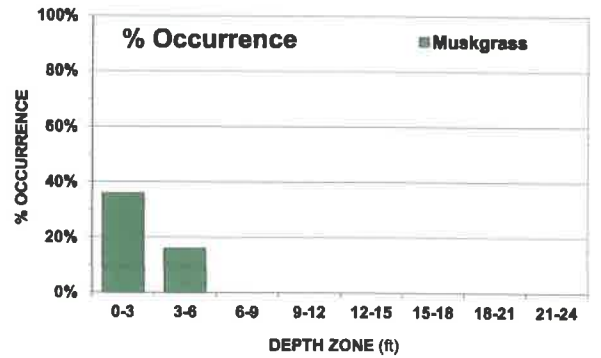
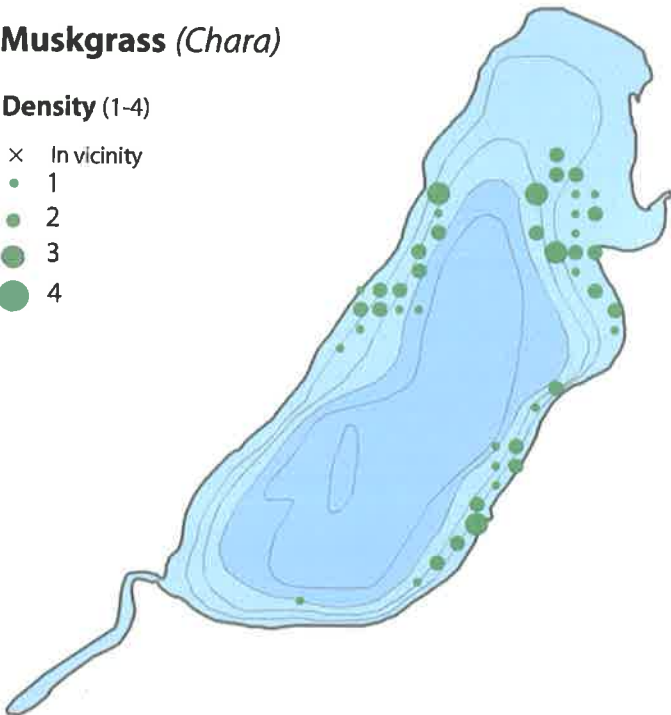
- × In vicinity
- 1
- 2
- 3
- 4



Muskgrass (*Chara*)

Density (1-4)

- × In vicinity
- 1
- 2
- 3
- 4

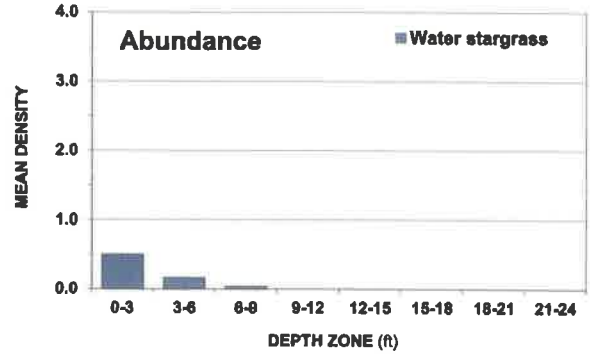
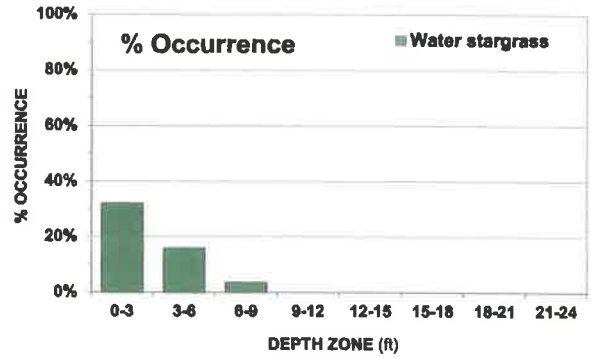
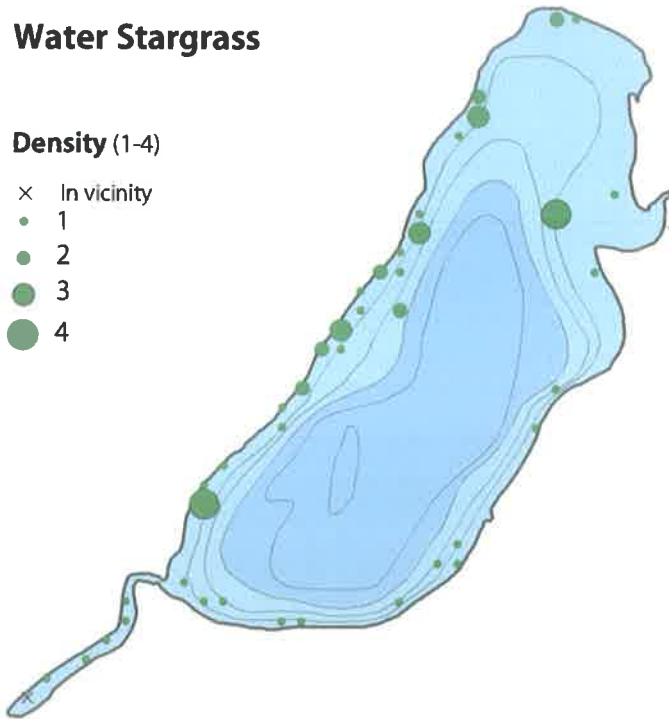


Briggs Lake – Native Aquatic Plants (Submersed)

Water Stargrass

Density (1-4)

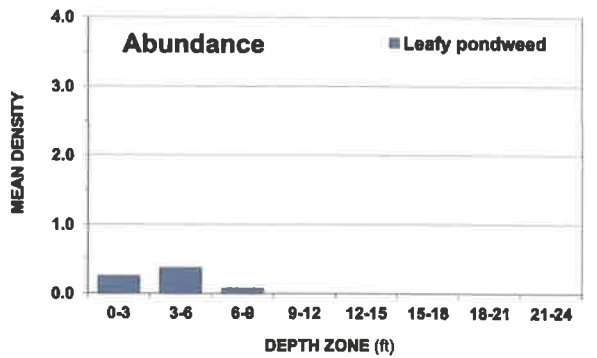
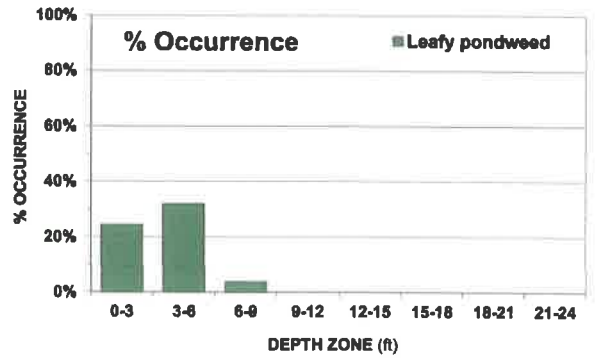
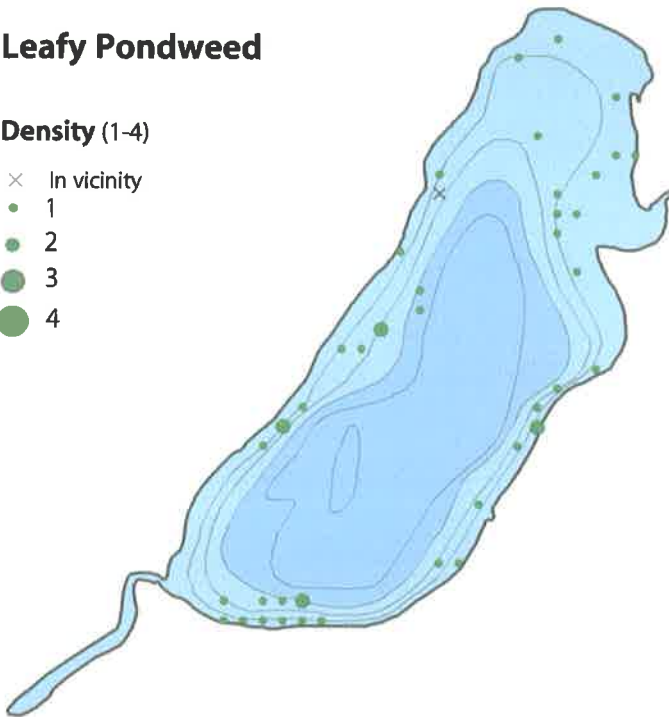
- × In vicinity
- 1
- 2
- 3
- 4



Leafy Pondweed

Density (1-4)

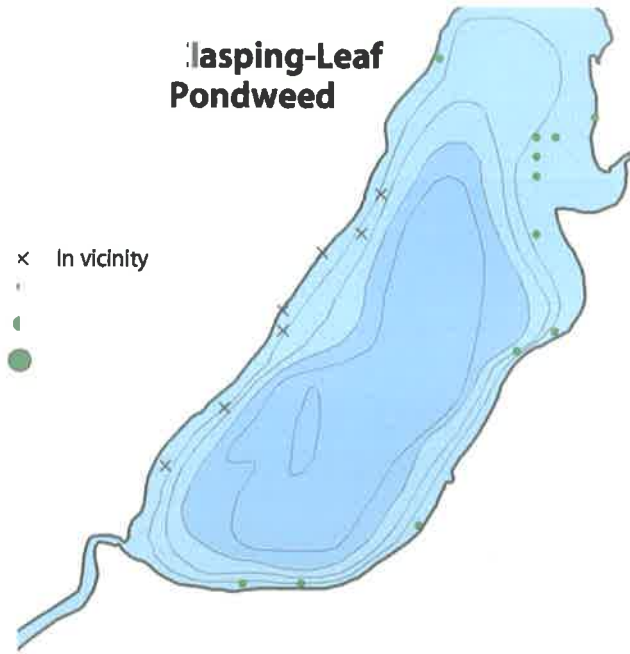
- × In vicinity
- 1
- 2
- 3
- 4



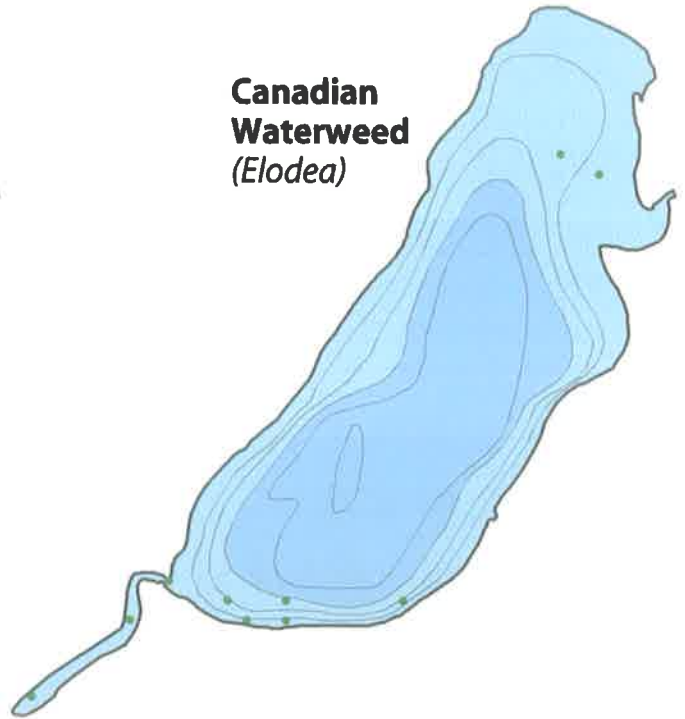
(Submersed)

**Waspwing-Leaf
Pondweed**

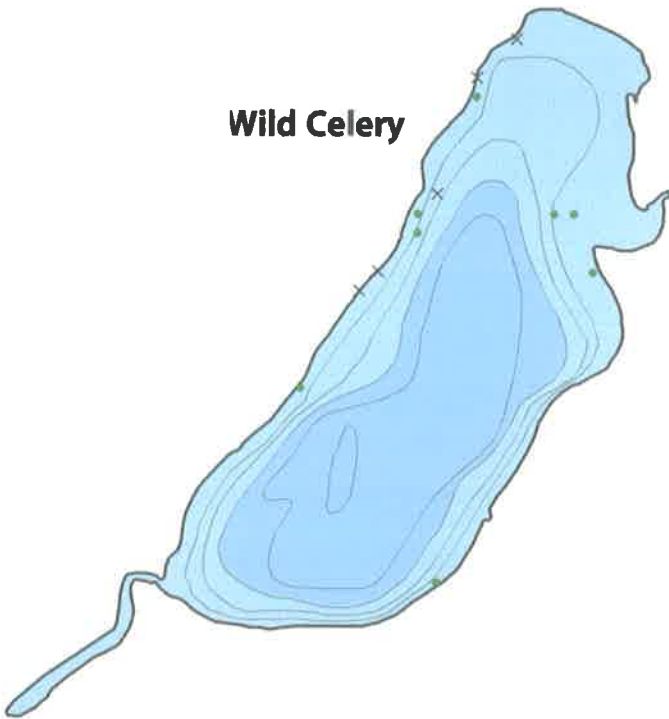
× In vicinity



**Canadian
Waterweed
(Elodea)**



Wild Celery



**Sago
Pondweed**



Briggs Lake – Native Aquatic Plants (Floating & Emergent)

