

2014 WATERCRAFT INSPECTION REPORT

CHISAGO LAKES LAKE IMPROVEMENT DISTRICT

Background

The Chisago Lakes Chain of Lakes watershed is one of the premier recreational destinations in the northeast metro area. The lakes in the area vary in many ways, but they all have one thing in common, they are all susceptible to aquatic invasive species (AIS). Curly-leaf pondweed, which was first found in Minnesota in 1910, is found in all of the lakes in the watershed. This plant has been a part of the aquatic landscape for so long that it often isn't recognized as an invasive species. The aquatic invasive plant Eurasian Water Milfoil has been in Green, Little Green and Ellen lakes since the 1980's. In 2010 it was found in the channel between North Center and North Lindstrom Lakes. Since then, it has been rapidly spreading throughout the remaining major lakes – North & South Center, North & South Lindstrom, and Chisago. Both of these invasive plants substantially impair navigation and crowd out desirable, native plants. Additionally, Curly-leaf Pondweed has a negative effect on water quality.

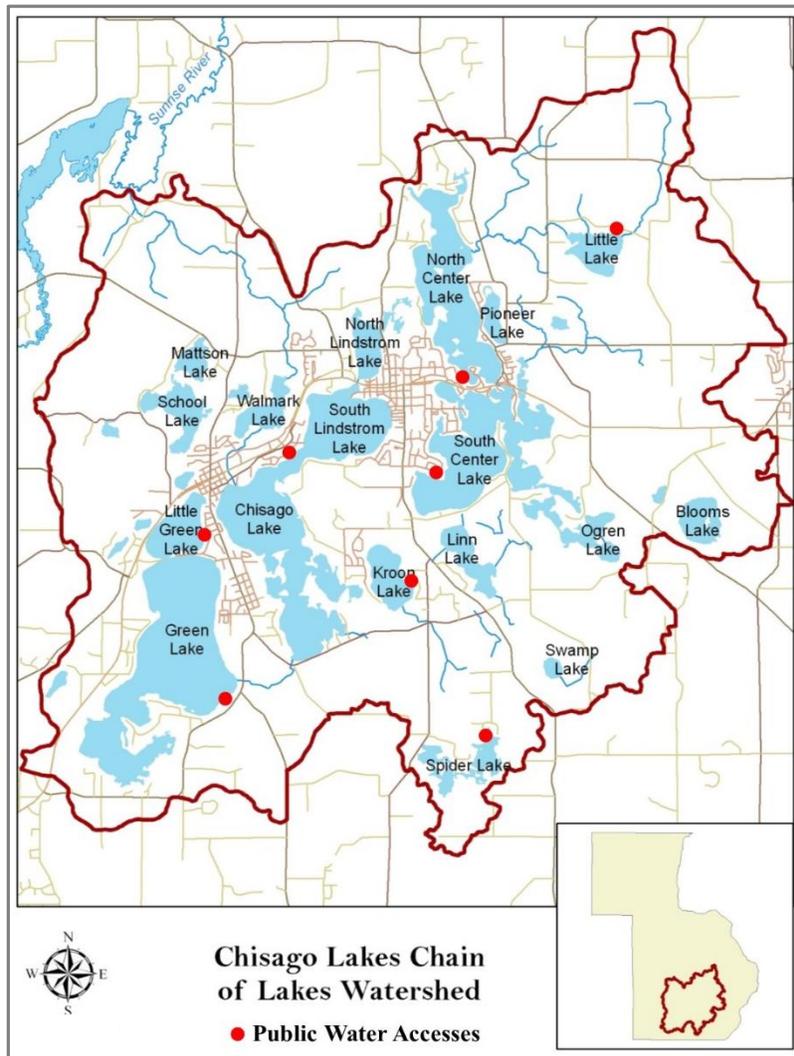
Movement of aquatic invasive species by boats is the number one way these harmful species spread from lake to lake. Fortunately other aquatic invasive species that are threatening other waters of the state, specifically Zebra Mussels, Flowering Rush, Spiny Water Flea, and Faucet Snails, are not known to be found in the Chisago Lakes Chain of Lakes watershed. The watercraft inspection program is essential in our efforts to keep these invaders out of the watershed.

To implement the watercraft inspection program in 2014, Chisago County entered into a Joint Powers Agreement with the Minnesota Department of Natural Resources for authority to conduct boat launch inspections. Additionally, a partnership was formed between the Chisago Lakes Lake Improvement District and the Comfort Lake Forest Lake Watershed District to inspect boats at public accesses in the two districts. A total of four Level 1 inspectors were hired by Chisago County to perform inspections. Two inspectors provided coverage to the Chisago Lakes Lake Improvement District and two inspectors were stationed in the Comfort Lake Forest Lake Watershed District. Once trained and authorized, Level 1 inspectors can inspect water-related equipment and prohibit the launching of equipment in waters of the state if the individual refuses to allow an inspection of their equipment or refuses to comply with AIS laws.

The primary objective of the watercraft inspection program is to inform and educate the public on the threats of ecologically harmful aquatic invasive species to the lakes in the Chisago Lakes Chain of Lakes. The watercraft inspector works at boat launches educating the public by providing information to watercraft users and conducting a brief survey while inspecting watercraft for aquatic invasive species.

There are nine lakes with public accesses within the Chisago Lakes Chain of Lakes watershed:

- Chisago
- Green
- Kroon
- Little
- Little Green
- North Center
- South Center
- South Lindstrom
- Spider



North and South Center Lakes each have separate boat launching areas and the lakes are connected by a channel. Chisago and South Lindstrom Lakes share a mutual boat launch and are connected by a channel (in this report they are grouped together). Green and Little Green Lakes have separate boat launches but are also connected by a channel.

Additionally, inspections took place at three additional lakes located in the Comfort Lake Forest Lake Watershed District: Bone Lake, Comfort Lake, and Forest Lake (3 accesses-West, Central, and East). Results from these lakes are not included in this report.

Watercraft inspections were conducted between May 5 and October 19, 2014. Inspections were rotated among the lakes with public accesses with priority given to accesses with higher boat traffic.

Summary

- 1754 watercraft were inspected. 1072 while entering boat launches. 682 while exiting boat launches.
- 24 watercraft arrived at the boat launch with vegetation attached to the boat or trailer. This vegetation was removed prior to launching into the lake. No watercraft entered waterways in the district with AIS or significant vegetation of any kind.

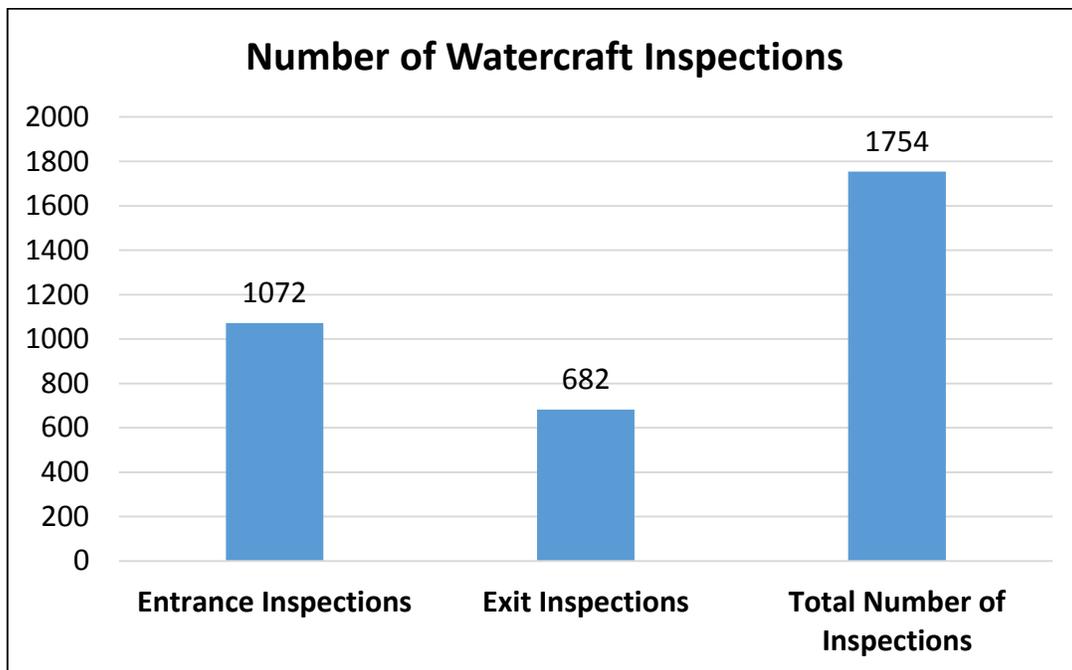
- 103 watercraft inspected were required to remove the bilge drainage plug prior to launching watercraft.
- Many of these boaters stated that they were unaware of the requirement while others claimed that removing the plug caused undue hardship as they would forget to replace it prior to launch.
- 130 watercraft exited a lake with vegetation attached to the boat or trailer. In all of these recorded instances the vegetation was removed before leaving the public access.
- No animal AIS were observed. Animal AIS include Zebra Mussels and Spiny Water Flea.
- All bilge plugs were removed prior to leaving boat launches.
- Many boaters consistently use the same public access each time they visit a lake.
 - When asked “what was the last water body visited?” responses were as follows:
 - 40% of boaters visited the same lake.
 - 12% of boaters visited a different lake within the Chisago Lakes watershed.
 - 39% of boaters visited a lake outside the Chisago Lakes watershed.
 - When asked “what lake are you planning to visit next?” responses were as follows:
 - 57% of boaters plan to visit the same lake.
 - 14% of boaters plan to visit a different lake within the Chisago Lakes watershed.
 - 21% of boaters plan to visit a lake outside the Chisago Lakes watershed.

2014 Totals

Number of Watercraft Inspections

Watercraft inspectors stationed at a public access inspect all incoming and exiting watercraft. At the time of the inspection they also ask the boaters a series of questions relating to their boating activities.

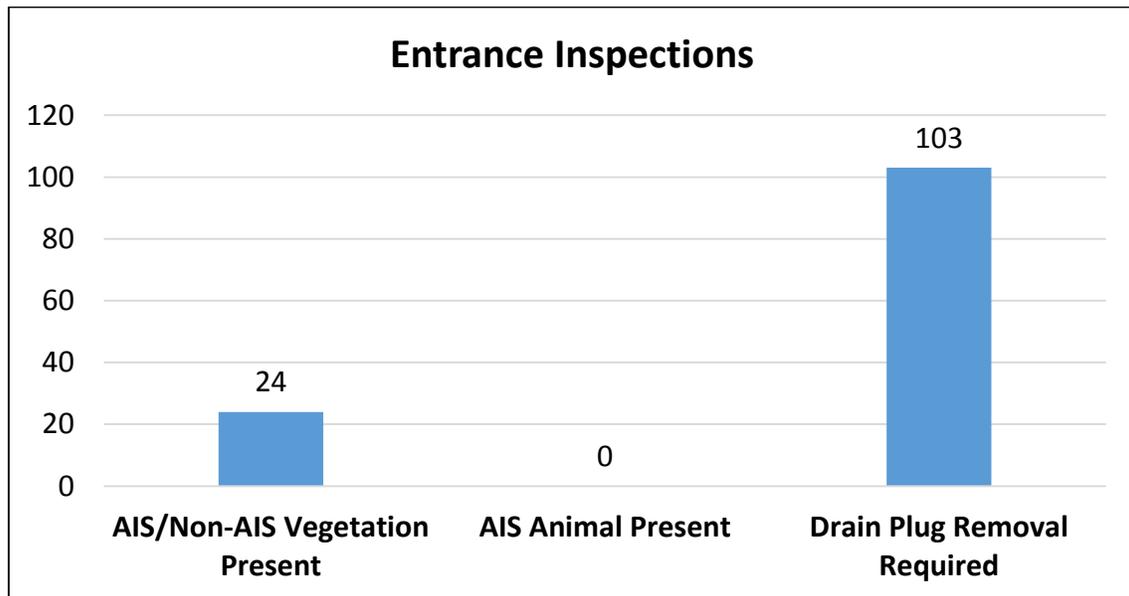
Lake Access Name	Entrance Inspections	Exit Inspections	Total Number of Inspections
Chisago-South Lindstrom	462	240	702
Green	278	197	475
Kroon	14	10	24
Little	3	9	12
Little Green	17	17	34
North Center	42	32	74
South Center	255	177	432
Spider	1	0	1
Total	1072	682	1754



Entrance Inspections

During the entrance inspection, watercraft inspectors help boaters check for aquatic plants and animals that may be attached to the watercraft. They also check to see if the drain plug is in or out of the boat. If the plug is in during the time of the inspection the inspector sends the watercraft away to remove the plug to drain the boat of any water at a location away from the lake.

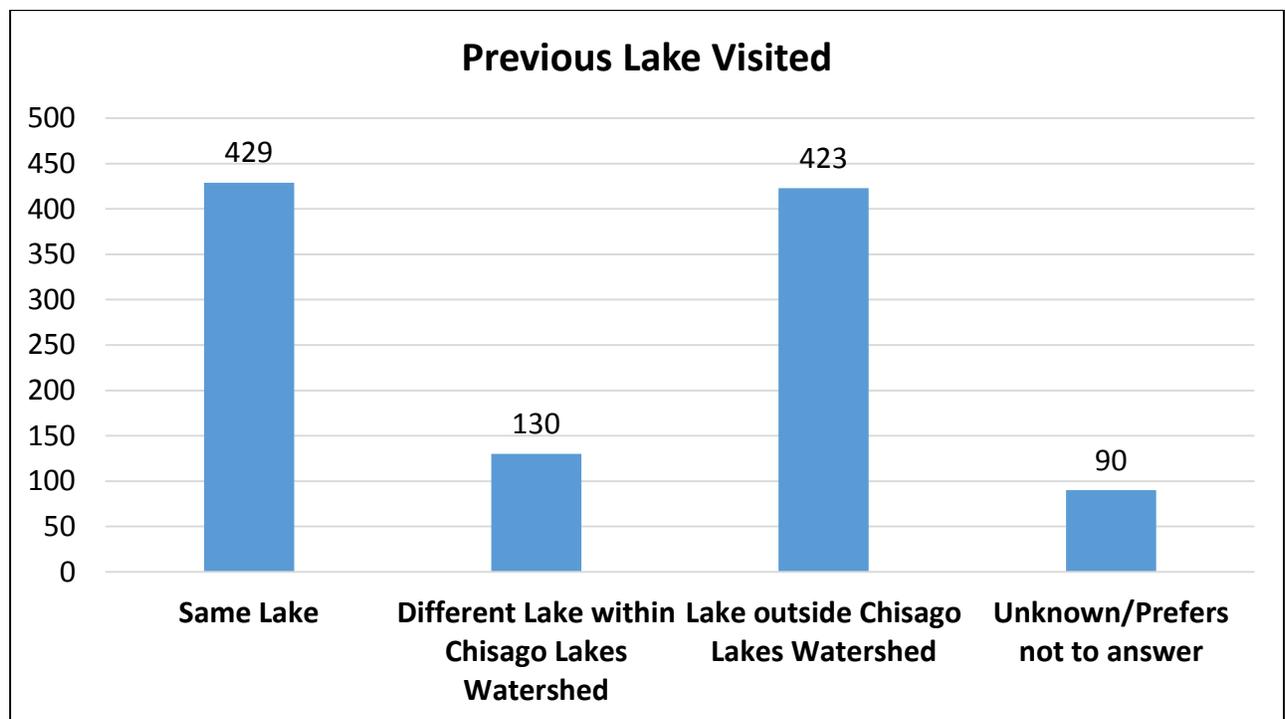
Lake Access Name	AIS/Non-AIS Vegetation Present	AIS Animal Present	Drain Plug Removal Required
Chisago-South Lindstrom	10	0	36
Green	5	0	27
Kroon	0	0	0
Little	0	0	0
Little Green	2	0	5
North Center	1	0	6
South Center	6	0	29
Spider	0	0	0
Total	24	0	103



Previous Lake

During the entrance inspection the inspector collects information in the form of a survey. The inspector is interested in knowing what body of water the boater had previously visited.

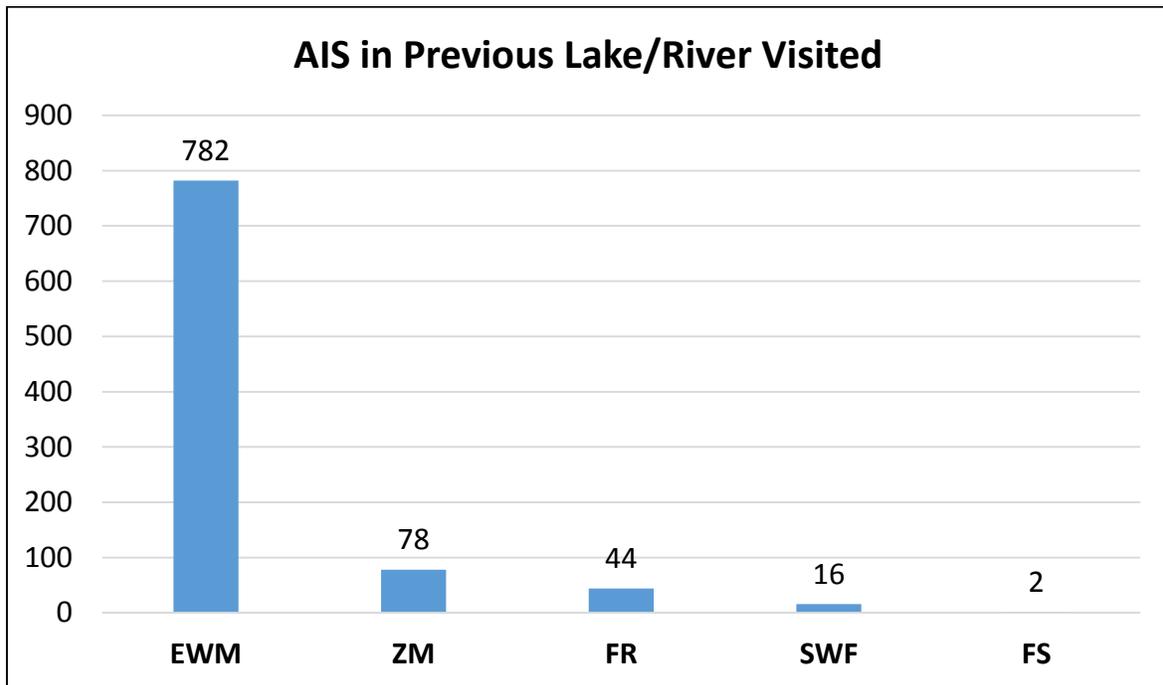
Lake Access Name	Same Lake	Different Lake within Chisago Lakes Watershed	Lake outside Chisago Lakes Watershed	Unknown/ Prefers not to answer
Chisago-South Lindstrom	226	40	163	33
Green	95	31	135	17
Kroon	6	3	4	1
Little	0	1	1	1
Little Green	0	12	2	3
North Center	11	5	21	5
South Center	91	37	97	30
Spider	0	1	0	0
Total	429	130	423	90
	40.0%	12.1%	39.5%	8.4%



AIS in Previous Lake Visited

Knowing what body of water a boat had previously been in gives a good indication of what aquatic invasive species are our biggest threat and how effective watercraft inspections are in preventing the spread.

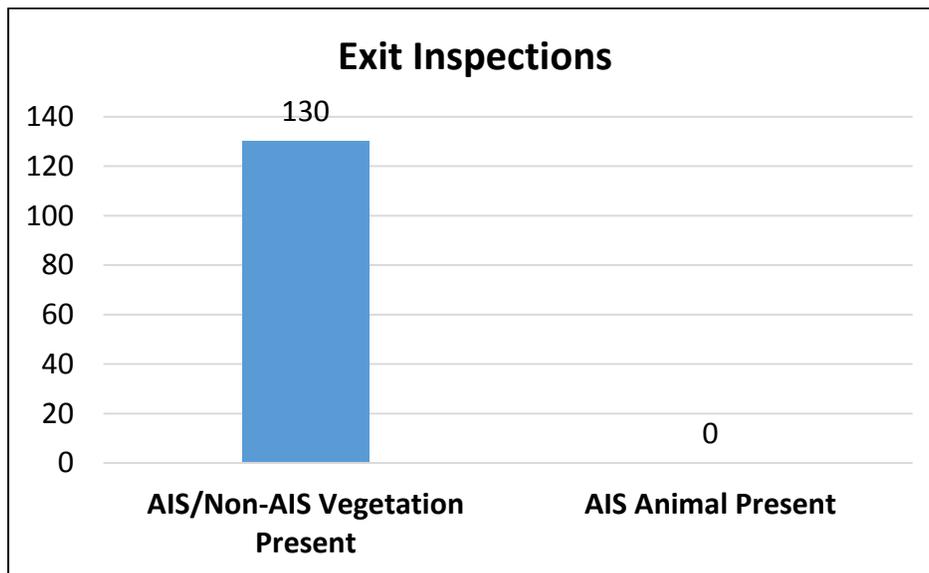
Species	Eurasian Water Milfoil (EWM)	Zebra Mussels (ZM)	Flowering Rush (FR)	Spiny Water Flea (SWF)	Faucet Snail (FS)
Total	782	78	44	16	2



Exit Inspections

While leaving a body of water an exit inspection is performed by the watercraft inspector. During this inspection the inspector may be having an encounter with a person(s) who went through an entrance exam earlier in the day. The inspector will help look for aquatic plants or animals that may be attached to the boat or trailer from the lake that they just left. If any material is found it is promptly removed and properly disposed of.

Lake Access Name	AIS/Non-AIS Vegetation Present	AIS Animal Present
Chisago-South Lindstrom	37	0
Green	42	0
Kroon	1	0
Little	1	0
Little Green	0	0
North Center	2	0
South Center	46	0
Spider	0	0
Total	130	0



Next Lake

Upon the exit inspection, the inspector performs another survey, with one question asking where the boater plans to go next.

Lake Access Name	Same Lake	Different Lake within Chisago Lakes Watershed	Lake outside Chisago Lakes Watershed	Unknown/ Prefers not to answer
Chisago-South Lindstrom	165	22	38	15
Green	94	24	58	21
Kroon	5	4	1	0
Little	2	5	0	2
Little Green	0	12	5	0
North Center	14	11	3	4
South Center	109	19	38	11
Spider	0	0	0	0
Total	389	97	143	53
	57.0%	14.2%	21.0%	7.8%

