

Eurasian Watermilfoil in the Briggs Lake Chain: 2018

Rush Lake (#71-0147)

Briggs Lake (#71-0146)

Julia Lake (#71-0145)

Big Elk Lake (#71-0141)

Surveyed July 5 & September 6, 2018



Survey, Analysis, and Reporting by:

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



Purpose of Survey

This survey was 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 2018. At the request of the Three Lake Improvement District, Rush Lake was surveyed in early July to help guide summer herbicide treatments, while the remaining lakes were surveyed in early September. These later surveys maximize the likelihood of finding any small areas of EWM by taking advantage of the greater water clarity, reduced native plant abundance, and active EWM growth in September.

Survey Method

EWM Delineation Surveys

Freshwater Scientific Services surveyed Rush Lake on July 5, 2018 and Briggs, Julia, and Big Elk Lake on Sept 6, 2018. During each of these surveys, we navigated a meandering transect over the portion of each lake that supported plants (generally <10 ft). In addition, we conducted a more intensive search (additional passes and rake tosses) in the area surrounding the channel between Rush and Briggs. In all, we surveyed a total path length of 31 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.

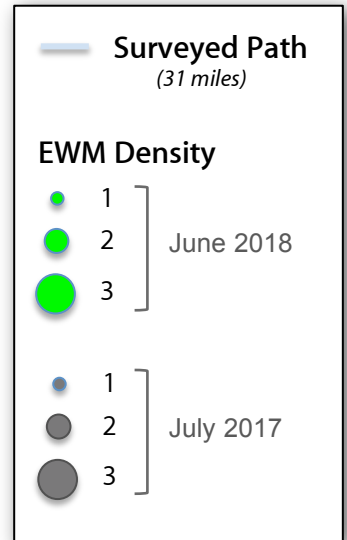
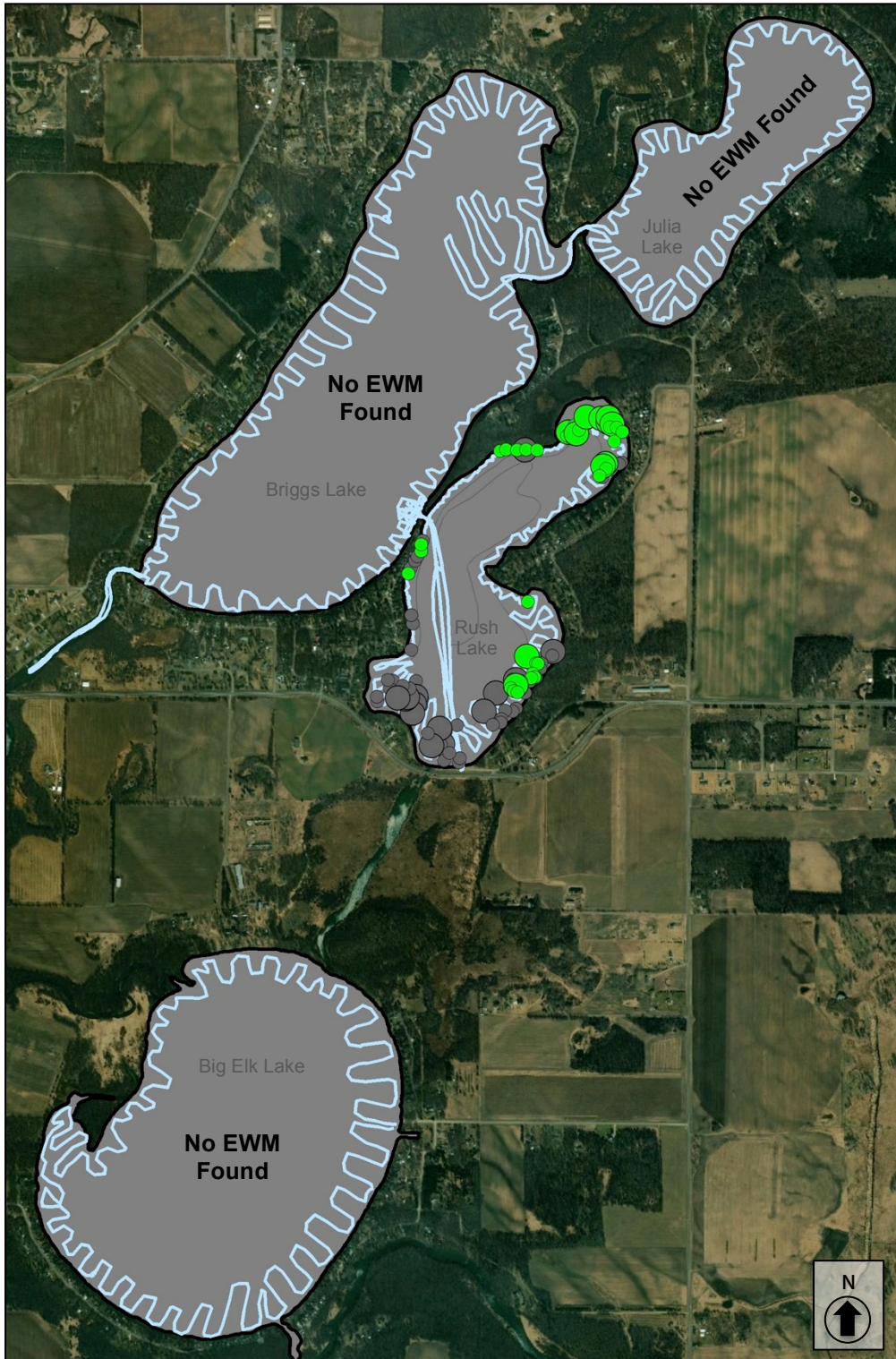
Results & Management Context

EWM in the Briggs Chain

During the 2018 surveys, we found EWM only in Rush Lake. This suggests that to this point, EWM has not spread to the other lakes in the chain. Furthermore, it appeared that the management of EWM in the far southern portion of the lake in 2017 was very effective, as we found no EWM in that area. However, we found substantially greater EWM abundance in the northern portion of the lake than in the past. When we returned in August to survey native plants in Rush Lake (after herbicide treatments), these northern areas of EWM appeared to be well controlled. However, we recommend that these areas be monitored again in the summer of 2019 to help determine if additional management is warranted. Given the successful control of EWM in the southern portion of the lake, we recommend that the same treatment strategy be used for any future treatments in other portions of the lake.

Briggs Lake Chain

2018 Eurasian Watermilfoil Search & Delineation Survey



Surveyed: July 2017 & July/Sep 2018
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

ALS Management Coordinator
Minnesota DNR
wendy.crowell@state.mn.us
(651) 259-5085