

City of Emily Lake Associations Update

October 10, 2023



RLID

Agenda Topics

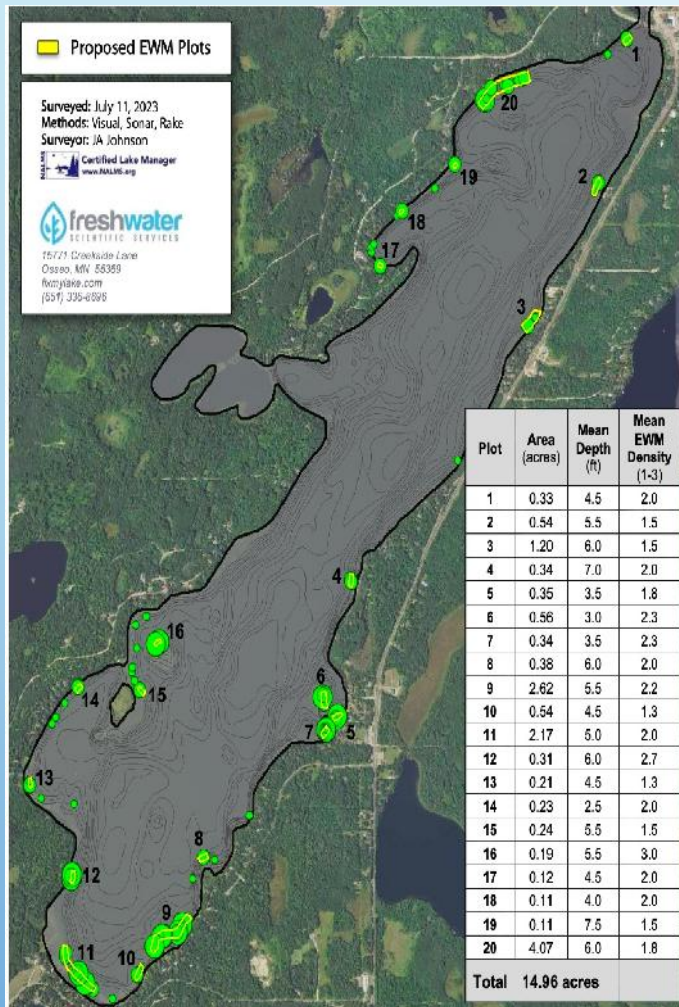
- Mission Statements
- History of Accomplishments
 - Aquatic Invasive Species
 - Shoreline Restorations
 - Get the Lead Out
 - Loon Liaison
 - Thousands of Volunteer hours
- Current and Future Risks
 - AIS
 - Enbridge Pipeline
 - Natural Shoreline Loss
 - Proximity of Manganese Mine
- Managing the Risks
 - AIS Launch Site Prevention
 - Enbridge Pipeline – Monthly Water Testing
 - Natural Shoreline Loss – Protect our Lakes and Lake Stewards Program
- Costs of Programs
 - Year by Year Costs
- Forecast of Future Costs
- City of Emily Contributions
- Request for Further Support
 - Help is needed

Mission Statement

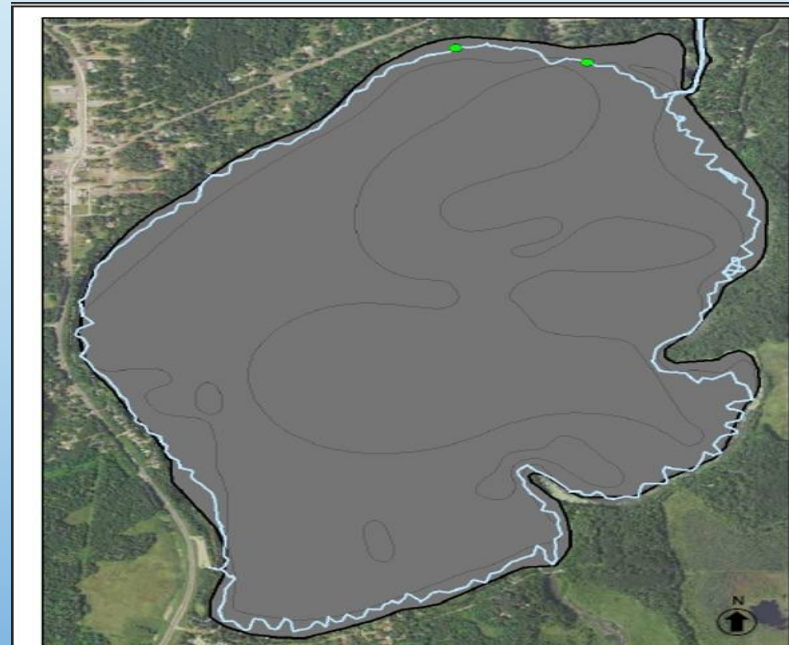
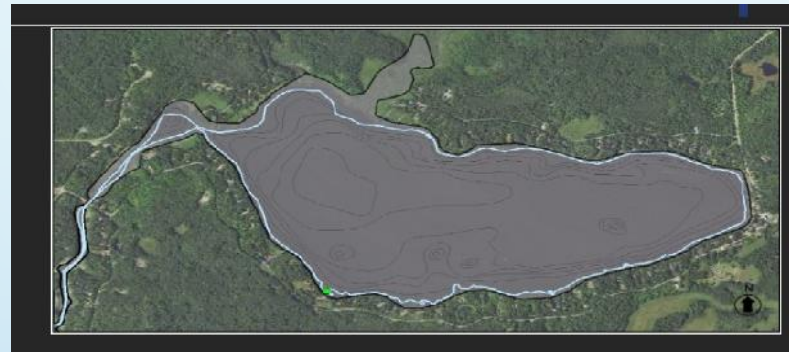
- Preserve and Protect the Lakes and the Watershed
 - We are all in this together
 - Water is fundamental to all forms of life
 - Maintain or Improve Water Quality
- AIS Management
 - Address Invasive Species
- Design, Organize, and fund educational programs designed to promote a healthy balance between recreational use of lakes and protection of the lakes as a natural resource
- Aid, advise, and assist municipal, county, and state policymakers in making decisions and taking actions that impact the lakes and the watersheds
- Consistent with Lake Associations Mission Statements

Accomplishments – AIS Management

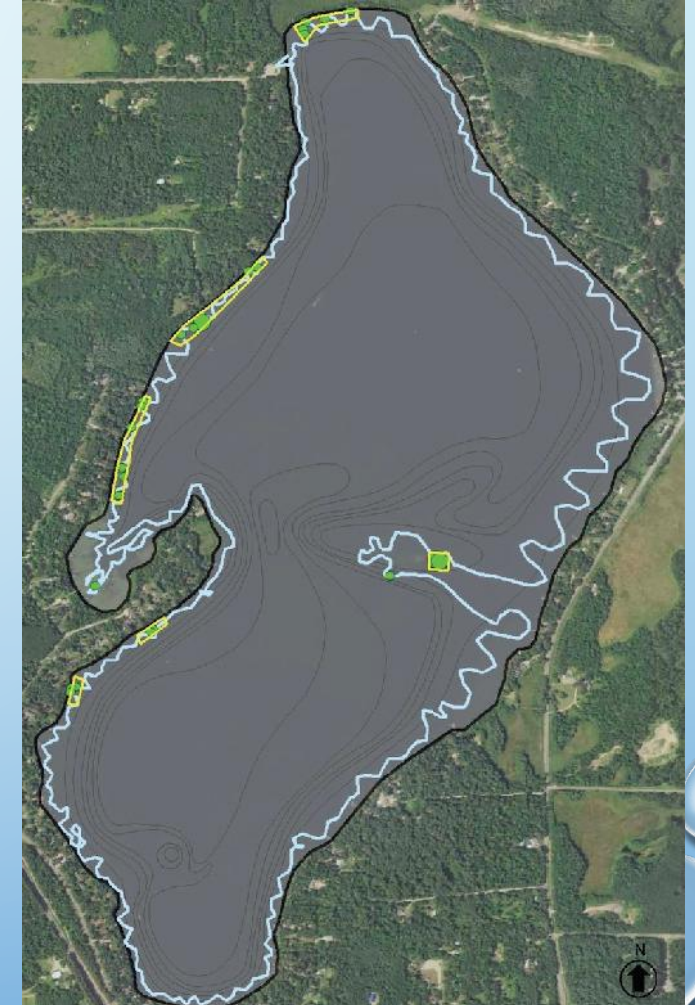
Roosevelt Lake



Lake Mary, Emily and Little Pine River



Ruth Lake



Accomplishments

- Shoreline Restorations at Roosevelt Lake



Accomplishments

- Shoreline Restorations at Ruth Lake



Accomplishments

- Lake Stewart Program Implemented – 43 Lake Stewards – Created by MLR

CONGRATULATIONS LAKE STEWARDS!

Bonnie McGowan



Jim and Deb Nicholson



Chris and Mike Sandusky



Accomplishments

- Get the Lead Out – 109 pounds collected over 3 years – State Record



Accomplishments

- Loon Liaison Program



Accomplishments

- Support for Aquatic Management Area



- Buoy Management



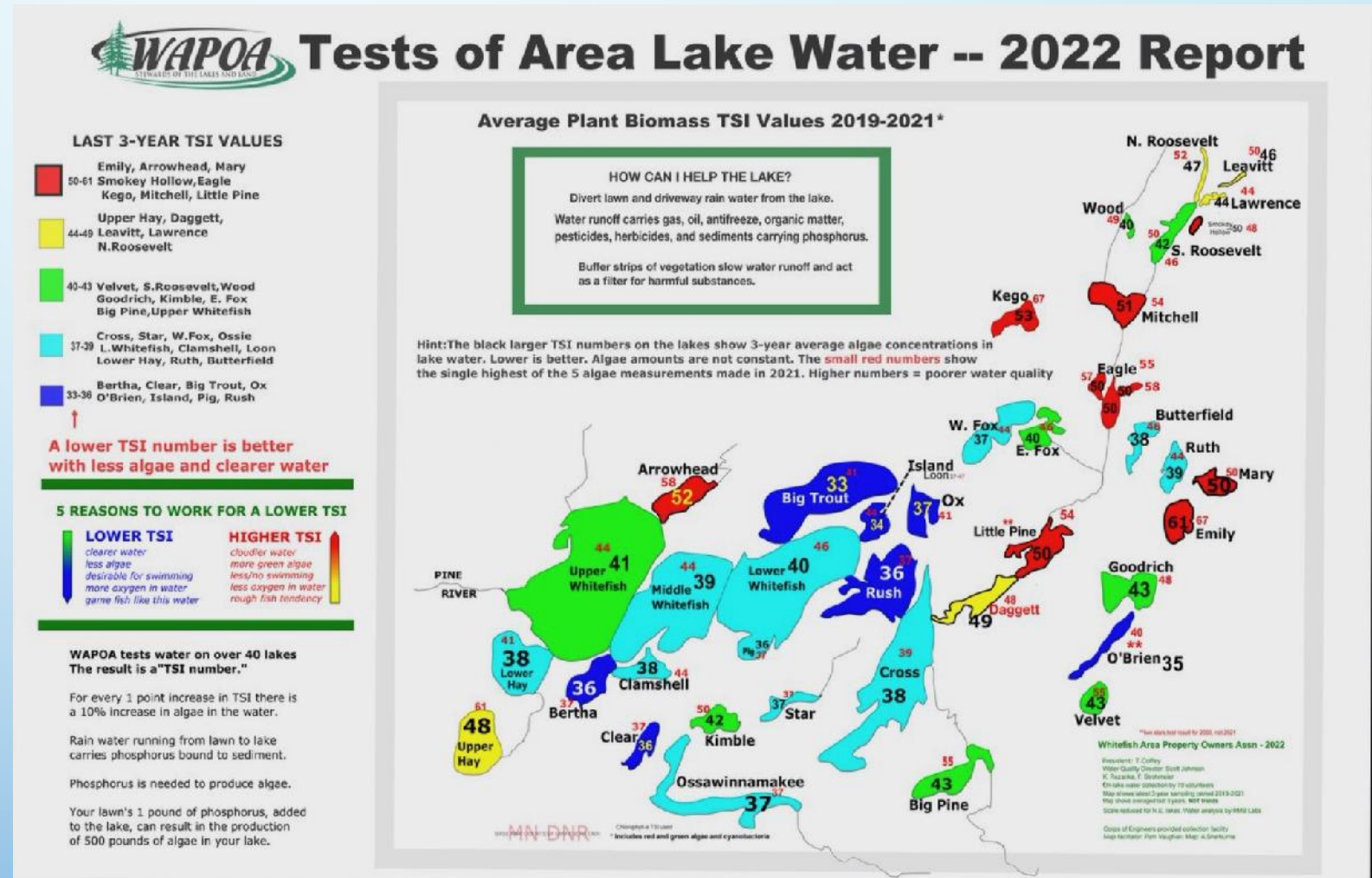
Accomplishments

- Continue to Improve Launch Site Management



Accomplishments

- Water Quality Testing – Partnership with WAPOA



Accomplishments

- Repairing the Dam



Accomplishments

- Strong relationships developed with AIS Lake Technician
- Newsletters from the Lake Associations focusing on Programs, Education and Best Practices.
- Lake Level Gauge Readers – Report to DNR Weekly
- Adopt a Highway Program
- Tens of Thousands of Volunteer Hours

Current and Future Risks

- Additional AIS
 - Lake Roosevelt, Ruth, Mary and Emily have been infected with Eurasian Watermilfoil
 - Thunder Lake has Zebra Mussels and Starry Stonewort. Close proximity equates to higher risk of infection. Dr Phelps (U of M) predicts Roosevelt has a 39% chance of getting Zebra Mussels and/or Starry Stonewort in the near future.
 - Launch Site Prevention and Education is the only real defense
- Enbridge Pipeline
 - 600 feet from the north end of Lake Roosevelt.
 - Barr Engineering firm (Enbridge Consultant) rates Lake Roosevelt as a High Risk for contamination.
- Natural Shoreline (Is a buffer to protect the lakes from contamination)
 - 40 – 50% of our natural shoreline has been eliminated.
 - This creates more Algae; lowers water quality: negatively impacts the fish populations and lowers property values
- Proximity of Proposed Manganese Mine

Managing the Risks

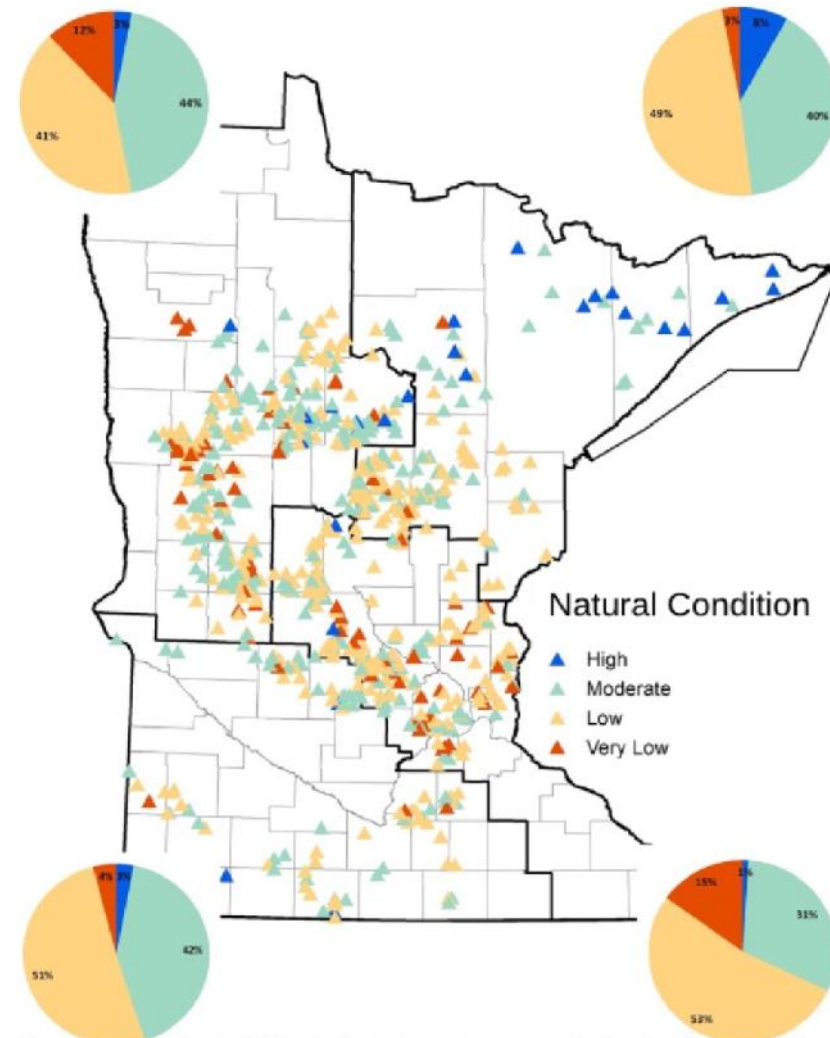
- AIS – Launch Site Prevention
 - Additional Inspector Hours
 - ILIDS – Automated Audio and Video of off hour boat launches
 - Decontamination Unit located at Ruth Lake Launch Site
 - Decontamination Location Assessment for other lake Launch Sites
 - More oversight needed
- Enbridge Pipeline
 - Water Quality Testing on a Monthly Basis
 - Conducted by Objective 3rd Party – Certified Laboratory
- Natural Shoreline
 - Protect our Lakeshore (POL) Program implemented in 2019
 - Partnered with County Soil and Water and Prairie Restorations Inc
 - Lakeshore Stewards Program implemented in 2021
 - 43 Lake Stewards
- Education Programs and Newsletters
 - New Lakeshore Owner Orientation Package & Meeting

Why do we Focus on Natural Shoreline?

Lakeshore Buffers –

We've lost 40-50% of our natural lakeshores

If we fail to protect these natural shorelands, we will lose lake water quality, and maybe even the ability to swim and recreate in our lakes



Score-the-Shore survey results by DNR administrative region rescored using developed sites for each lake.

Impacts of Disappearing Natural Shorelines



Managing the Threats

- Natural Shoreline Impact – Roosevelt Lake



Costs of Programs

| RALALA Costs | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | | | | | | |
| Survey Cost | \$3,200 | \$1,600 | \$3,562 | \$2,312 | \$2,250 | \$2,400 | \$4,205 | \$4,035 |
| Treatment Cost | \$22,497 | \$14,524 | \$8,866 | \$6,601 | \$15,891 | \$6,965 | \$7,007 | \$24,900 |
| Additional Inspector Hours | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$9,900 |
| Enbridge Water Testing | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$7,000 |
| | | | | | | | | |
| ELRA Costs | | | | | | | | |
| | | | | | | | | |
| Survey Costs | \$1,600 | \$2,900 | \$2,882 | \$2,970 | \$2,400 | \$2,100 | \$2,830 | \$2,950 |
| Treatment Costs | \$11,448 | \$2,579 | \$3,103 | \$7,800 | \$15,036 | \$0 | \$0 | \$0 |
| Additional Inspector Hours | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | | | | | |
| Ruth Lake Costs | | | | | | | | |
| | | | | | | | | |
| Survey Costs | \$1,140 | \$1,180 | \$1,200 | \$1,280 | \$1,400 | \$1,450 | \$1,660 | \$1,790 |
| Treatment Costs | \$10,962 | \$16,822 | \$9,058 | \$15,122 | \$12,771 | \$11,597 | \$27,311 | \$10,180 |
| Additional Inspector Hours | | | | \$19,336 | \$13,258 | \$13,935 | \$17,246 | \$17,952 |
| | | | | | | | | |
| Total Costs by Year | \$52,863 | \$39,605 | \$28,671 | \$55,421 | \$63,006 | \$38,447 | \$60,259 | \$78,707 |
| | | | | | | | | |
| | | | | | | | | |
| TOTAL Costs 2016 - 2023 | | | | | | | | |
| | | | | | | | | |
| \$416,979 | | | | | | | | |

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Request for Further Support

- Funding Request for AIS and Launch Site Support – We are requesting an increase of 49% based on cost changes since 2016.
- Provide Support for Enbridge Water Testing – 50% of Yearly Costs – New Request \$3,500
- Need to better understand the best process for oversight and management of natural lakeshore changes.
- Future Discussion Point
 - Determine if there is value in formalizing the City of Emily Waters group to advocate for and help manage funds associated with the Lakes and Watershed.

The background is a light blue gradient. In the top-left corner, there are several water droplets of varying sizes, some overlapping. In the top-right corner, there are a few more droplets. In the bottom-right corner, there is a larger, more complex arrangement of droplets, including a large one and several smaller ones. In the bottom-center, there are a few small droplets.

Questions/Comments