

Clearwater Lake (Wright County)

Eurasian Watermilfoil Delineation

September 9, 2018



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Prepared for the Clearwater Lake Property Owners Association

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Summary of Results

AIS Consulting Services completed an Eurasian Watermilfoil (EWM) delineation on Clearwater Lake on September 9, 2018. The purpose of the survey was to map the distribution of EWM to inform future management. Areas searched included locations where EWM has either been found from past surveys, has recently been treated or has been observed by others to potentially have EWM.

A low abundance of EWM was observed at three locations, well below the surface of the water and not currently providing a nuisance. Northern Watermilfoil (NWM) appeared to be more common than EWM, although NWM was still scattered. Other native plants observed were Chara, Bladderwort, Wild Celery, Coontail and variety of native pondweeds.

Since both the native NWM and the invasive EWM co-exist in Clearwater Lake, there is a potential for the two species to hybridize. Hybrid Watermilfoil (HWM) can at times exhibit more aggressive growth patterns than EWM, and has the potential to be more tolerant to certain herbicides. Genetic analysis of milfoil in Clearwater Lake may be warranted, and would provide a good baseline for management moving forward.

Methods

Protocol for the survey followed the MN DNR Guidance for Delineating Invasive Aquatic Plants for Management. We maneuvered our boat in a meandering pattern across our EWM search areas using a combination of visual assessment and rake tosses aided by our sonar unit. EWM search areas included locations where EWM has either been found from past surveys, has recently been treated or has been observed by others to potentially have EWM.

If EWM was found, the location was marked with a gps waypoint, depth was recorded, and EWM was given an estimated density rating. At each point where EWM was found, additional locations around that spot was searched for additional EWM plants, and the boundaries of each bed were marked. Acreage and average depth were then calculated for each bed.

Rake Density Ratings - *estimated coverage of rake head by plant sample*

1 = Scattered plants

2 = Plants are common

3 = Heavy growth

Results

Figure 1. EWM Search Areas & Tracks from Survey

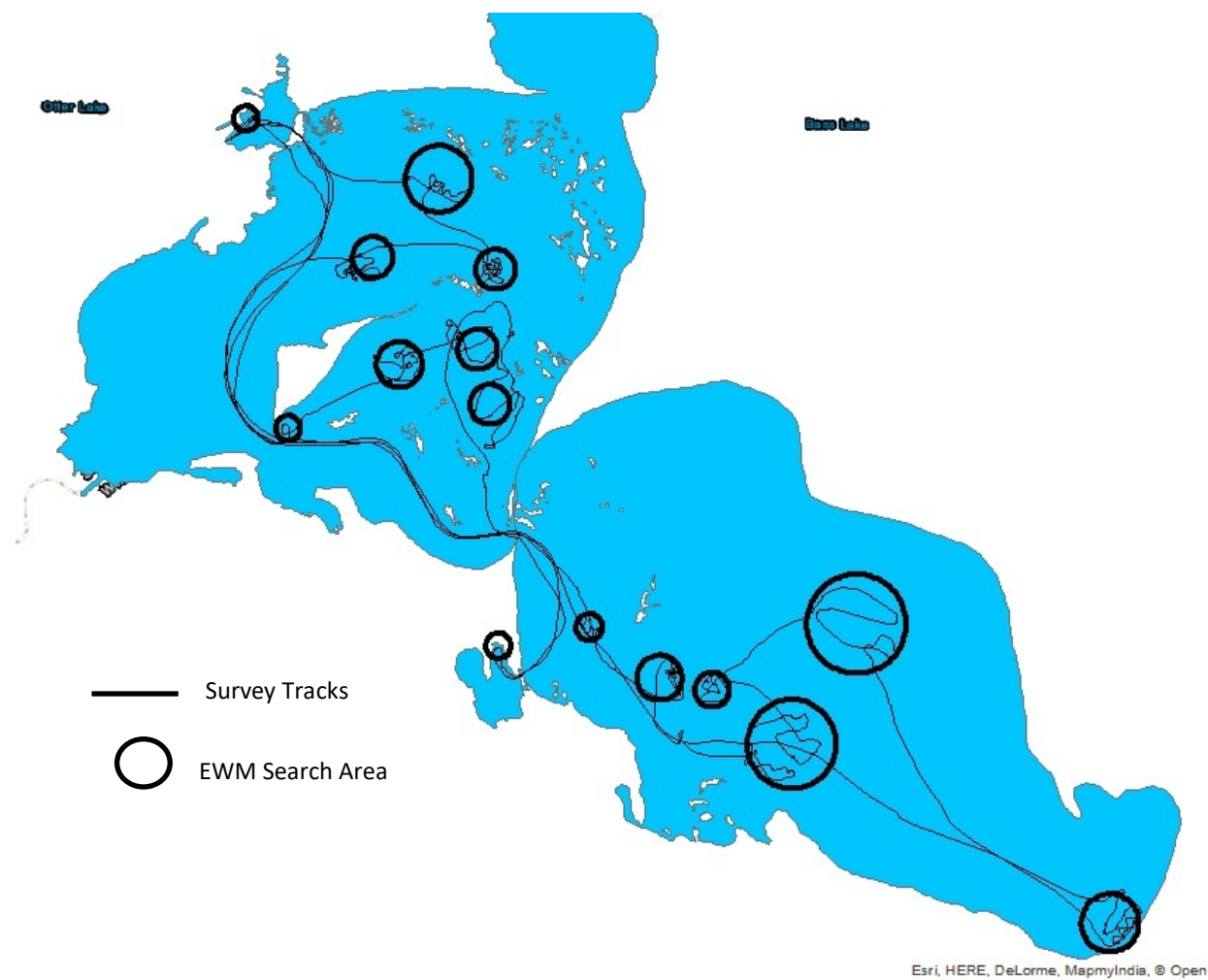


Figure 2. EWM distribution from 9/9/18 survey

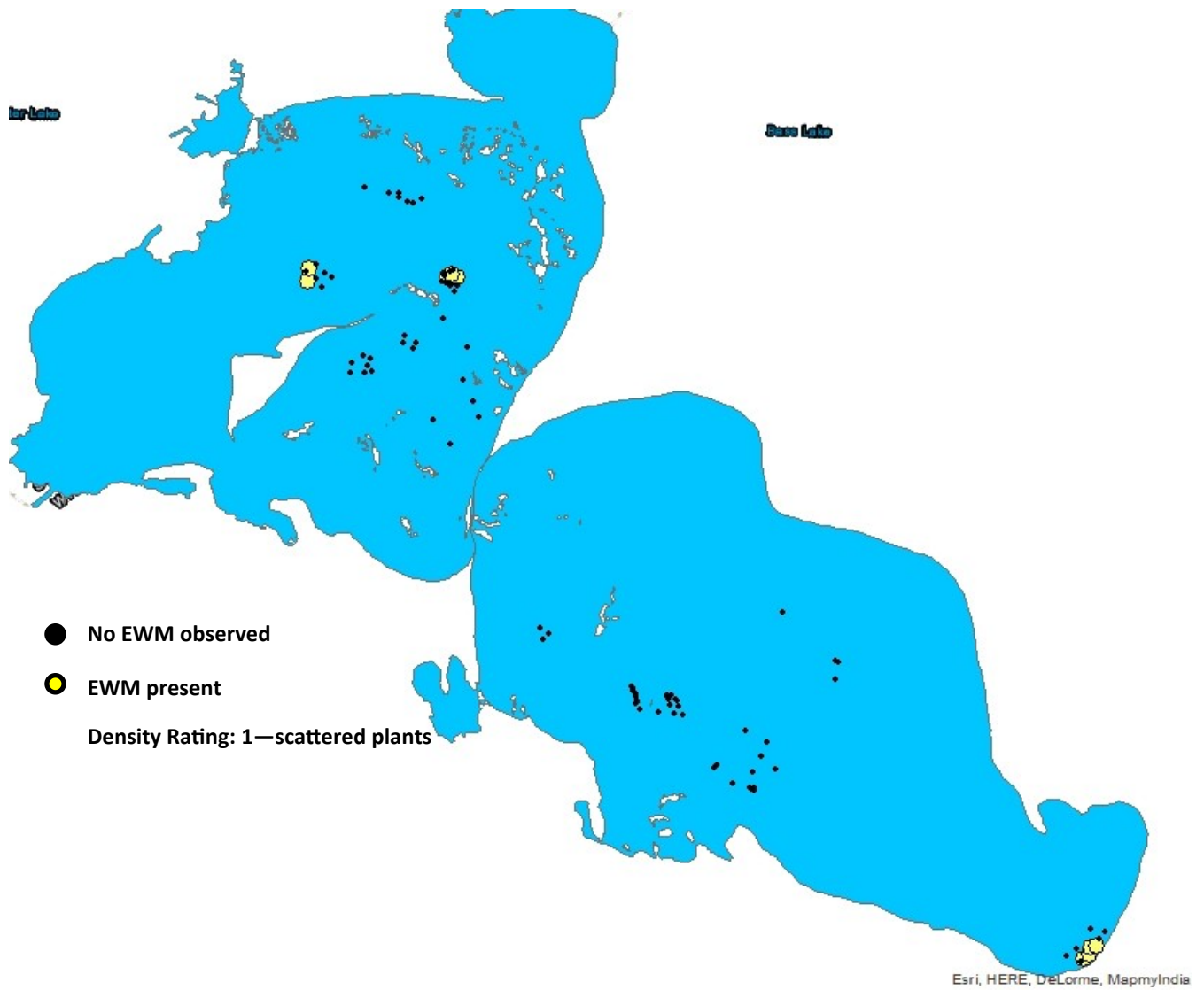


Figure 3. EWM distribution from 9/9/18 survey (Northwest Basin)

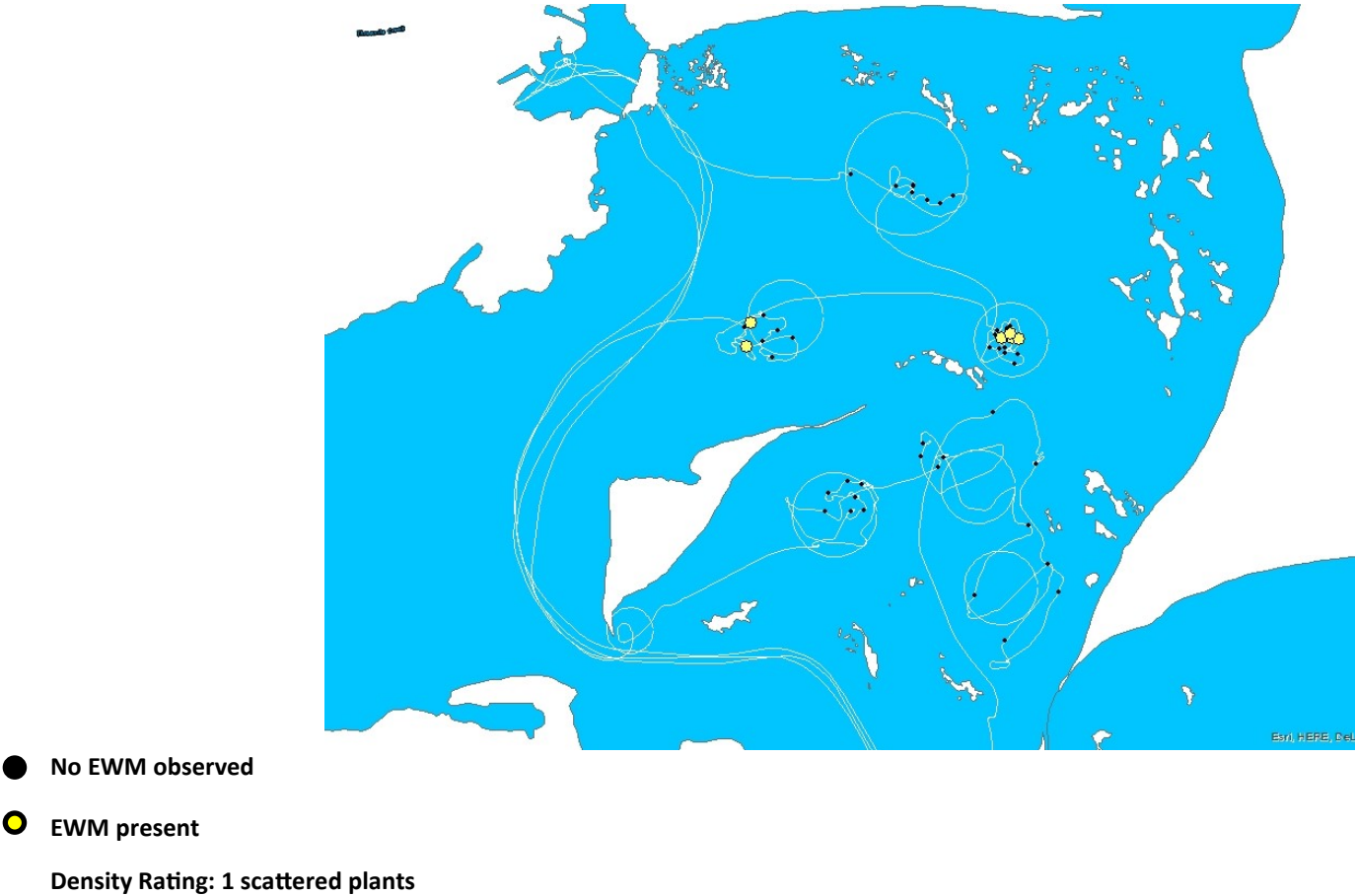


Figure 4. EWM distribution from 9/9/18 survey (Southeast Basin)



Figure 5. EWM distribution from 9/9/18 survey (East)

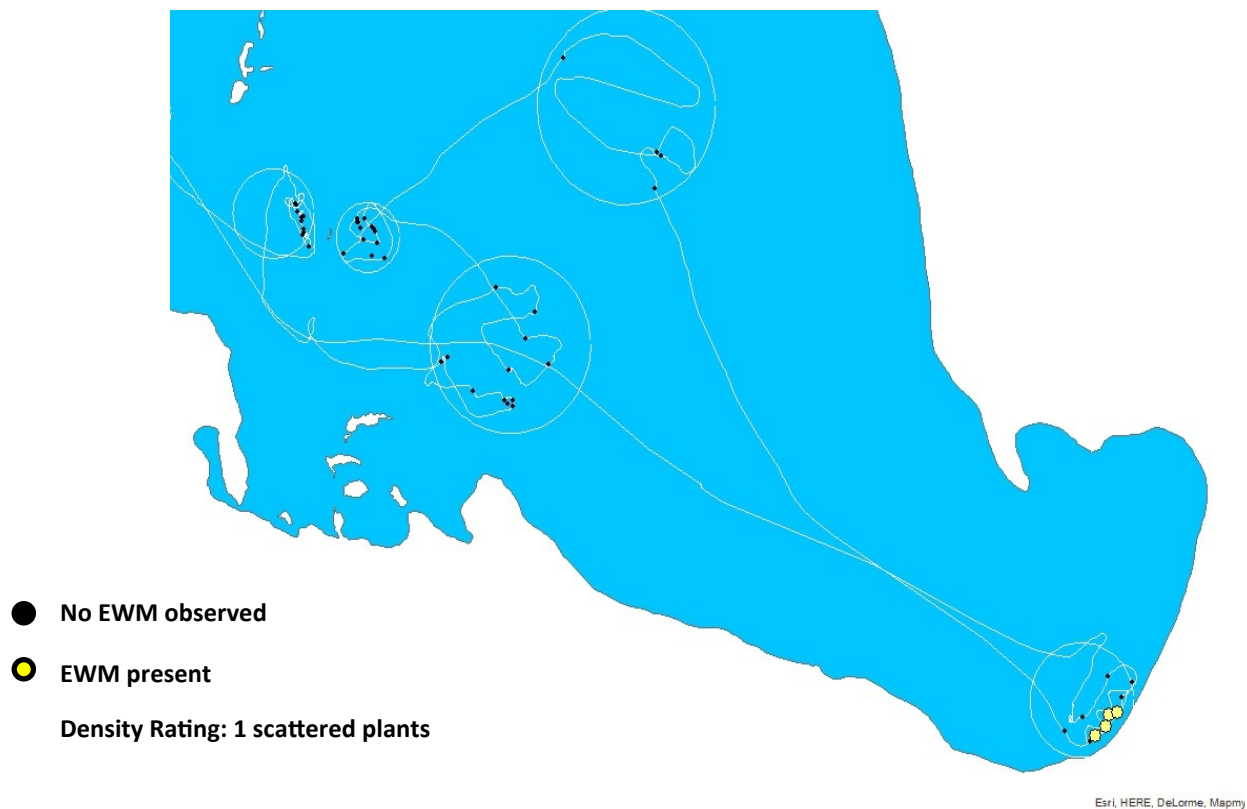
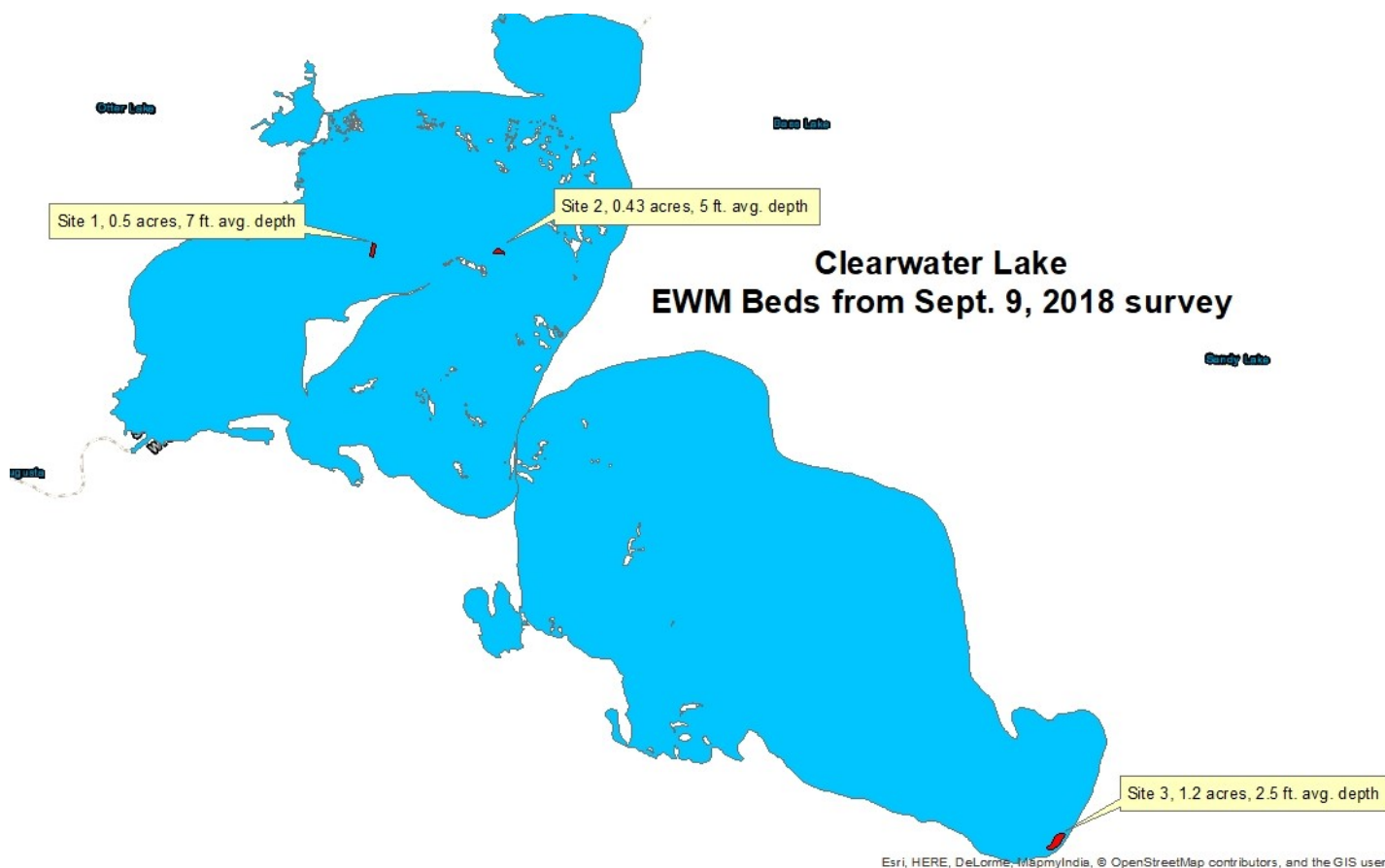
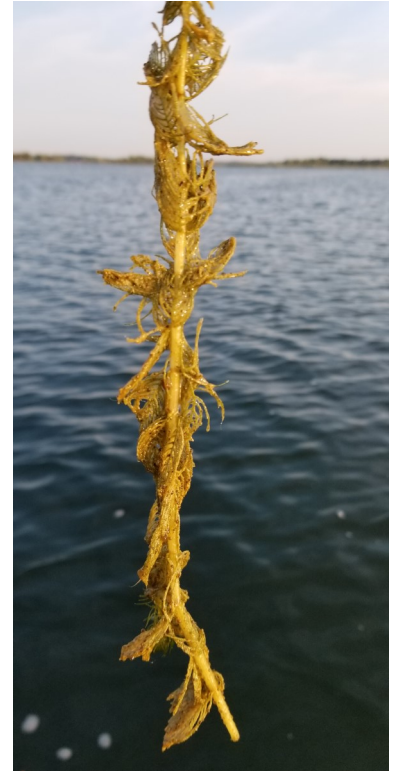


Figure 6. EWM Beds observed from 9/9/18 survey



Northern Watermilfoil Observed from September 9, 2018 survey



Eurasian Watermilfoil Observed from September 9, 2018 survey

