## **Inspection by the Invasive Species Program**

Division of Ecological Resources Minnesota Department of Natural Resources

Lake: Cross DOW Number: 58011900 Date of inspection: 25 July 2024

County: Pine Observer[s]: Rich Rezanka

**Type of inspection:** Mid-summer delineation of Eurasian watermilfoil.

Author[s] of report: Rezanka Date of report: 26 July 2024

**Overall:** The entire shoreline of Cross Lake was surveyed for the presence of Eurasian watermilfoil (EWM) and curly-leaf pondweed (CLP). Areas of Eurasian watermilfoil were documented. Management of Eurasian watermilfoil at those sites is warranted.

Photo 1: Blue-Green algal blooms were present on Cross Lake on 25 July 2024.



A delineation survey was conducted on 25 July 2024. Surface water temperatures varied from 78 to 79 degrees(F) in the main lake with temperatures near 83 in the shallow harbors. Calm winds allowed for an accurate survey.

The survey was conducted with a sampling rake, water depth was measured with the depth finder, and GPS coordinates were recorded on Garmin Map 62stc unit. Two GPS units were used, one for navigation and the other to record locations where EWM was found growing.

Curly-leaf pondweed was not documented in Cross Lake during the survey.

Eurasian watermilfoil was present at sites on the east and north shores. The eastern sites once supported a robust population of curly-leaf pondweed. Photo 2 shows that EWM that was brought to the surface from the eastern sites. When present, the EWM was growing in pure stands with only a few native plants.

Historical herbicide treatment projects have reduced the populations of both curly-leaf pondweed and Eurasian watermilfoil to manageable areas. Native plants, in contrast, still benefit from nutrient conditions and limnological parameters found in Cross Lake. This was evident during the survey as large beds of coontail (*Ceratophyllum demersum*) and water celery (*Vallisneria americana*) were both widespread and common.

Coontail and Eurasian watermilfoil have similar physical attributes and can be easily mistaken, especially when covered with a coat of algae. Photos 3 and 4 show the differences between the two plants. Surface matting of coontail was common throughout the lake but pronounced on the north side of the lake as shown in photos 5 and 6.

Photo 2. Eurasian watermilfoil from a site on the east side of Cross Lake on 25 July 2024.



Photo 3. This photo shows the arrangement of leaflet pairs of Eurasian watermilfoil from Cross Lake on 25 July 2024.





Photo 4. This photo shows the arrangement of leaflets on a piece of Coontail sampled from Cross Lake on 25 July 2024.

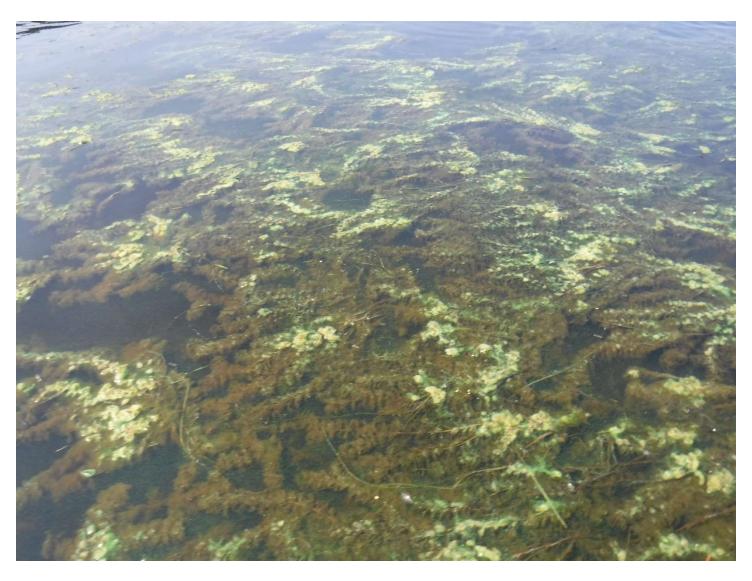


Photo 5. A large bed of coontail growing in Cross Lake on 25 July 2024.

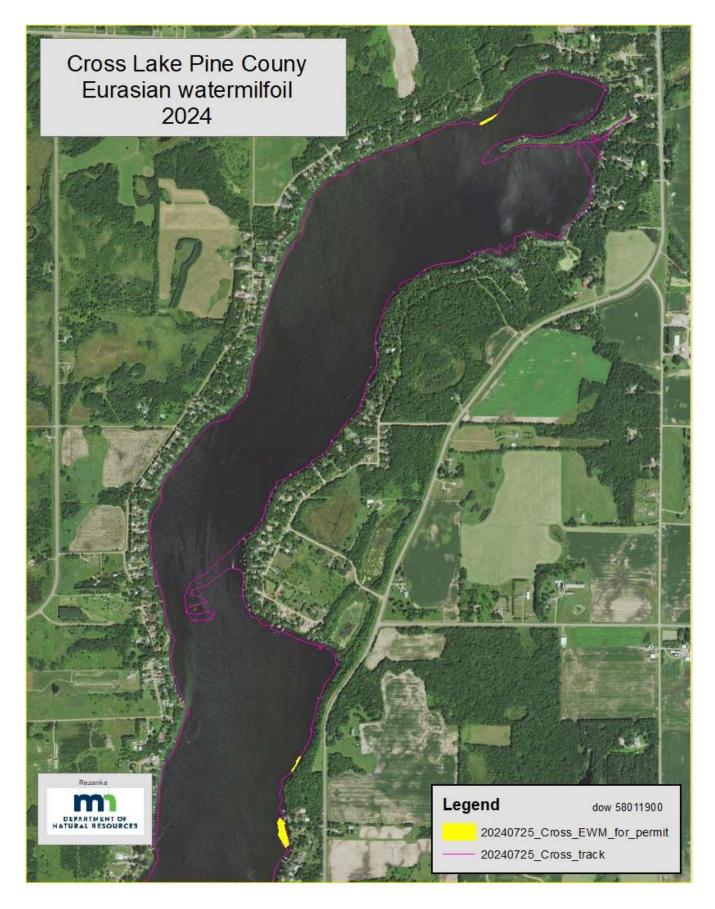


Figure 3. Proposed herbicide treatment sites (EWM) for Cross Lake 2024.



Photo 6. Another large bed of coontail growing in Cross Lake on 25 July 2024.