



# 2024 NFCRWD AIS BOAT INSPECTION REPORT

November, 2024

## Why are We Inspecting Boats?

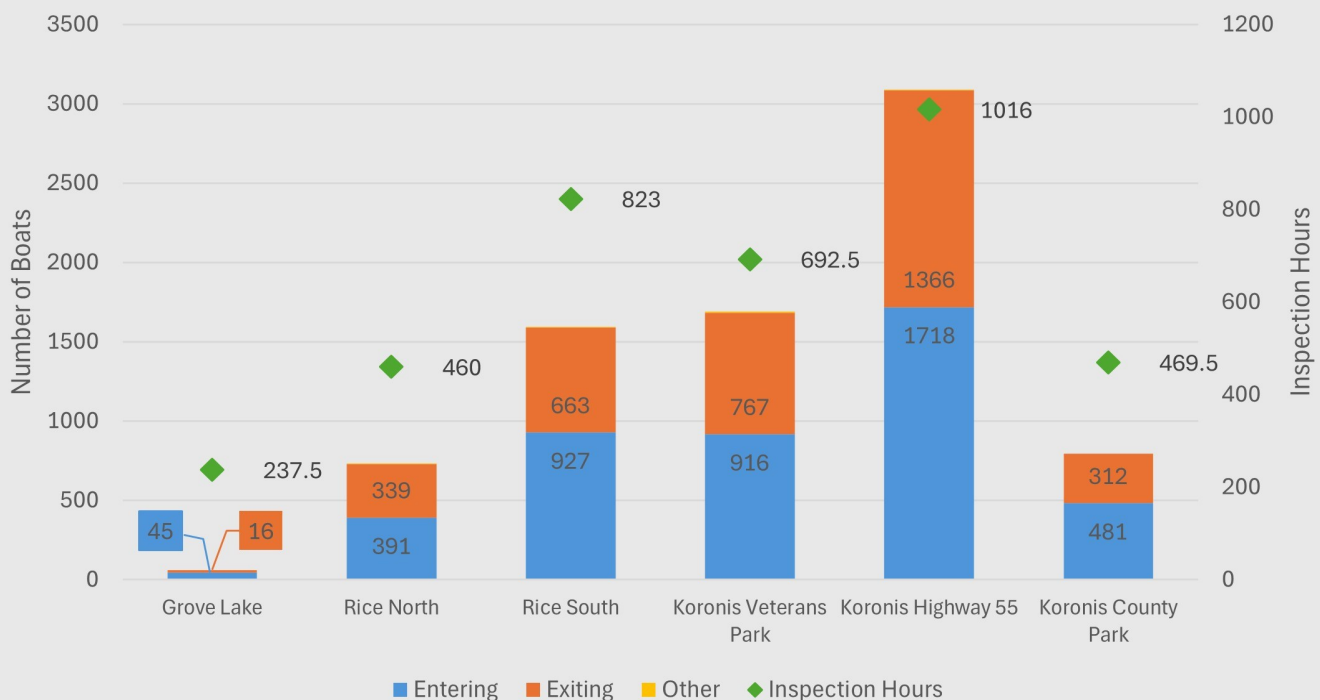
Boats are inspected to reduce the risk of spreading Aquatic Invasive Species (AIS) into the watershed district waters. AIS are non-native plants, animals, or pathogens that live primarily in water and thrive in their new environment, often out-competing native species.

The inspectors complete a DNR survey during each watercraft inspection with the inspection results presented in the following graphs and tables. They also discuss MN AIS laws with boaters and complete a visual and physical inspection of boats entering or exiting waterways. Completing these inspections with boaters increases the knowledge of AIS, teaches self-inspection techniques, reduces the risk for AIS infestation in District waters, and can stop AIS contaminated boats from launching.

## 2024 Summary

- **7,951** boats inspected May-October 2024
- **399** water bodies with boats entering the watershed district
- **25** Level 1 Watercraft Inspectors staffed by WaterGuards LLC
- **6** accesses across three lakes
- Contributors: Meeker County, Paynesville Township, Koronis Lake Association, Rice Lake Association, Grove Lake Association, Union Grove Township, Stearns County, Pope County, MN DNR and the NFCRWD

Inspection Hours and Number of Boats Inspected

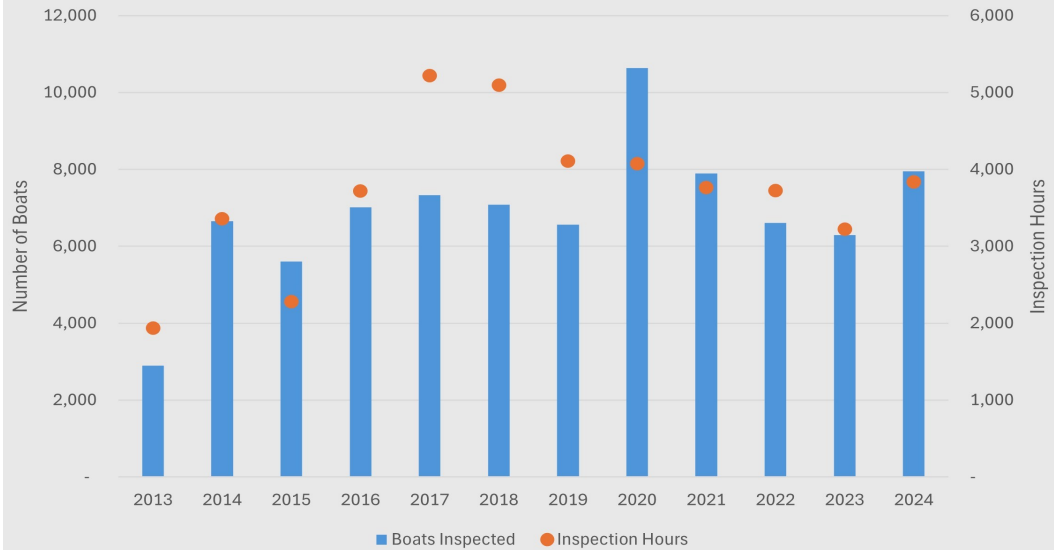


# Inspection Data

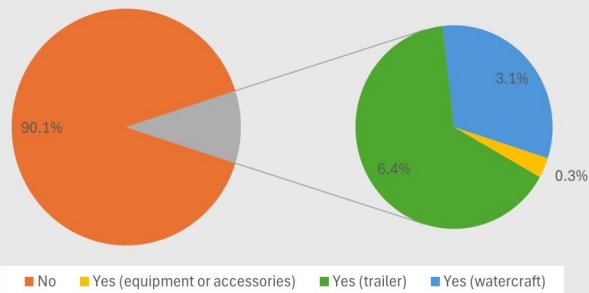
## Grant Funds and Contributions for 2024 AIS Program

Stearns County	\$52,216
RLA	\$8,000
GLA	\$300
Pope County	\$6,290
Meeker County	\$8,000
Paynesville TWP	\$6,000
Union Grove TWP (thru KLA)	\$1,500
KLA	\$20,577
<b>2024 Total</b>	<b>\$102,883</b>
NFCRWD In-Kind Hours	~ 40 hours

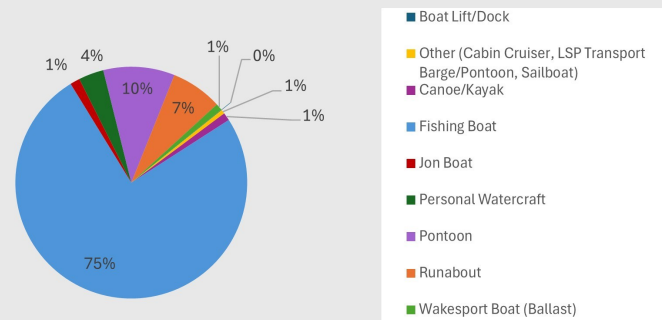
### Yearly Boat Inspection Hours



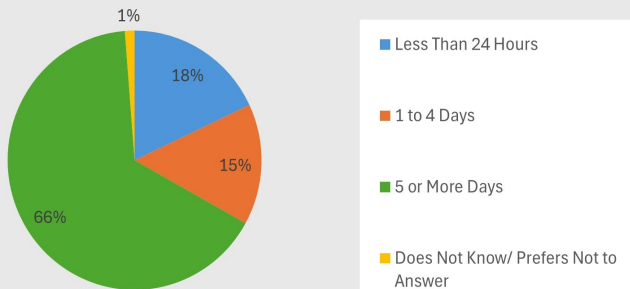
### Were any plants, animals, water, or mud found during the inspection?



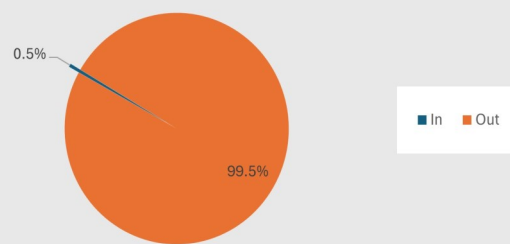
### Percentages of Boat Types



### How long has your boat been out of water?



### Percentage of Drain Plugs



## Trends

- Excluding 2020, there was a steady increase in boats inspections while maintaining an average amount of hours.
- One of every ten inspections found plants, animals, water, or mud on the watercrafts, trailers, or accessories, which indicates that about 9.8% of the watercrafts entering or exiting the lakes are potentially transporting AIS. This is comparable to the 2023 and 2021 seasons (9% and 8%, respectively) and higher than the 2022 season (2%).
- There was a wide range of watercraft types inspected, with the majority being fishing boats.
- Two thirds of the watercrafts inspected were out of water for five or more days.
- The vast majority of boaters had their drain plugs out when inspected. This is similar to 2023 and 2021 (99.6% and 98.3%, respectively), and higher than the 2022 season (84.7%).
- The Highway 55 Access at Lake Koronis had the most inspections (3,085), followed by the Veterans Park Access at Lake Koronis (1,690) and the South Access at Rice Lake (1,591).
- About 65% of lakes with watercrafts frequently entering Grove Lake, Lake Koronis, and Rice Lake are infested with AIS.

# AIS in NFCRWD

**Starry stonewort** (*Nitellopsis obtuse*) is an invasive green algae that has spread rapidly within some northern-tier lakes. It can grow tall and dense, forming mats on the surface that interfere with recreation and potentially displacing native plant species. Minnesota Aquatic Invasive Species Research Center (MAISRC) researchers are currently performing ecological niche modeling to assess risk of spread in Minnesota as well as laboratory experiments to assess how long it can survive out of water and to evaluate the efficacy of herbicides and algacides while minimizing non-target impacts.

## What it affects

Where starry stonewort grows densely and forms surface mats, it can interfere with boating and other recreational activities. Dense growth may also displace native plants and could potentially have impacts on fish and other animals. Starry stonewort's ecological impacts are not well understood, and there has been little published research to date.

## How it spreads

Starry stonewort appears to be spreading vegetatively in the U.S. (by bulbils and fragments). Accidental movement by people is the most likely means of dispersal. Many of the known infestations occur in high-use waterbodies and near boat accesses (MAISRC 2024).

Lake Koronis and Rice Lake both have active programs in place to control/manage Starry Stonewort.



**Zebra mussels** (*Dreissena polymorpha*) are small, invasive aquatic invertebrates that can have a huge impact on the recreational, ecological, and economic value of a lake. They can reduce lakefront property value, their shells can cut swimmers' feet, and the presence of zebra mussels in lakes can affect fish and native mussel populations.

## How it spreads

Zebra mussels are transferred when attached to boats, trailers, docks, boat lifts or other equipment that are placed in water. The juvenile mussels can be transferred from lake to lake in a very small amount of water. Having a drain plug in a boat can greatly increase the spread of zebra mussels. Zebra Mussels can also survive out of water on boats or other water equipment for 31 days, depending on weather conditions. A boat or other water equipment coming from a contaminated lake that is not completely dry or decontaminated (high pressure wash with 140°F water) can spread zebra mussels.

## What it affects

Ecologically, they filter enormous quantities of microscopic algae and alter energy flow through aquatic ecosystems - with potentially large impacts on fish populations - and they smother and cause extinctions of native bivalve mollusks.

Grove Lake confirmed zebra mussels in July 2024.



## Why is this Important?

In addition to AIS prevention, the inspection program focuses on stopping the spread of AIS from leaving the lakes and infesting other waters. Rice lake is infested with starry stonewort, Lake Koronis is infested with starry stonewort and zebra mussels, and in July 2024, zebra mussels were found in Grove Lake. Information about all three lakes can be found in the DNR's Infested Waters List. While it is impossible to know how the AIS found their way into the lakes, we will also never know if they would have infested the lake earlier without the inspection program being in place. The AIS inspection program furthers the mission of NFCRWD.

*"The District Mission for the NFCRWD is to improve and enhance water quality, to control water flow, to reduce erosion and sedimentation, to promote wise public, private and natural use of water while maintaining, enhancing and preserving public and private drainage for present and future residents of the Watershed District."*