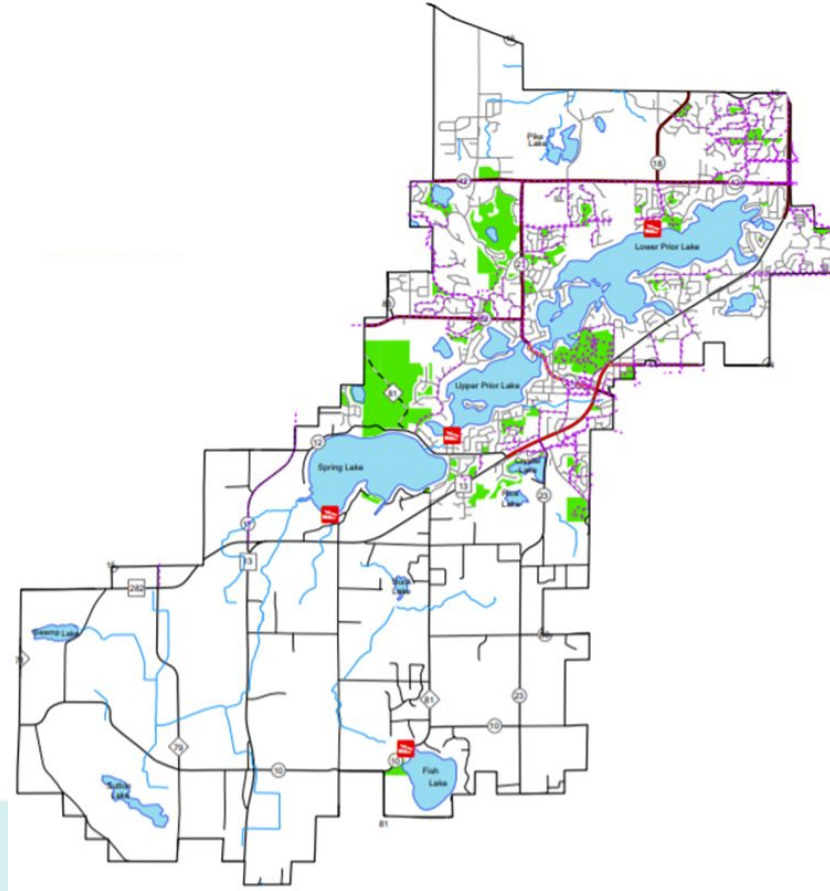


Prior Lake Spring Lake Watershed District 2021 Watercraft Inspection Program



Inspection Program Review

- Waterfront Restoration was hired to provide 1,000 hours of Level 1 Watercraft Inspector coverage
- Inspectors were staffed at Lower Prior Lake, Upper Prior Lake, Spring Lake, and Fish Lake
- 9 inspectors were recruited, hired, trained, authorized, scheduled and managed throughout the season
- Coverage was scheduled on Fridays, Saturdays, Sundays and Holidays starting 5/14/21 and ending on 9/25/21
- Waterfront Restoration coordinated schedules with the MN DNR inspectors to maximize coverage and prevent any overlap.
- Most shifts started between 7am - 9am and ended between 3:30pm and 6pm

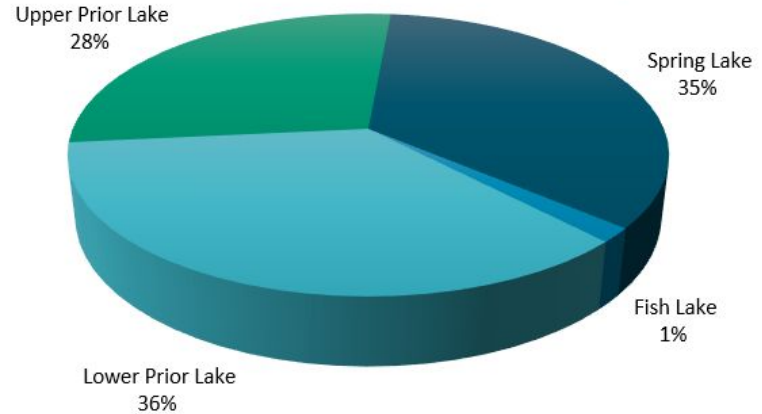


Inspections and Hours Coverage

Lake Name	Inspections	Inspection Hours
Fish Lake	79	49
Lower Prior Lake	1,720	225
Upper Prior Lake	1,348	302
Spring Lake	1,670	424
Total	4,817	1,000

- All 1,000 contracted hours were worked at the 4 launches
- 3,136 entering inspections, 1,670 exiting inspections, 9 lift inspections, and 2 courtesy inspections
- 4.8 inspections were completed per hour on average

2021 Watercraft Inspection Percentages

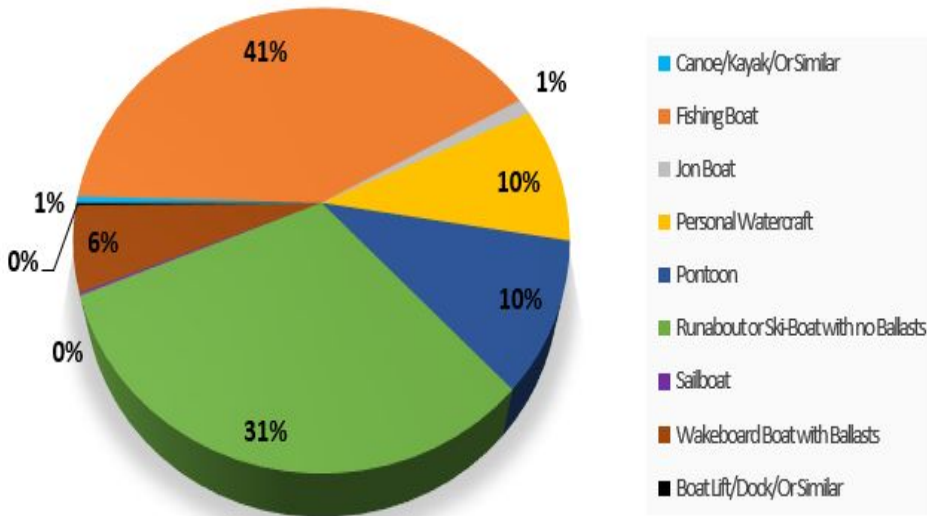


- DNR inspectors were mostly scheduled at Lower Prior, and only a few shifts at Upper Prior
- Fish Lake was allocated 16 hours in June, July and August each

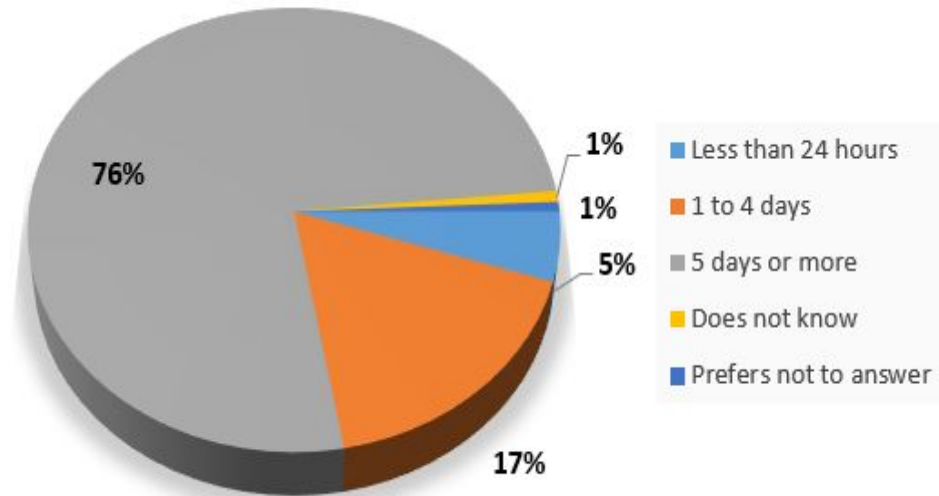


Inspection Data Analysis

Type of Watercraft



Time out of Water Before Entering

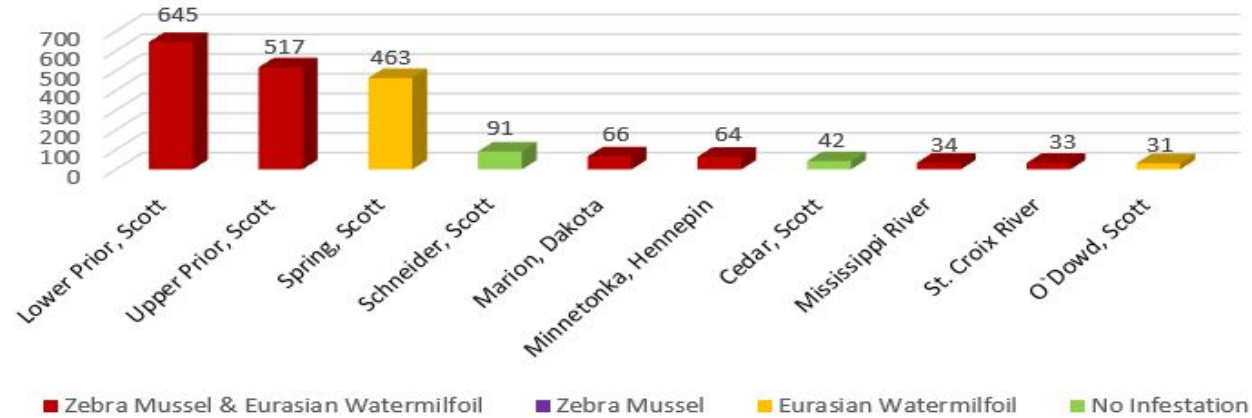


Inspection Data

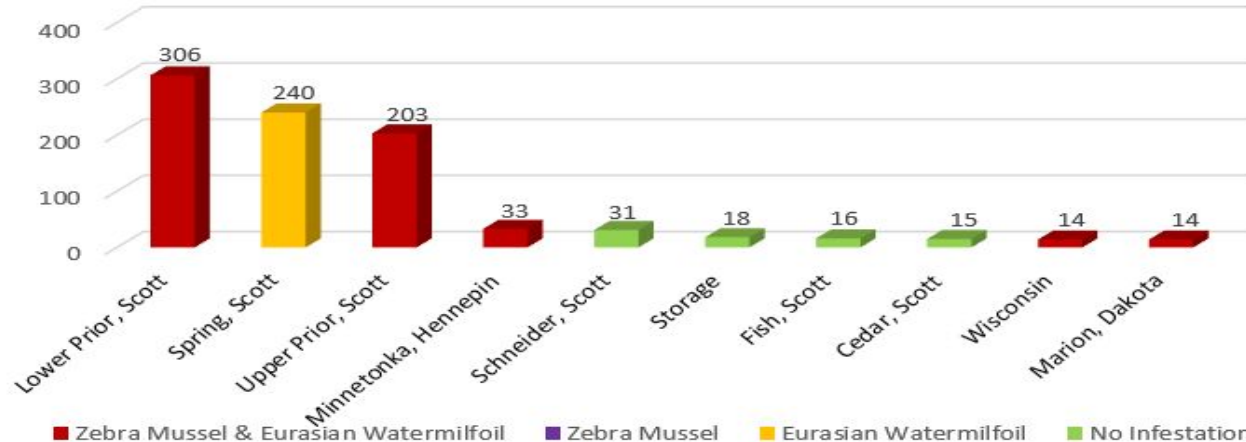
Analysis

- Responses to the inspection survey questions about the LAST body of water and the NEXT body of water the watercraft is going to be on is important to understanding the risk of AIS being spread
- Graphs reflect only the top 10 responses for each question
- The main point of concern is the volume of watercraft traveling to and from lakes with Zebra Mussel infestations (red bars) to lakes without (yellow and green bars)

LAST Body of Water Visited



NEXT Body of Water Planning to Visit

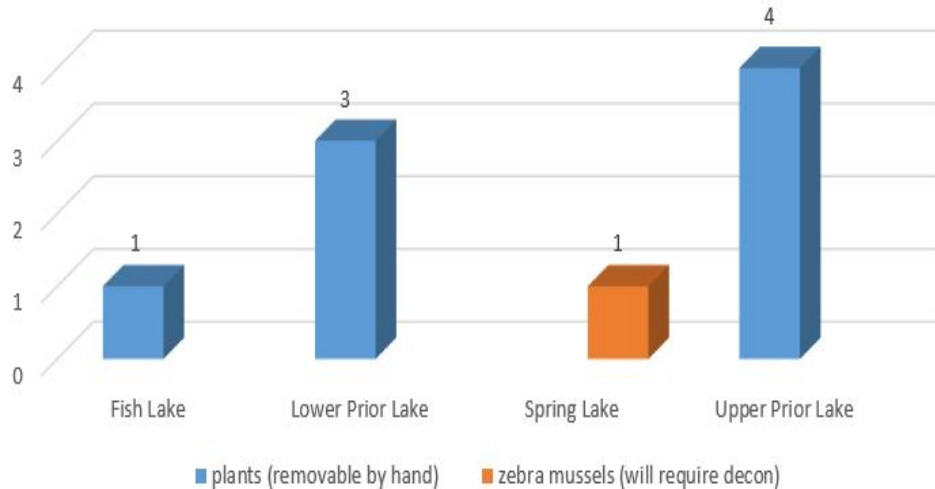


AIS Violation Statistics

Entering

- 9 AIS violations
- 30 Drain plug law violations
- Spring Lake ZM violation prevented an introduction

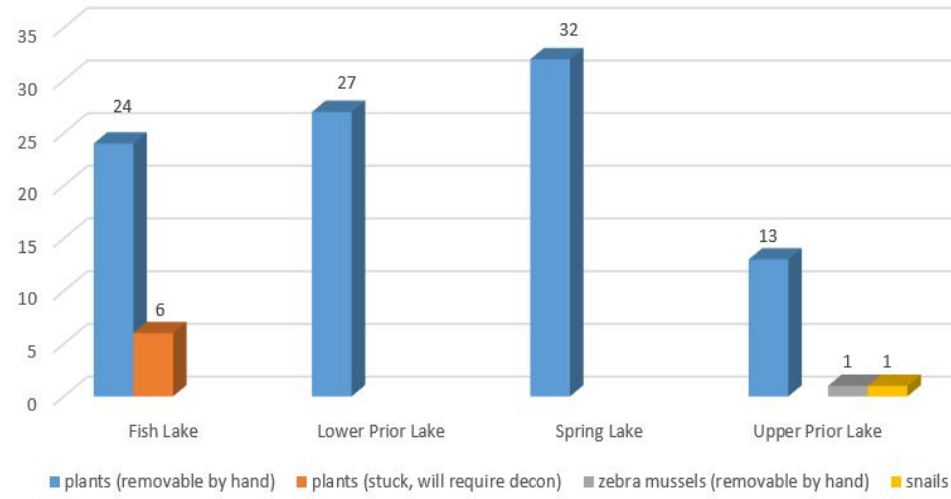
Entering Violations by Lake



Exiting

- 104 exiting watercrafts were found to have at least one AIS on and/or in the watercraft, trailer, or equipment
- Findings at exit were resolved on site before the watercraft left the launch

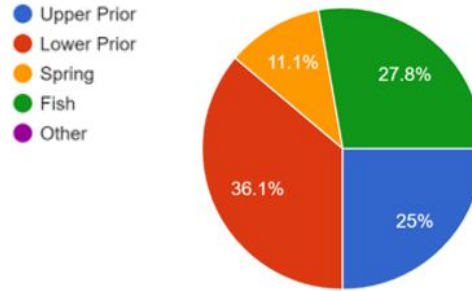
Exiting Violations by Lake



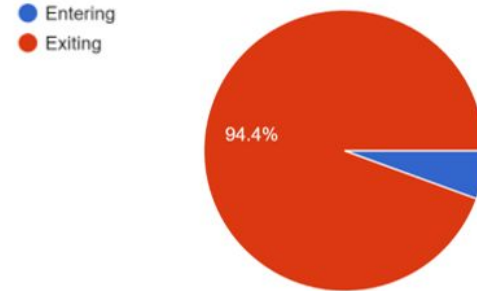
Identification of Plant Species Found

- With the vast majority of inspection findings being plants, Waterfront Restoration was asked to further identify what species of plants were being found.
- Developed a 7 questions survey that inspectors were asked to complete when they found plants during an inspection.
- Inspectors submitted their assessment of the plant species as well as pictures
- Most common findings were:
 - Filamentous Algae (30.6%)
 - Unable to identify (22.2%) - often this is a type of algae or less identifiable form of vegetation, but not AIS
 - Curly Leaf Pondweed (19.4%)
 - Coontail (11.1%)
- It is illegal to transport or launch a watercraft with any aquatic plants attached. Duckweed is the only exception to this law.
- Sample of pictures on the next slide!

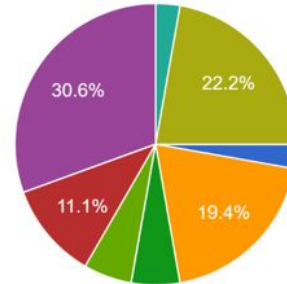
What lake launch are you working at?



Is this an entering or exiting inspection?



What is the identity of the plant?

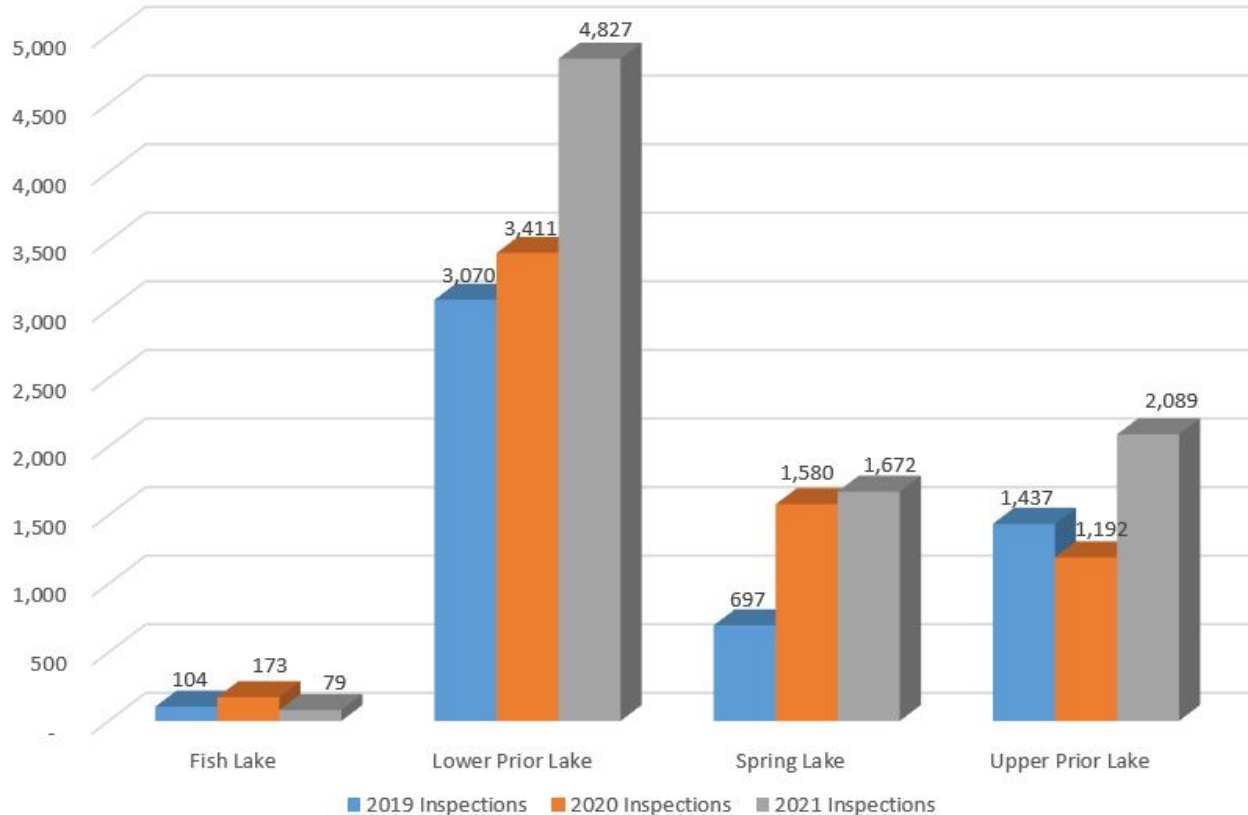


- Eurasian Watermiloil (See comparison...)
- Northern Milfoil (ON THE LEFT)
- Curly Leaf Pondweed
- Flat Stem Pondweed (Firmly rooted, t...)
- Elodia (Stems form large mass near la...)
- Broad/ Clasp Leaf (Tough stems; r...)
- Eelgrass (Eelgrass: Grows very close...)
- Chara (No roots; free floating. Usually...)
- Coontail (No roots)
- White Water Lily (Grows rooted in mucky or silty bottoms up to 5 feet deep. Flower opens in morning and usually...)
- Filamentous Algae (No roots; free floating)
- Other: please identify in the next question
- Unable to Identify



3 Year Trends and DNR Partnership

Survey Totals (Contracted + DNR)



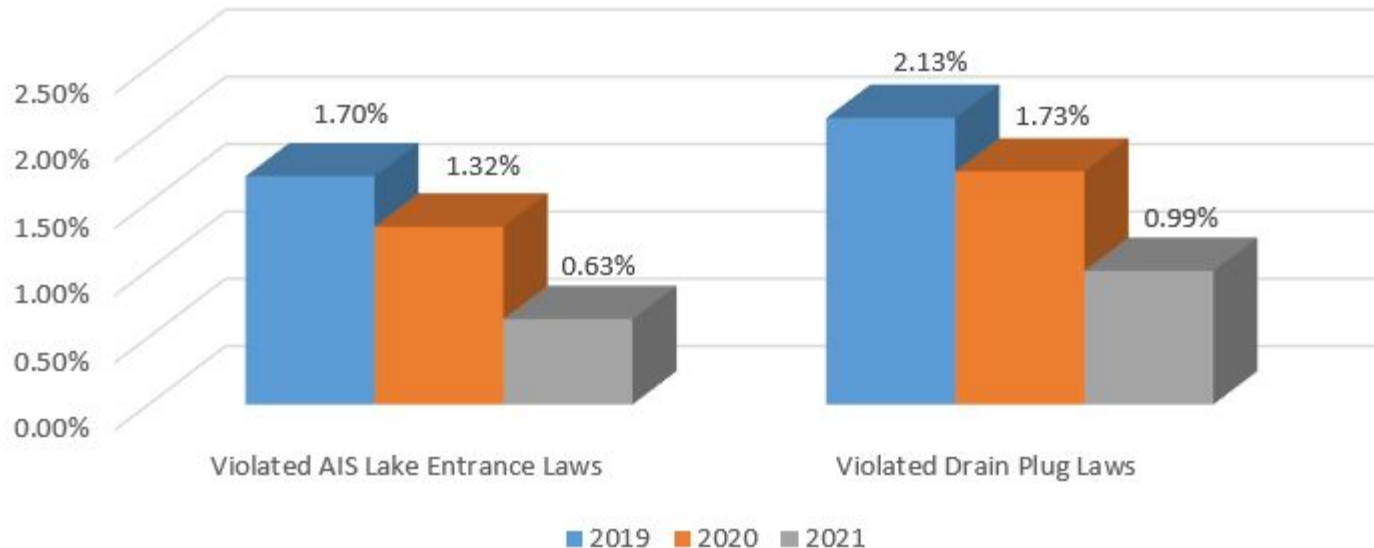
- Strong partnership and coordination with the DNR had a significant positive impact on launch coverage
- Total inspections by year (all launches, all inspectors):
 - 2019 – 5,308
 - 2020 – 6,356 – increase of 19.7%
 - 2021 – 8,667 – increase of 36.3%
- DNR partnership allowed for a decontamination unit to be staffed on Prior Lake frequently (33 decons in 2021)
- Contracted inspector hours by year:
 - 2019 - 385 on Spring Lake only
 - 2020 - 900
 - 2021 - 1,000



3 Year Trends and DNR Partnership (Cont.)

- Steady decreases in AIS violations and drain plug compliance
- Most common violation found is plants (removable by hand)
- Inspectors made numerous comments throughout the season to management that most boaters seem to have a strong understanding of their responsibility in preventing the spread of AIS and appreciate the work inspectors do to educate the public

Comparison of MN AIS Law Violation



Recommendations for Future Inspections

- Continue with at least the same level of coverage and consider more weekday coverage throughout the season.
 - Randomized (by location and time of day) weekday shifts could help reach people who do not typically interact with inspectors on the weekends.
- Expand inspector coverage frequency to the Prior Lake Spring Lake Watershed District lakes and launches.
 - Weekend evening shifts
 - Early weekend morning shifts
- Continue to provide and refresh educational AIS material handouts that inspectors can hand out to boaters
 - iLIDS informational material
 - Bait bucket law stickers/postcards
 - Waterproof topographic lake map with an emphasis on AIS
 - Drain plug wrenches



Thank you for trusting Waterfront Restoration to recruit, staff, train, and manage a team of dedicated inspectors to help protect the Prior Lake Spring Lake Watershed District lakes.

Questions?

