



2021 Prevention and Control of Aquatic Invasive Species

Overview

In 2021, the City of Lakeville was awarded funds from the Dakota County Aquatic Invasive (AIS) Grant as well as the MN Department of Natural Resources Control Grant for various AIS activities. The following activities on Lake Marion and Orchard Lake were funded via the grant:



- 1) Watercraft inspections
- 2) Monthly targeted AIS searches
- 3) Treatment of curlyleaf pondweed (CLP) and Eurasian watermilfoil (EWM)

While the City was awarded funds to treat EWM, populations were observed at levels that did not warrant treatment. This finding was significant, because in 2018 EWM was treated using a method stated to have population reduction impacts lasting 2-3 years.

In 2021, the City also partnered with Montana State University to perform genetic analysis on the Eurasian/hybrid watermilfoil present in Marion and Orchard Lakes. Watermilfoil samples were collected this summer, and genetic analysis results will be provided to City staff January, 2022. This research will: offer insight into the distribution of the invasive watermilfoil and help improve invasive watermilfoil management by tracking management responses in differing milfoil genotypes.

Practices

- ◆ Watercraft inspections
- ◆ Vegetation and habitat monitoring
- ◆ AIS treatment

Benefits

- ◆ Watercraft decontamination
- ◆ Education and outreach
- ◆ AIS rapid response
- ◆ Promotion of native species through invasive removal

Partners

- ◆ Dakota County
- ◆ Department of Natural Resources

Contractors

- ◆ Blue Water Science
- ◆ PLM Lake and Land Management Corp
- ◆ Waterfront Restorations

Timeline

- ◆ Watercraft inspections: May 15—Sept. 2 (Fri-Sun and holidays)
- ◆ Curlyleaf treatments: May 17
- ◆ Watermilfoil sample collection: July 29

*Eurasian
Watermilfoil Treated
0 acres
warranted treatment!*

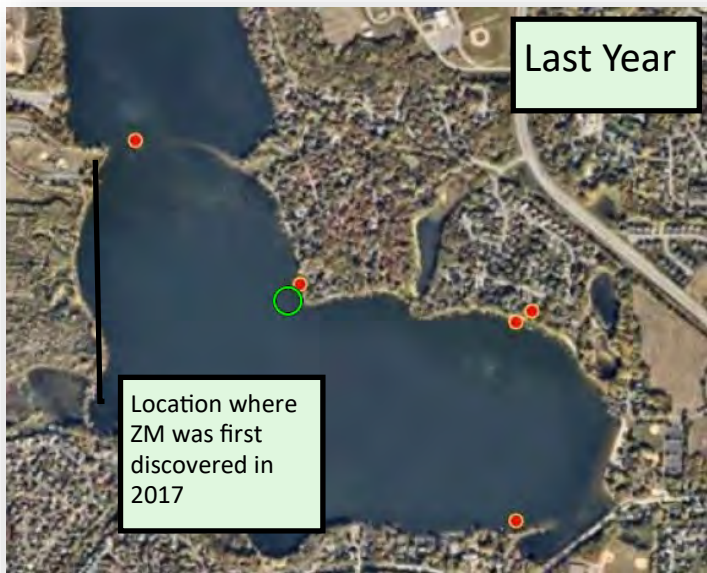
*Watercraft Inspection Data
Total Inspections: 3,643
~25% of boats did not wait the
recommended 5 day dry time
before launching*

*Curlyleaf
Pondweed Treated
Marion: 16.46 acres
Orchard: 12.31 acres*

Funding

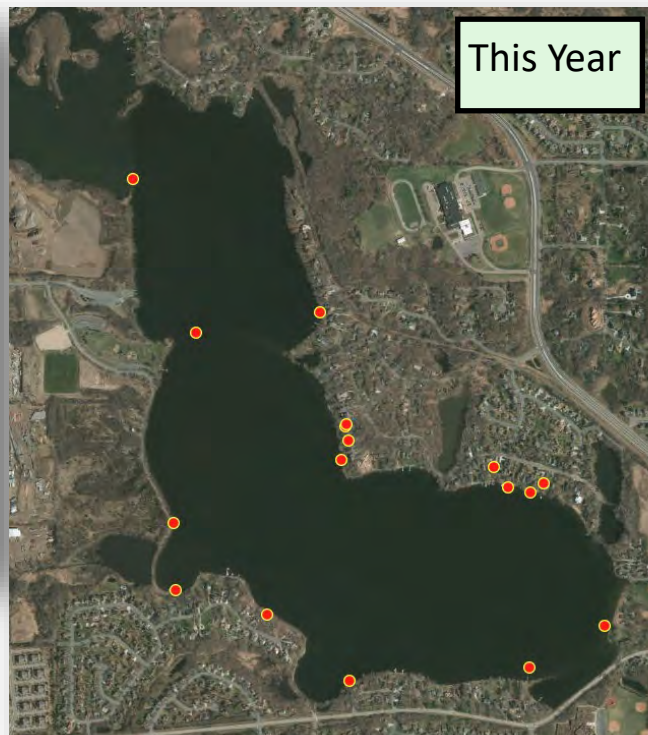
Grant Funding : \$31,530
City of Lakeville: \$12,463

Project Cost: \$43,933



Last Year

Location where ZM was first discovered in 2017



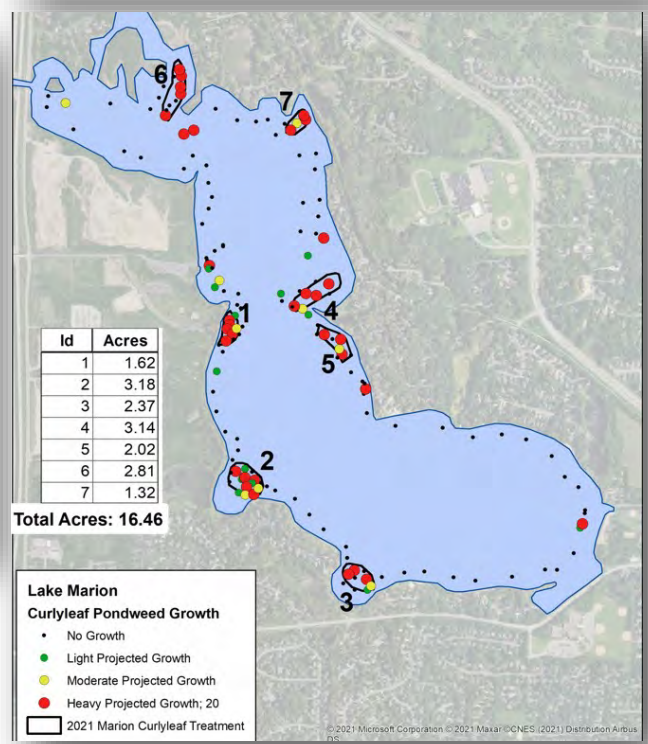
This Year

(Left) Lake Marion residents reported ZM sightings at 12 new locations in 2021. Greater than 100 ZMs were observed at these new reporting locations.

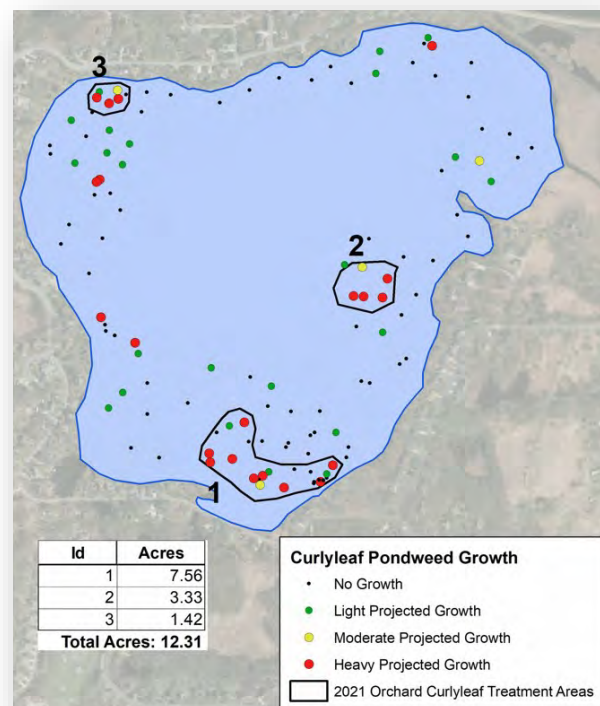
(Above) Lake Marion residents reported ZM sightings at 5 new locations (red dots) in 2020 using the new AIS reporting application. Total ZMs reported = 18.



(Above) Zebra mussels found on Lake Marion.



(Left) CLP delineation results for Lake Marion. Treated areas are shown outlined in black (totaling 16.46 acres).



(Left) CLP delineation results for Orchard Lake. Treated areas are shown outlined in black (totaling 12.31 acres).



(Below) An example of plant specimens collected for Eurasian watermilfoil genetic analysis. Photo provided by Montana State University.