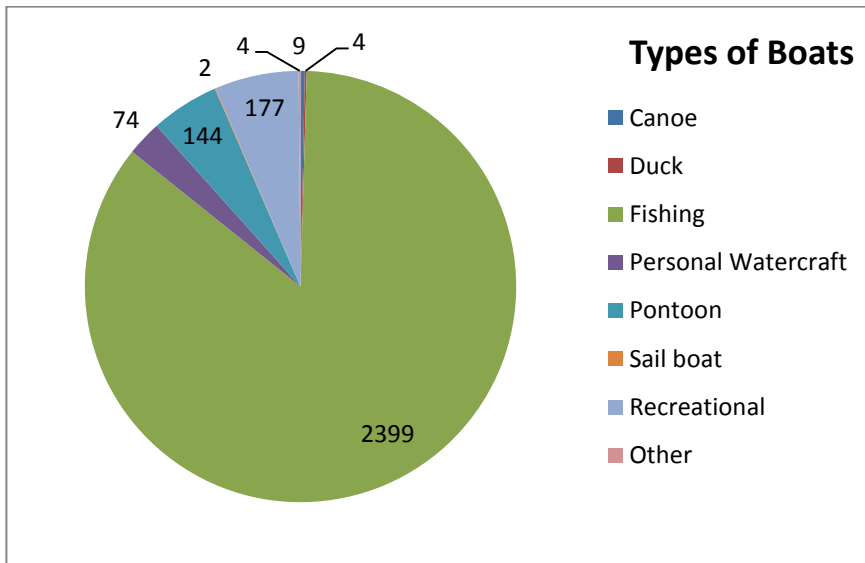
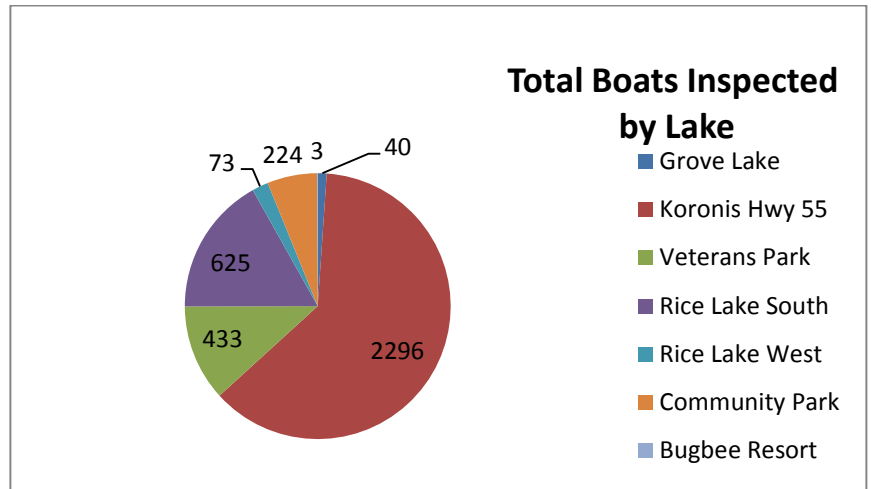


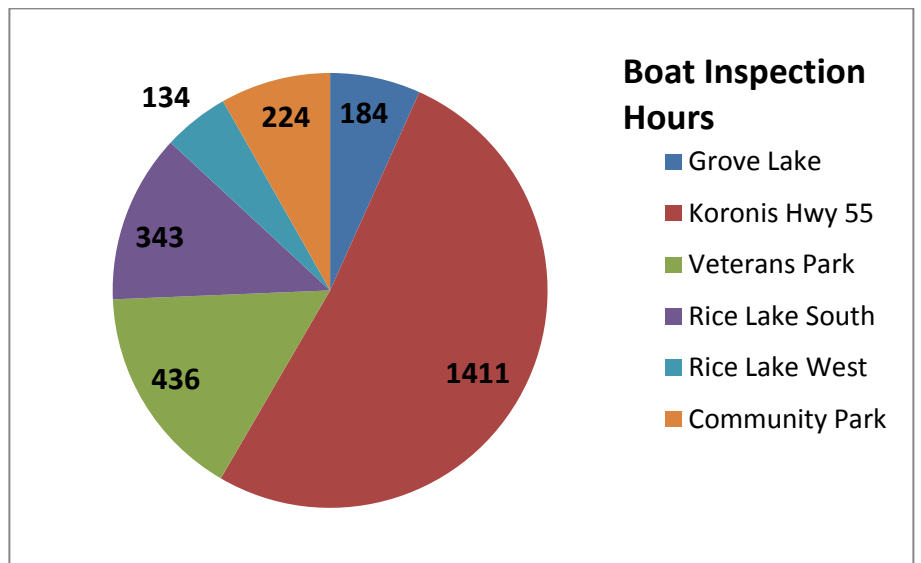
2013 AIS BOAT INSPECTION RECAP FROM NFCRWD AND KORONIS LAKE ASSOCIATION – TOTAL SUMMARY DATA

The North Fork Crow River Watershed District (NFCRWD) and the Koronis Lake Association employed 4 level 1 watercraft inspectors and 3 inspectors through the WaterGuards during 2013. The inspectors were trained by the MN DNR to inspect boats entering and exiting public boat accesses on the District’s recreational lakes. Contributors to the project included the Koronis Lake Association, MN DNR, Paynesville Township, Meeker County, NFCRWD, City of Paynesville, Union Grove Township, Rice Lake Association, and Grove Lake Association.

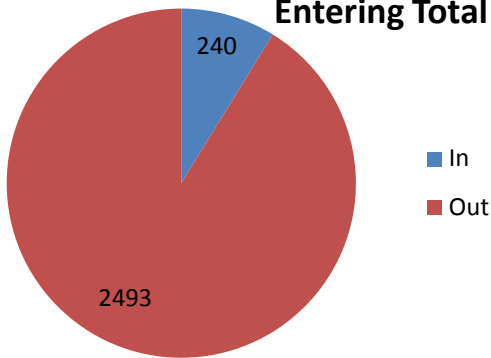


By far the largest number of transient boats was fishing boats. Inspections/surveys went very well taking only about 5 minutes each unless there was an issue. i.e. weeds on the boat, plug in the boat, water in the live-well. The inspectors also did basic AIS training with each boater. Most boaters were very cooperative with the inspection and survey. Some reluctance existed on revealing previous lake entered. The graphs in this report are a combination of the Watershed / DNR data and the WaterGuards data obtained from the surveys.

The hours at each launch site within the watershed were not split up equally. Initially it was estimated which launches would be the busiest and based on that, hours were assigned. The busiest launch then had the watershed Level I trained inspectors assigned as they had the most authority. During each watercraft inspection, the inspectors completed a DNR survey, discussed MN AIS laws and completed a visual and physical inspection of boats entering or exiting the waterways. Completing these processes with boaters increases the knowledge of AIS and self-inspection techniques, reducing the AIS risk for the District’s waters.

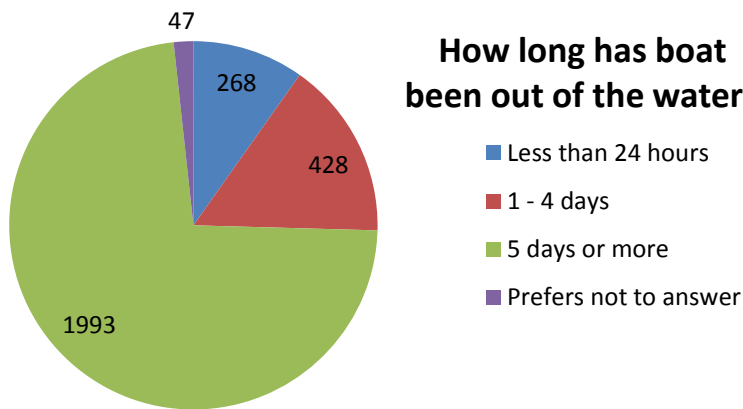


Drain Plug Boats Entering Total



It is documented that transient boats present the greatest risk for the transfer of aquatic invasive species from lake to lake. Several key factors determine the risk and when controlled can substantially reduce the risk. These are dependent on the biological factors of the invasive. In the case of Eurasian milfoil, small fragments that still have the ability to grow are all that are needed to be put into a lake to start the invasive population and pending ecological change. Zebra Mussels are transferred when attached to boats, trailers 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, such as the bottom of a boat, a live-well, or a ballast tank. Failing to completely drain a boat can greatly increase the spread of zebra mussels. Zebra Mussels can also survive out of a lake on boats for 21 days, depending on weather conditions. A boat that is not dry for 21 days coming from a contaminated lake or has not been decontaminated (high pressure wash with 140°F water) can spread zebra mussels.

How long has boat been out of the water?



As previously noted the length of time a boat is out of the water can also indicate the risk of transfer of AIS. A question on the survey was asked to try and determine how great of a risk this presented. The scientific data all indicates it takes 21 days of drying for zebra mussels to become dead on a boat.

The surveys also gathered data on what lake the transient boats had last been launched into as a way of determining travel patterns and risk to the watershed. Included is a table to demonstrate travel patterns.

Incoming boats, lake last visited:

Prefers not to answer	644	Koronis	847	Rice	247	Green	41	Horseshoe Chain	37
Clearwater	33	Out of state	21	Mille Lacs	27	Long Lake	25	Minnetonka	24
Diamond	20	Big Lake	17	Sylvia	21	Osakis	13	Clear	19
Minnewaska	13	Leech Lake	15						

Green - lakes known to have Milfoil

Red - lakes known to have milfoil and Zebra mussels

When did boats typically arrive at the lakes in the Watershed?

Saturday was the busiest with about 50% of the boats arriving.

Sunday had about 25% of the boats arriving.

Thursday and Friday roughly had the same number of boats entering on each day or a total of 25% of the boats

Koronis Lake Association would like to **Thank** our partners in supporting our efforts to protect the watershed from Aquatic Invasive Species.
 Grant Funds and Contributions for 2013 Inspections :
 Koronis Lake Association \$ 15,080.00
 DNR grant \$7,750.00
 Paynesville Township \$6,000
 Meeker County \$3,500

NFCRWD \$ 2,993.00
 City of Paynesville: \$1,670.00
 Union Grove Township \$1,500
 Rice Lake Association \$500.00
 Grove Lake Association \$300.00
 NFCRWD In-kind Hours ~80hrs
AND a special THANKS to the NFCRWD for their willingness to sign the DNR Delegation Agreement and manage the inspection hours.

**This is a list of other lakes that were last visited before entry into the NFCRWD –
(many of these lakes are infested with Milfoil, Zebra mussels and/or other AIS)**

5th Crow Wing	Cedar	Grove Lake	Little Trout Lake	Pleasant (2)
Hubbard Cty	Collinwood (2)	Gull Lake	Long Lake	Prior Scott Cty
Allie	Coon Lake	Hoffman	Stevens Cty	Rainy River (2)
Andrew (2)	Crystal, Dakota	Howard Lake	Loon Lake	Red Cedar lake
Bass Lake	Cty	Ida	Madison	Wisconsin (2)
Bass, Cook Cty	Curry	Independence	Marie (2)	Red Wood
Beret Lake	Dean Lake	Iowa	Marion	Reno Lake Pope
Beebe (2)	Demontreville	John Lake	Martha (2)	Ripley (2)
Bell Lake	Dunn Lake	Knife Lake	Mazaska	Rue Richardson
Betsey	Meeker	Lake Andrew (2)	McCarron	Meeker Cty
Big Birch Lake	Eagle Lake (3)	Lake Ella	Miller	Lake Shetek
Big Elk Sherburne	Eden Lake (3)	Lake Erie	Miltona Lake	Spectacle Lake
Big Marine	Elizabeth	Lake Florida	Minnebelle (4)	Spunk Lake
Big Sauk	Erie	Lake Hanska	Mississippi River	Stella Meeker Cty
Big Stone	First Crow Wing	Lake John	(3)	Sugar (2)
Big Swan	Fish Lake (4)	Lake Marion	Mtn. Creek New	Swann
Birch Lake	Flint	Lake Martha	Ulm	Twin Lakes
Brainerd	Foot Lake	Lake Mary (3)	Mud Lake	Upper Red Lake
Bone Lake	Freeborn	Lake Michigan	Ness Kandiyohi	Upper Spunk
Wisconsin (2)	Games Lake (2)	Lake Maria	(2)	Valentine Blue
Boy Lake	Goose lardy	Lake of the	New Ulm Lake	Earth Cty
Briggs Chain	Grand (3)	Woods	O-Brien (2)	Vermilion
Sherburne County	Granite Lake	Lake Schnook	O'dowd	Waconia Carver
Browns Lake	Green lake Isanti	Lake Salmon	Omega	Watab (2)
Stearns (2)	Cty	Lake Superior	Osakis Douglas	West Norway
Buffalo Lake (2)	Green Leaf	Lake of the	County	(Kandiyohi)
Carnelian	Meeker (2)	Woods	Otter Tail River	Woman Lake
Carver	Grindstone Lake	Litchfield	Ottetail	
Cass	Pine Cty	Little Mad Lake	Pelican	