

# 2012 Watercraft Inspection Summary for Christmas Lake



**MINNEHAHA CREEK**  
WATERSHED DISTRICT

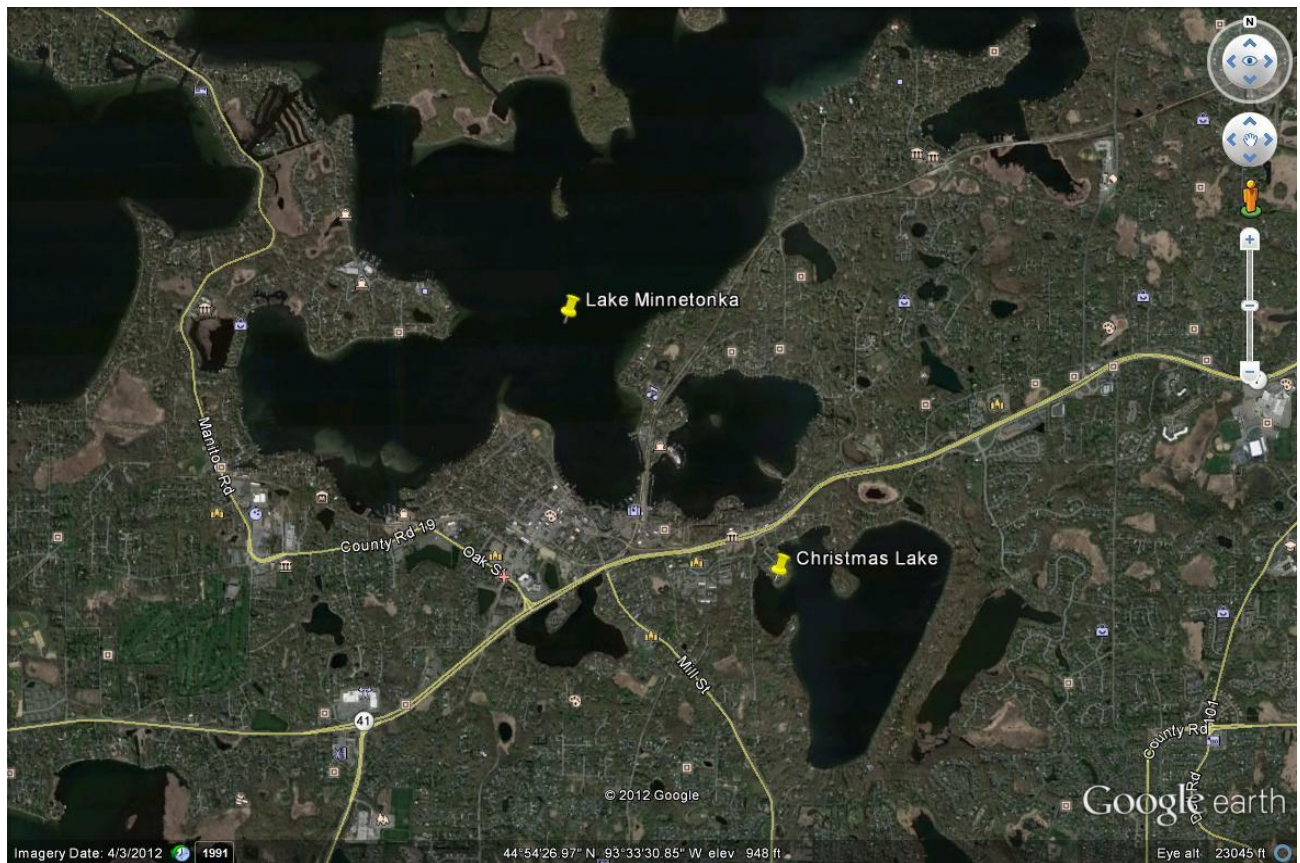
## **Background**

The Minnehaha Creek Watershed District (MCWD) is committed to taking an active role in preventing the spread of aquatic invasive species (AIS). One of the vectors of spread is by boats and trailers. In 2012, the Watershed District partnered with local governments to share in the costs of having DNR-trained watercraft inspectors at public boat launches within the District. The MCWD provided grants to the following to assist in their inspection programs: Lake Minnetonka Conservation District (Lake Minnetonka), Carver County (Lake Minnewashta), Minneapolis Parks and Rec Board (Minneapolis Chain of Lakes) and the City of Shorewood (Christmas Lake).

The inspections at Christmas Lake came about by a partnership between the District, the City of Shorewood and the Christmas Lake Association, with the District offering a \$10,000 grant to the City of Shorewood for the program. The City of Shorewood is responsible for the boat launch on Christmas Lake, which is at a city park open between 6am and 10pm. Shorewood provided the necessary AIS signage at the access and the necessary tools for the inspectors to perform their job. The MCWD also entered into a joint-powers agreement with the Minnesota Department of Natural Resources to have inspectors at Christmas Lake. The MCWD was responsible for managing the inspectors, and provided AIS-related materials for the inspectors to hand out to users of the boat launch. The MCWD contracted with Volt Workforce Solutions to staff this inspection program. Inspectors were MN DNR trained Level 1 inspectors having the authority to visually and tactilely inspect the exterior of boats, and may request assistance to see the anchor, livewell, etc. Level 1 inspectors were not authorized to perform decontamination, but they were allowed to deny launch and notify the local police if the situation arose.

## Christmas Lake

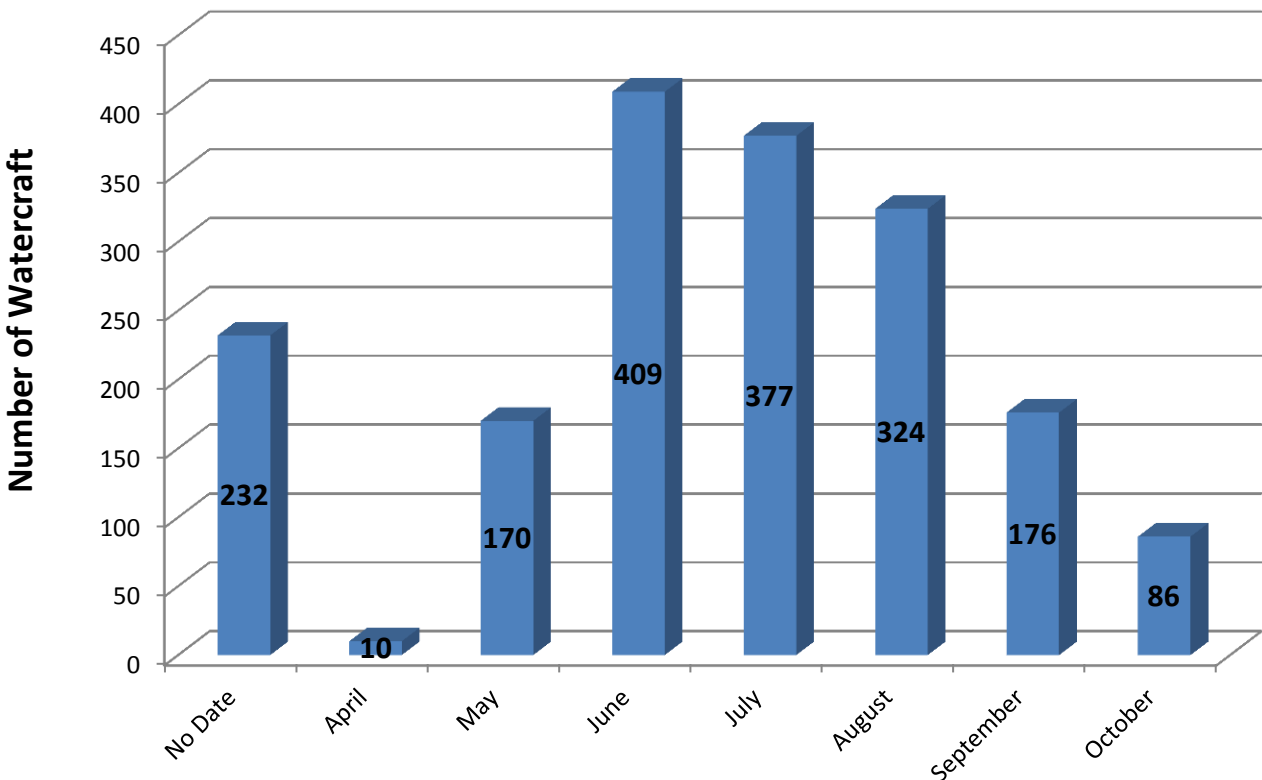
Christmas Lake is located in Shorewood and Chanhassen, MN and is in very close proximity to Lake Minnetonka, which has been infested with zebra mussels since 2010. Being close in proximity to Lake Minnetonka makes Christmas Lake a threat of being infested with zebra mussels. Christmas Lake is already infested with Eurasian Watermilfoil and Curlyleaf Pondweed, but there are many other aquatic invasive species that could infest the lake at any given time.



## Results

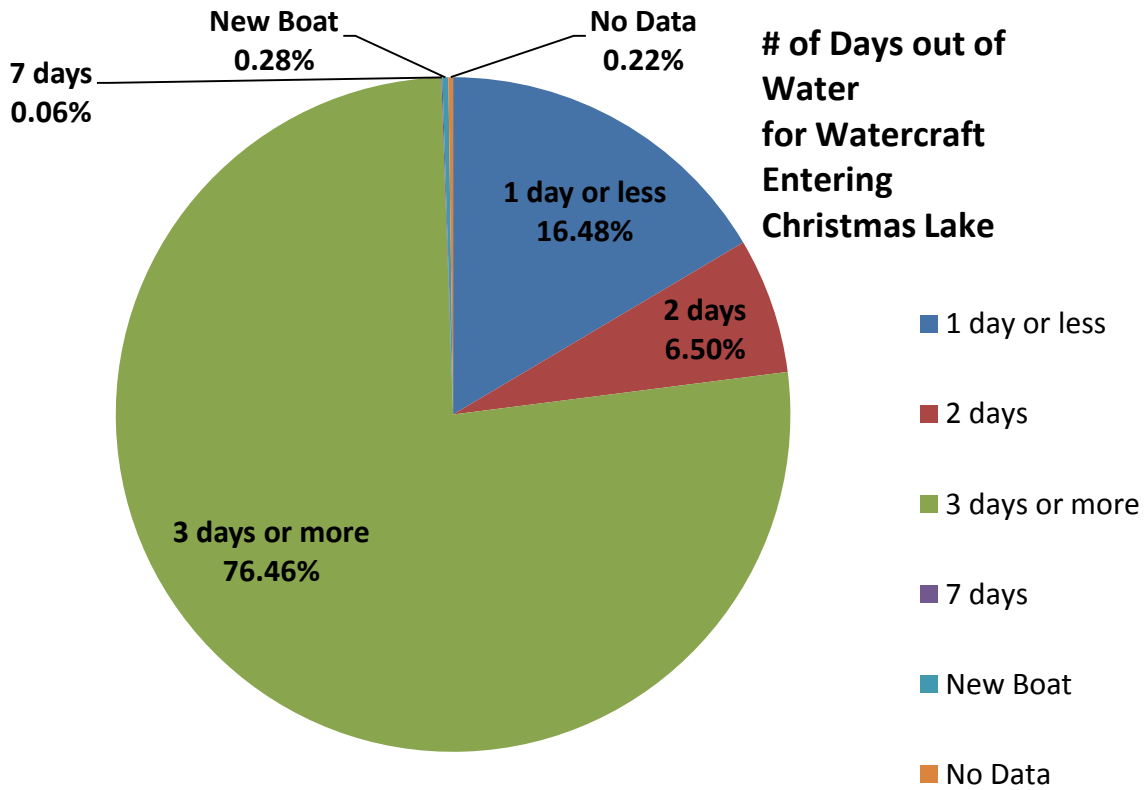
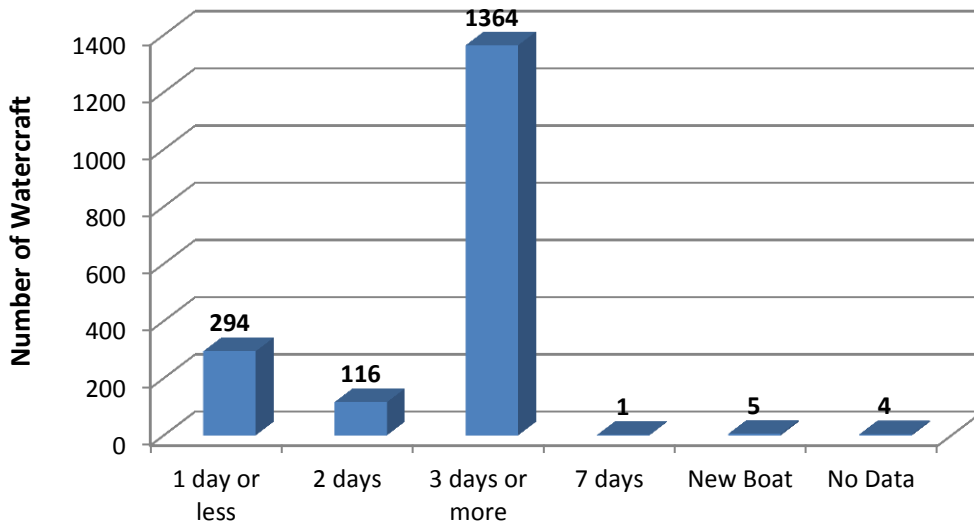
Inspectors worked a total of 2,764.1 hours spanning 194 days from April 21 – October 31. 3,506 inspections were recorded during this time period, with 1,784 coming from inbound inspections, 1,557 outbound inspections and 165 inspections not specifying inbound or outbound. This would average out to 1.27 inspections per hour and approximately 9 boats launching per day.

### Entering Watercraft broken down by month

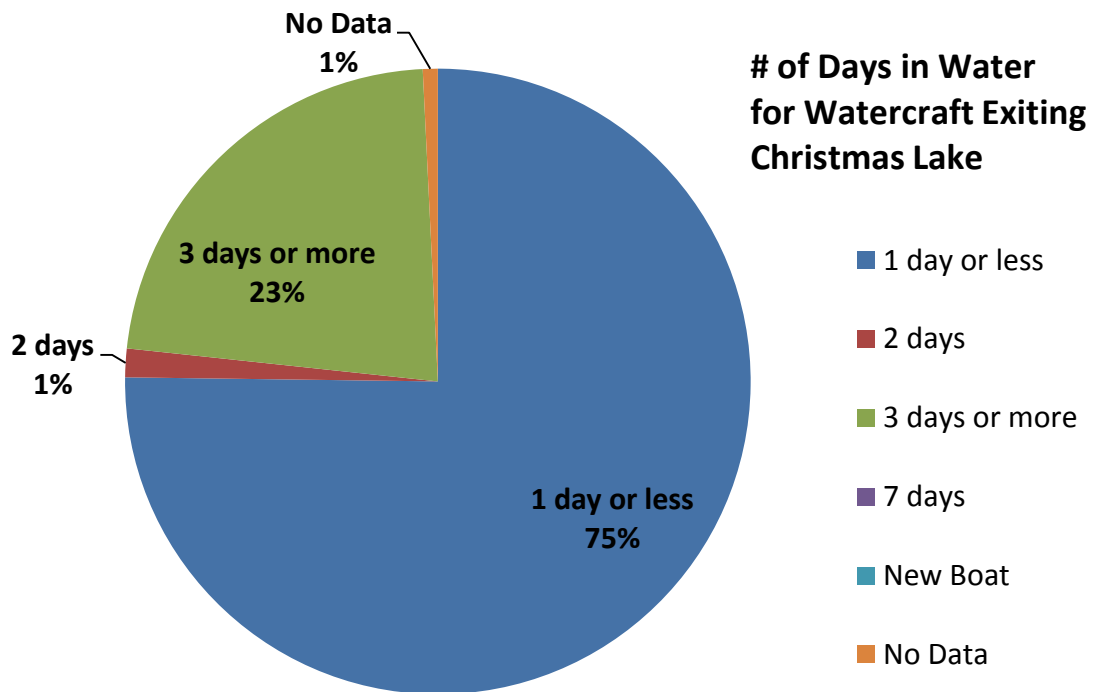
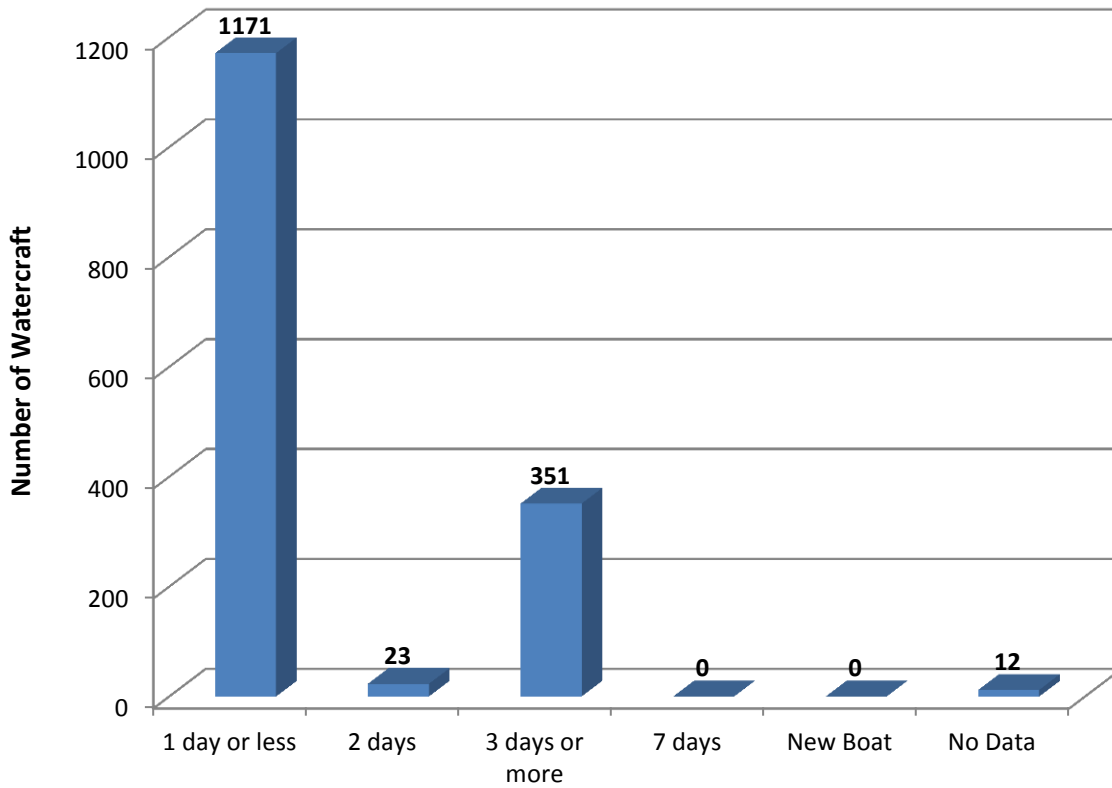


**Discussion:** There were 232 inspections with no date specified; these were mostly from paper surveys the inspectors used in April and May. Summer was the highest use time at the Christmas Lake boat launch, with spring and fall getting considerably less use.

## Number of Days Out of Water for Watercraft Entering Christmas Lake



## Number of Days in Water for Watercraft Exiting Christmas Lake



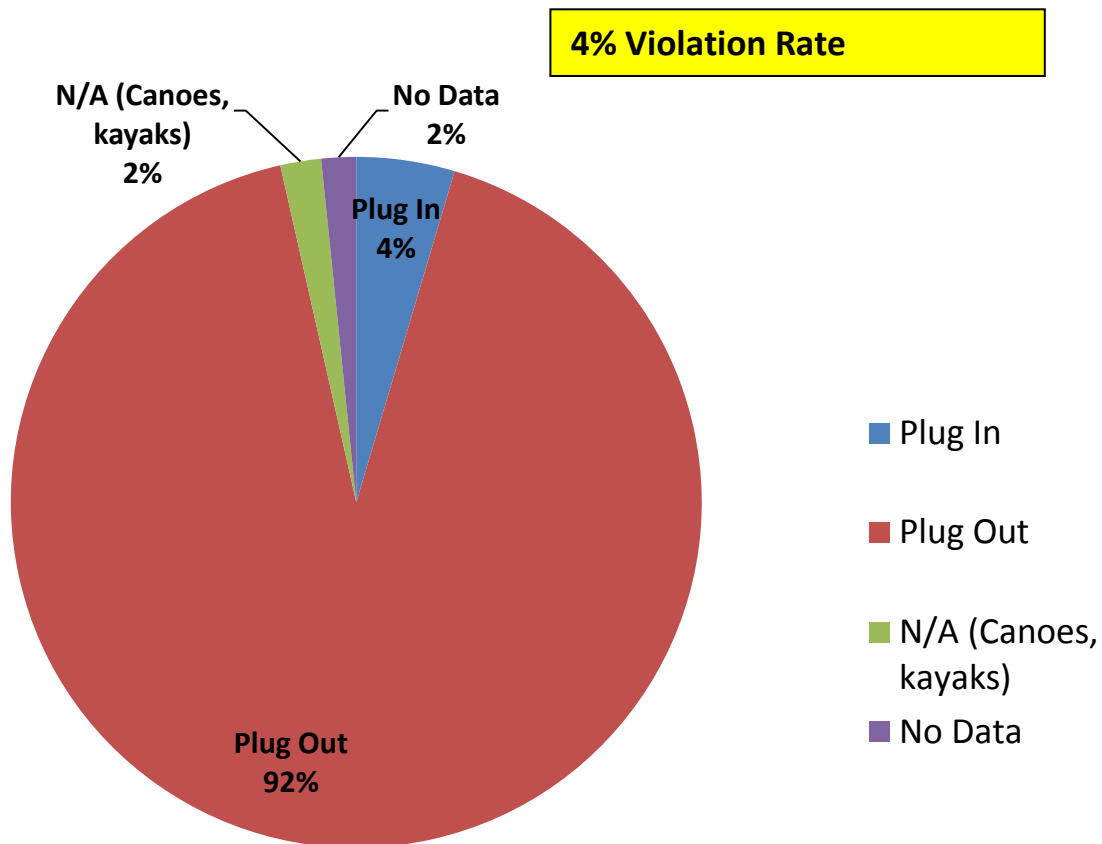
## Transportation of Water

As of May 28, 2011, the following regulations, apply to the transportation of water by boaters from all waters in the state (violations are misdemeanors):

- a person leaving waters of the state must drain water-related equipment holding water including bait containers, live wells and bilges by removing the drain plug before transporting the watercraft and associated equipment from a water access or riparian property; and
- drain plugs, bailers, valves, or other devices used to control the draining of water from ballast tanks, bilges, and live wells must be removed or opened while transporting watercraft and water-related equipment (marine sanitary systems and portable bait containers used by aquatic farms are exempt from this requirement).

### Was the drain plug in or out on arrival?

#### Seasonal Data

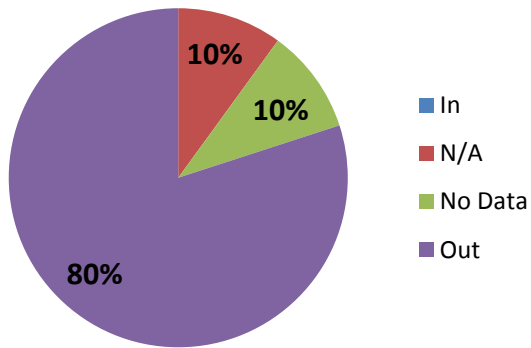


**Discussion:** Only 4% of boats entering Christmas Lake in 2012 had their drain plugs in, there were another 2% that did not have drain plugs such as canoes and kayaks, and 2% of inspections did not have data regarding if the drain plug was in or out on arrival.

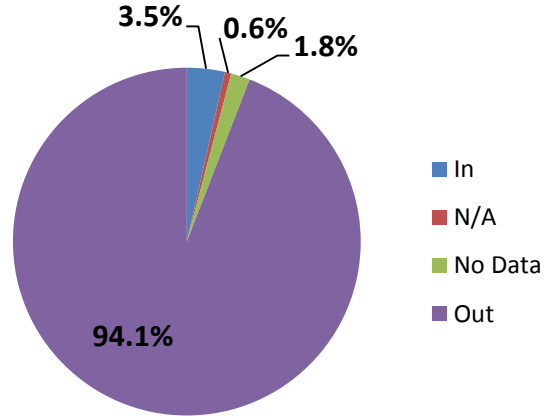
**Was the drain plug in or out on arrival?**  
**Monthly Data**

**April** 0% Violation Rate

10 Entering Boats

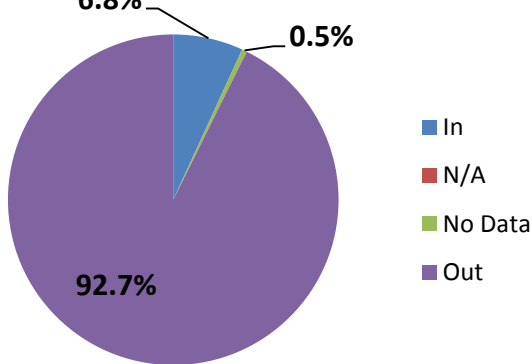


**May** 3.5% Violation Rate  
 170 Entering Boats



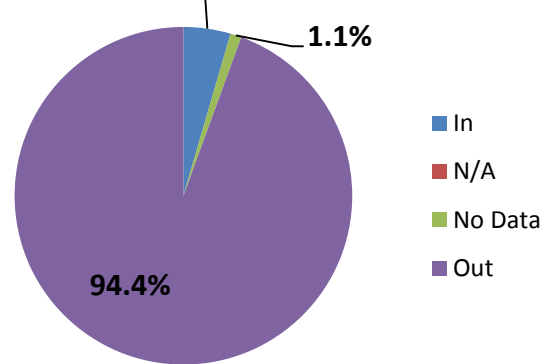
**June** 6.8% Violation Rate

409 Entering Boats



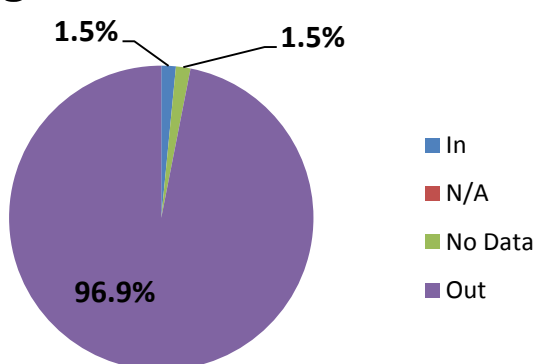
**July** 4.5% Violation Rate

377 Entering Boats



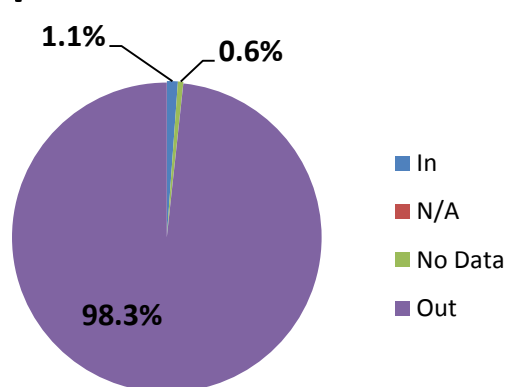
**August** 1.5% Violation Rate

324 Entering Boats



**September** 1.1% Violation Rate

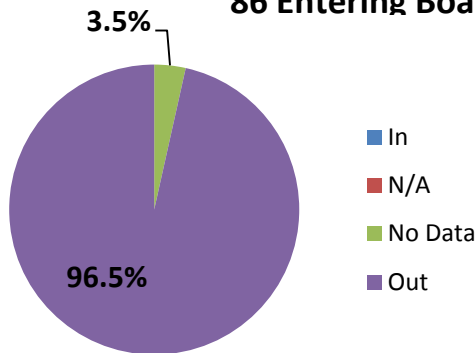
176 Entering Boats





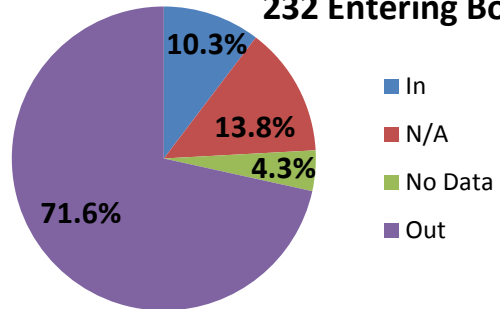
**Was the drain plug in or out on arrival?  
Monthly Data Continued.....**

**October**      **0% Violation Rate**  
**86 Entering Boats**



**No Date Specified**

**10.3% Violation Rate**  
**232 Entering Boats**



**Discussion:** Compliance with the drain plug law definitely correlated with the busier months, the month of June showed the highest number of users, and the violation rate was also higher with 6.8% of boats entering still having their drain plugs in. Compliance with the drain plug law was very good from August to October, going from 1.5% of boats with their plugs in during August, to 1.1% in September, to 0% in October. This would suggest that education is working and the inspections are having an impact on boater behavior at Christmas Lake.

## Transportation of Plants and Animals

Current state law prohibits transportation of **all** aquatic plants (with a few exceptions). This law will not only help prevent the spread of Eurasian watermilfoil, but it will also reduce the risk of zebra mussels being transported while attached to aquatic plants. And it will reduce the inadvertent transport of other harmful plants into or within the state.

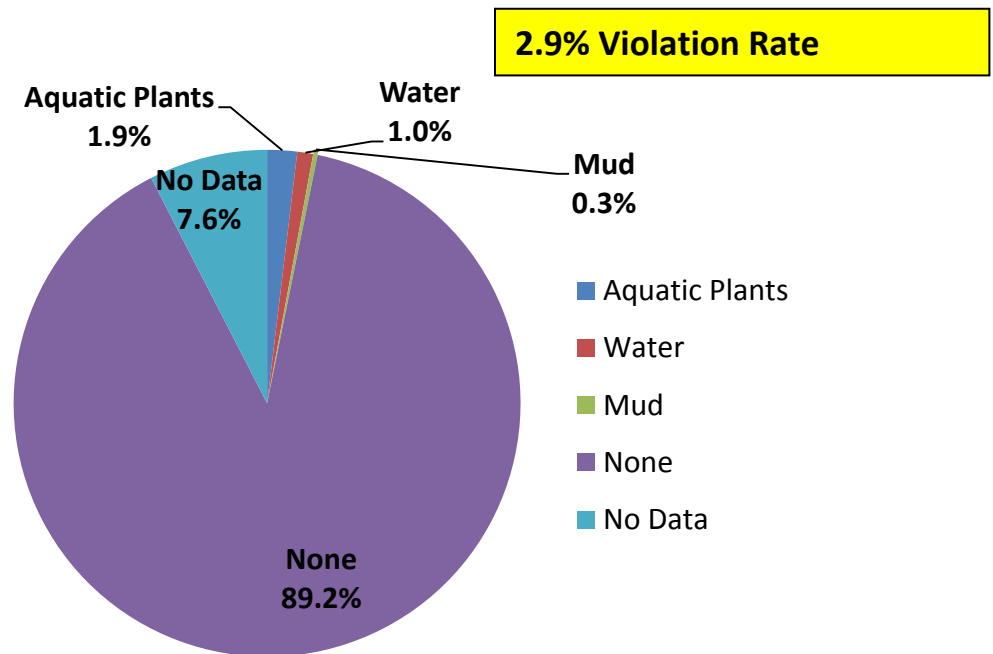
Under state law, it is unlawful to:

- transport aquatic plants (see: [except as allowed in statute](#)), except as allowed in statute (\$50 civil penalty or misdemeanor);
- transport zebra mussels and other **prohibited** species of animals on a public road (\$250 civil penalty or misdemeanor)
- place or attempt to place into waters of the state a boat, seaplane, or trailer that has aquatic plants (\$100 civil penalty), zebra mussels, or other **prohibited** invasive species attached (\$500 civil penalty or misdemeanor).

As of July 1, 2012, a boat lift, dock, swim raft, or associated equipment that has been removed from any water body may not be placed in another water body until a minimum of 21 days have passed.

## What was found on watercraft entering Christmas Lake?

### Seasonal Data



**Discussion:** Only 1.9% of watercraft entering Christmas Lake in 2012 had some type of Aquatic Plants attached, and 1% had standing water. The inspections also kept track of mud which could carry various AIS, and only 0.3% of boats were found with this. Having mud alone on a boat is not in violation of the law, but it is good practice to keep a clean boat to limit the risk of harboring invasive species.

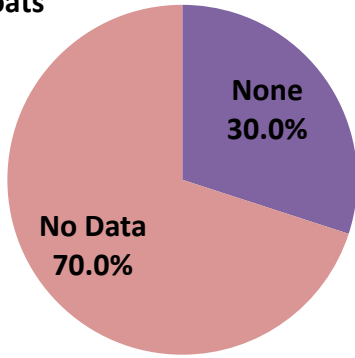
# What was found on watercraft entering Christmas Lake?

## Monthly Data

**0% Violation Rate**

### April

10 Entering Boats

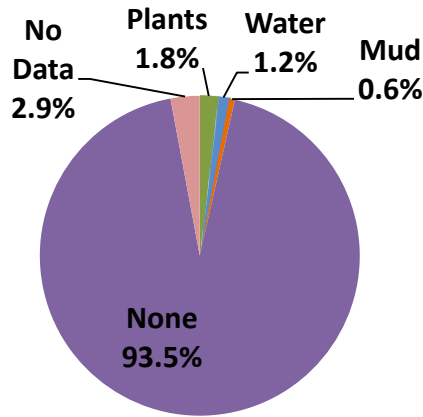


- Plants
- Water
- Mud
- None
- No Data

**3% Violation Rate**

### May

170 Entering Boats

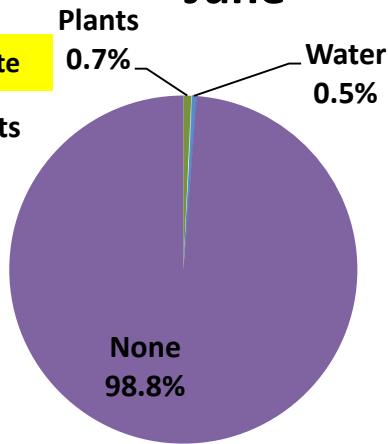


- Plants
- Water
- Mud
- None
- No Data

**1.2% Violation Rate**

### June

409 Entering Boats

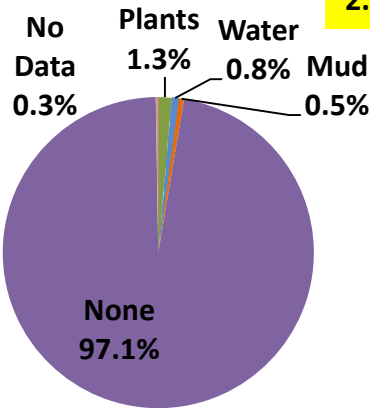


- Plants
- Water
- Mud
- None
- No Data

**2.1% Violation Rate**

### July

377 Entering Boats

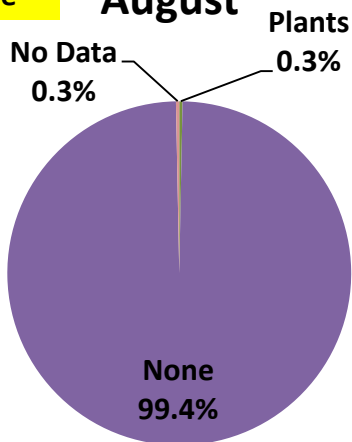


- Plants
- Water
- Mud
- None
- No Data

**0.3% Violation Rate**

### August

324 Entering Boats

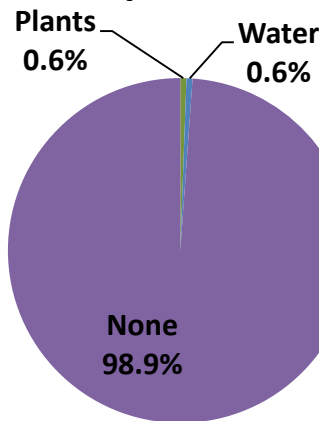


- Plants
- Water
- Mud
- None
- No Data

**1.2% Violation**

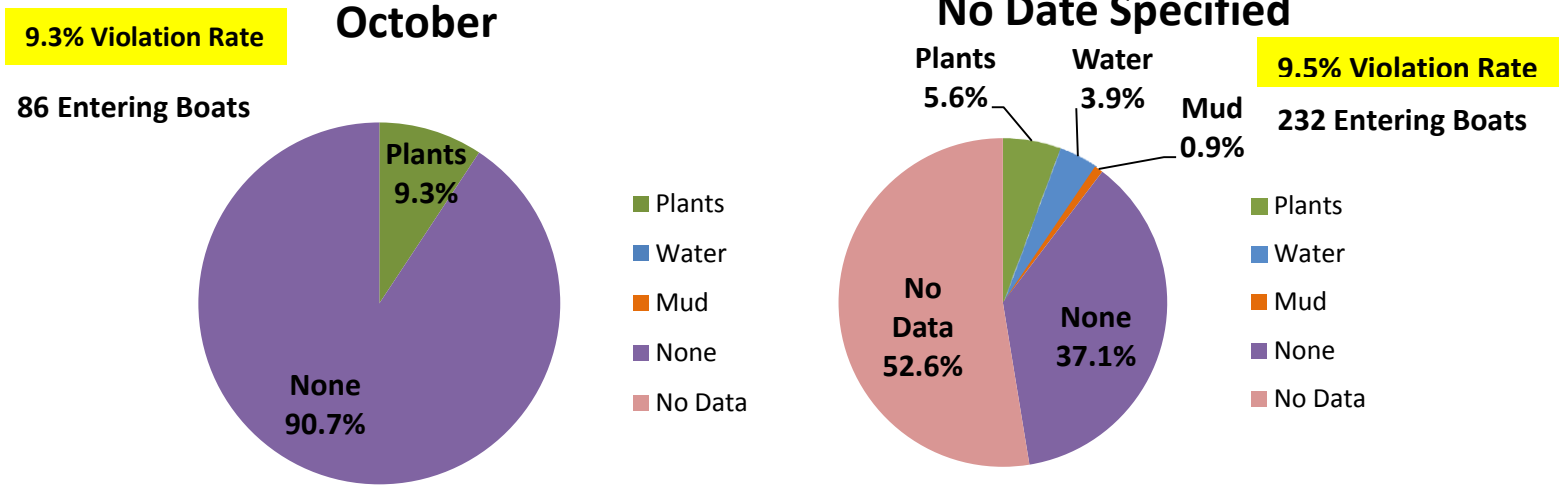
### September

176 Entering Boats



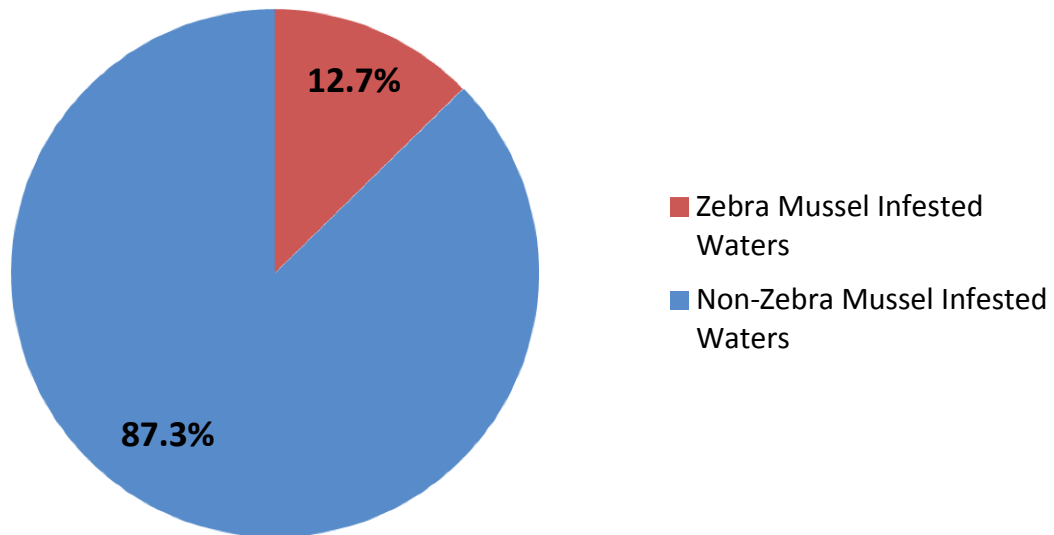
- Plants
- Water
- Mud
- None
- No Data

**What was found on watercraft entering Christmas Lake?  
Monthly Data Continued.....**

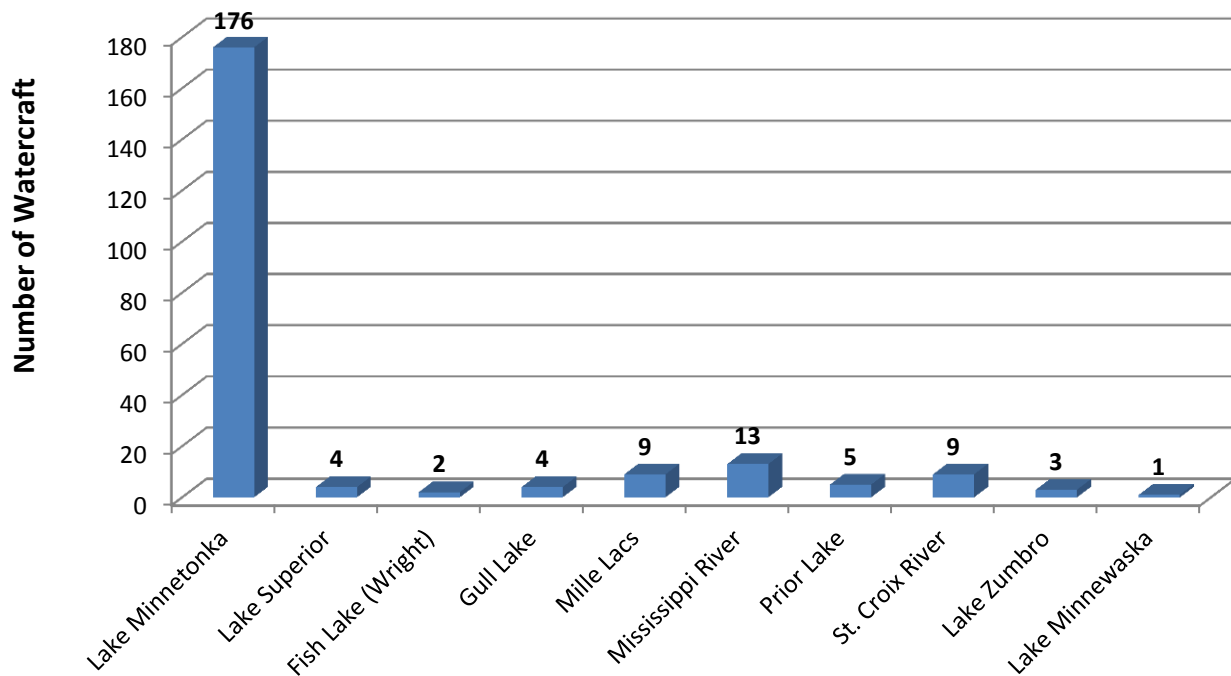


**Discussion:** Overall, there seemed to be very good compliance with not transporting aquatic plants or water, however in October 9.3% of entering boats had aquatic plants attached. Most of the season saw violation rates between 0% and 3%, with August and September at 0.3% and 1.2% respectively.

## Watercraft Entering Christmas Lake Coming From Zebra Mussel Infested Waters

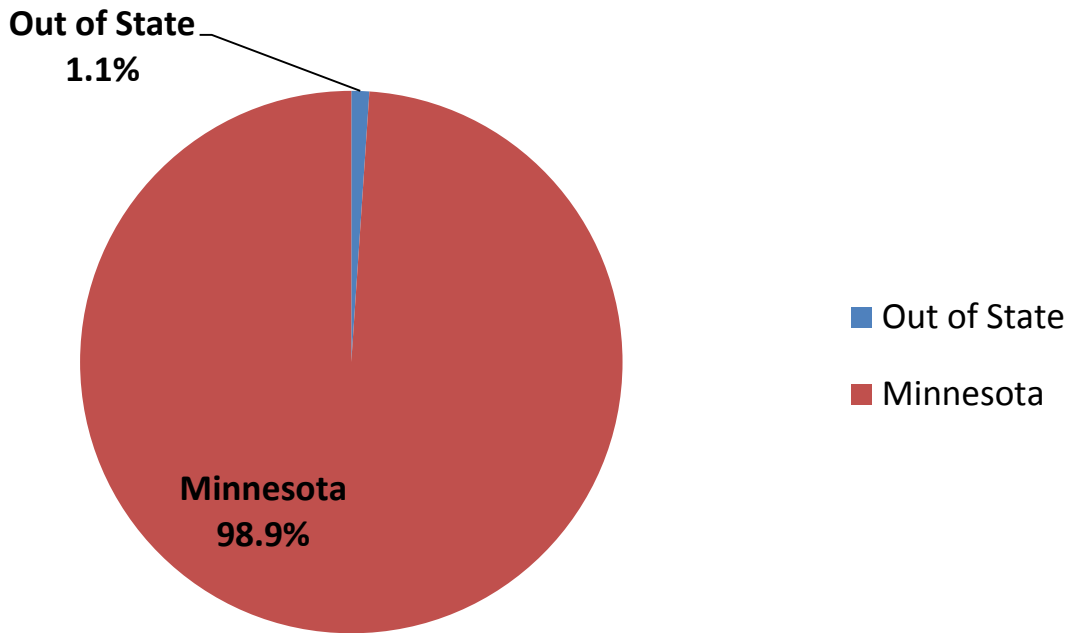


## Watercraft From Zebra Mussel Infested Waters Entering Christmas Lake

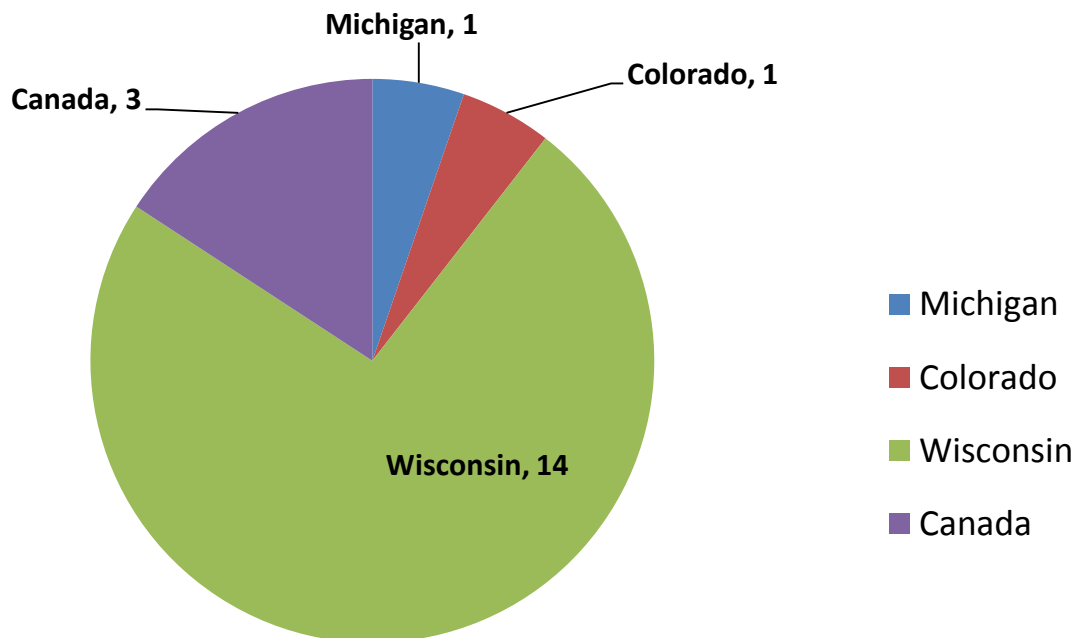


**Discussion:** 12.7% of boats entering Christmas Lake in 2012 came from Zebra Mussel infested waters, with almost 78% of those coming from Lake Minnetonka

## Out of State Watercraft Entering Christmas Lake

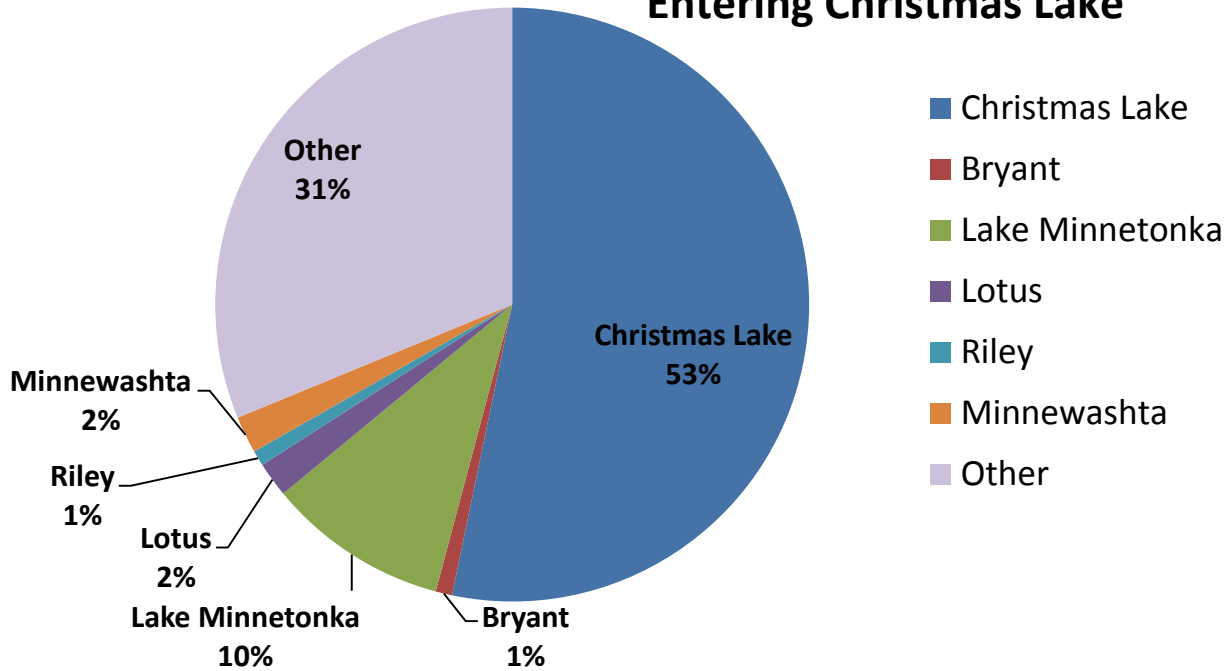


## Out of State Watercraft Entering Christmas Lake

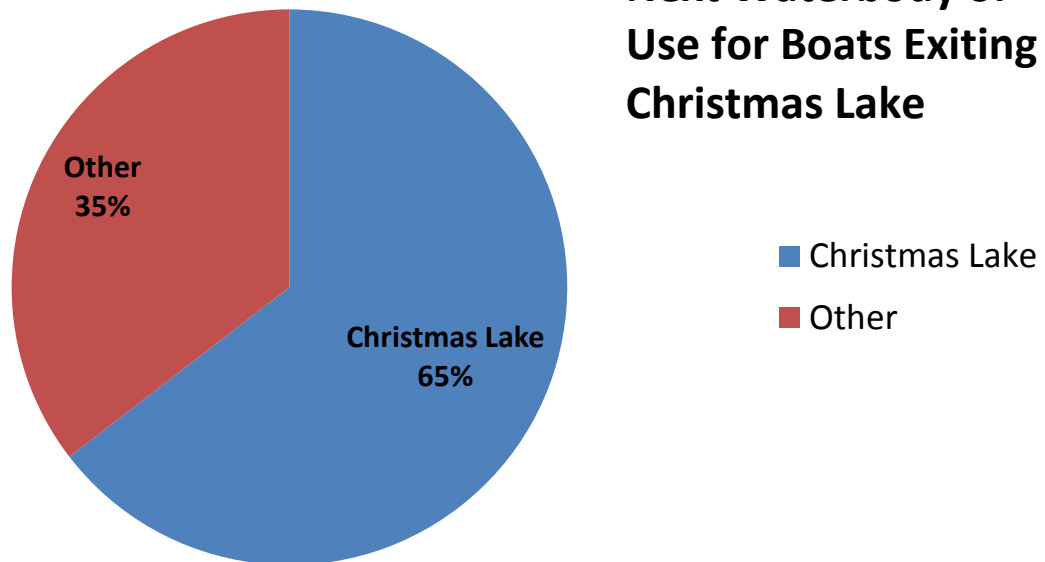


**Discussion:** 1.1% of boats entering Christmas Lake come from a state other than Minnesota, with almost 74% of those coming from Wisconsin.

## Previous Waterbody of Boats Entering Christmas Lake

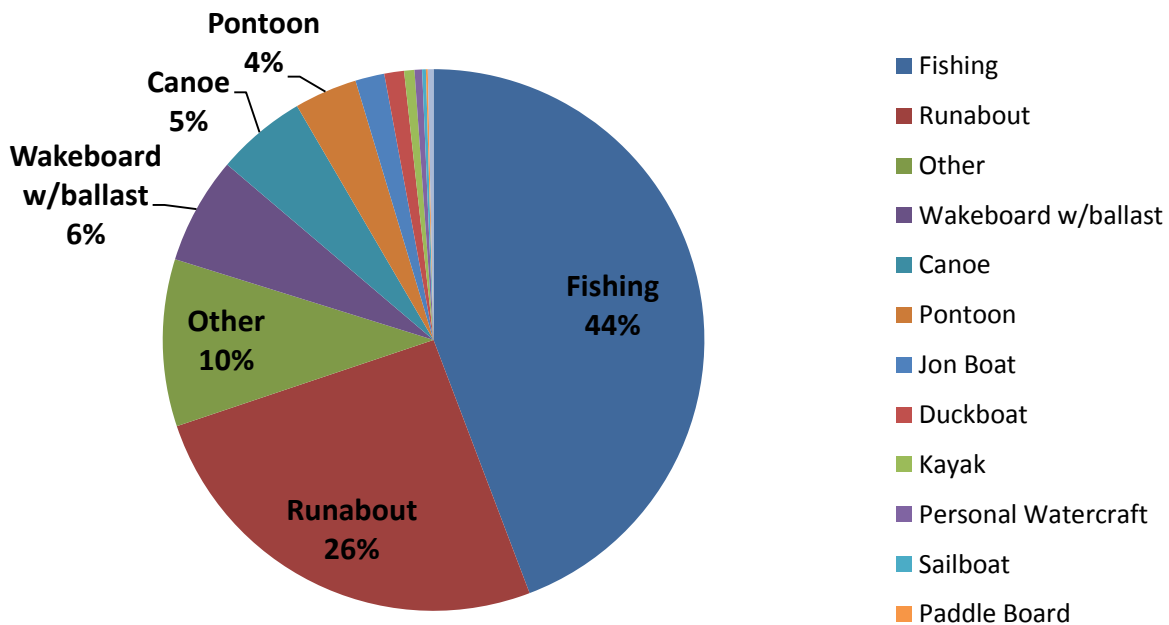
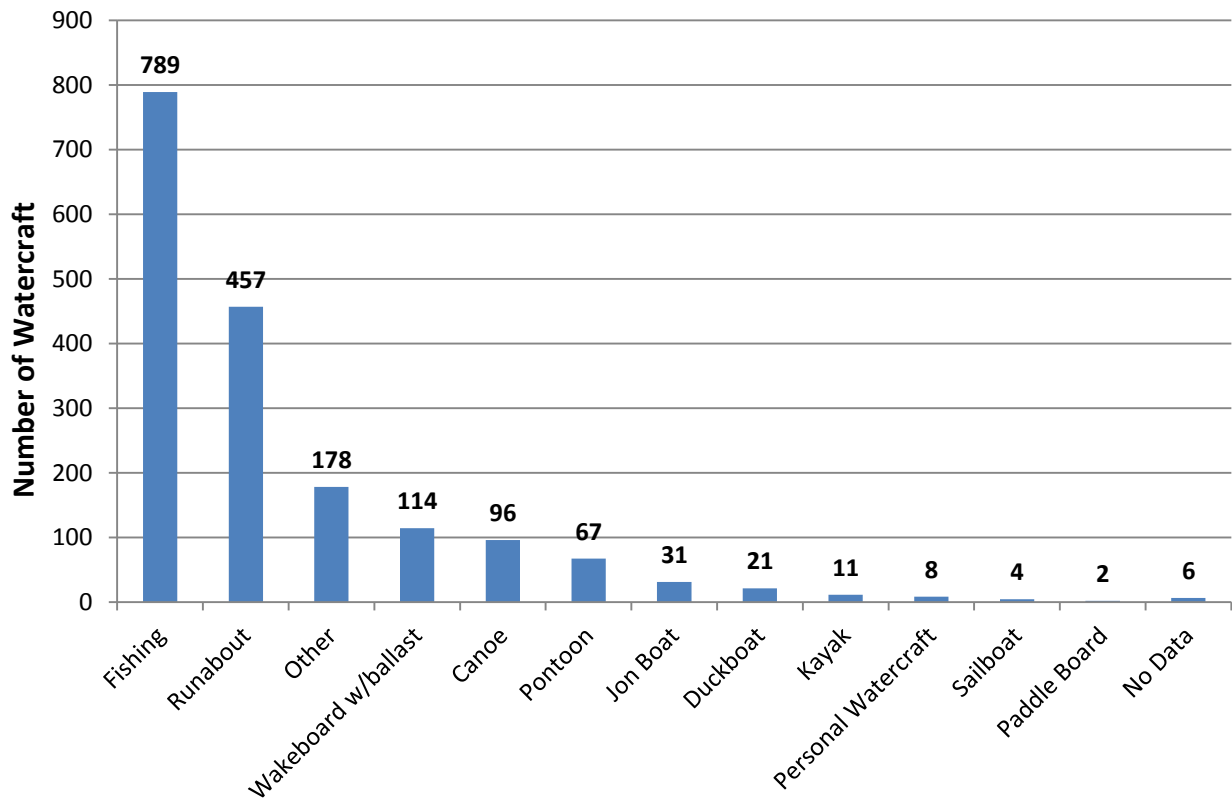


## Next Waterbody of Use for Boats Exiting Christmas Lake



**Discussion:** Over half of the users of Christmas Lake appear to be frequent visitors to the lake, 53% of boaters entering Christmas Lake last used Christmas Lake, and 65% of boaters exiting Christmas Lake plan to use it again. Lake Minnetonka appears to be the next most highly used lake for users who launch at Christmas Lake, making up 10% of entering boats.

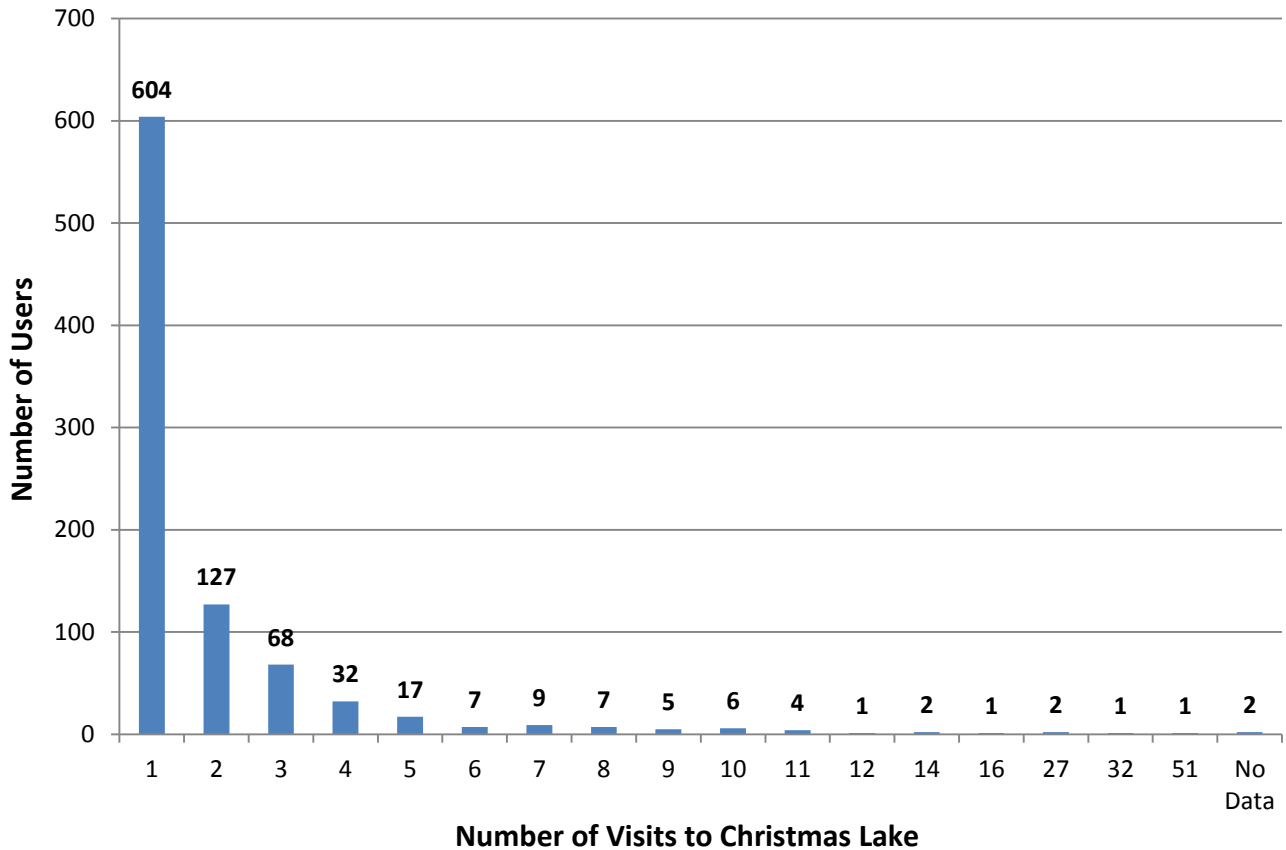
# Christmas Lake Watercraft Types



**Discussion:** There are many types of watercraft entering Christmas Lake, but the large majority appears to be Fishing Boats, making up 44% of all entering boats. Runabouts also make up a larger population, making up 26% of entering boats.

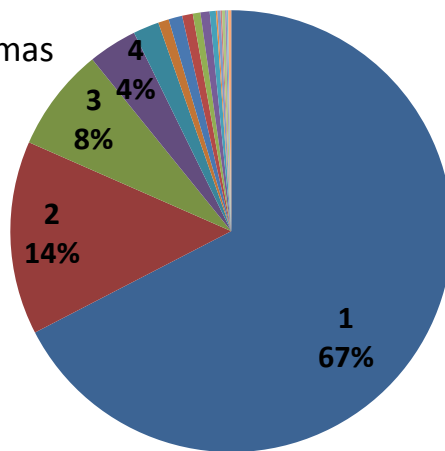


## User Frequency of Christmas Lake



### Frequent Users of Christmas Lake

– the number of times an individual user enters Christmas Lake

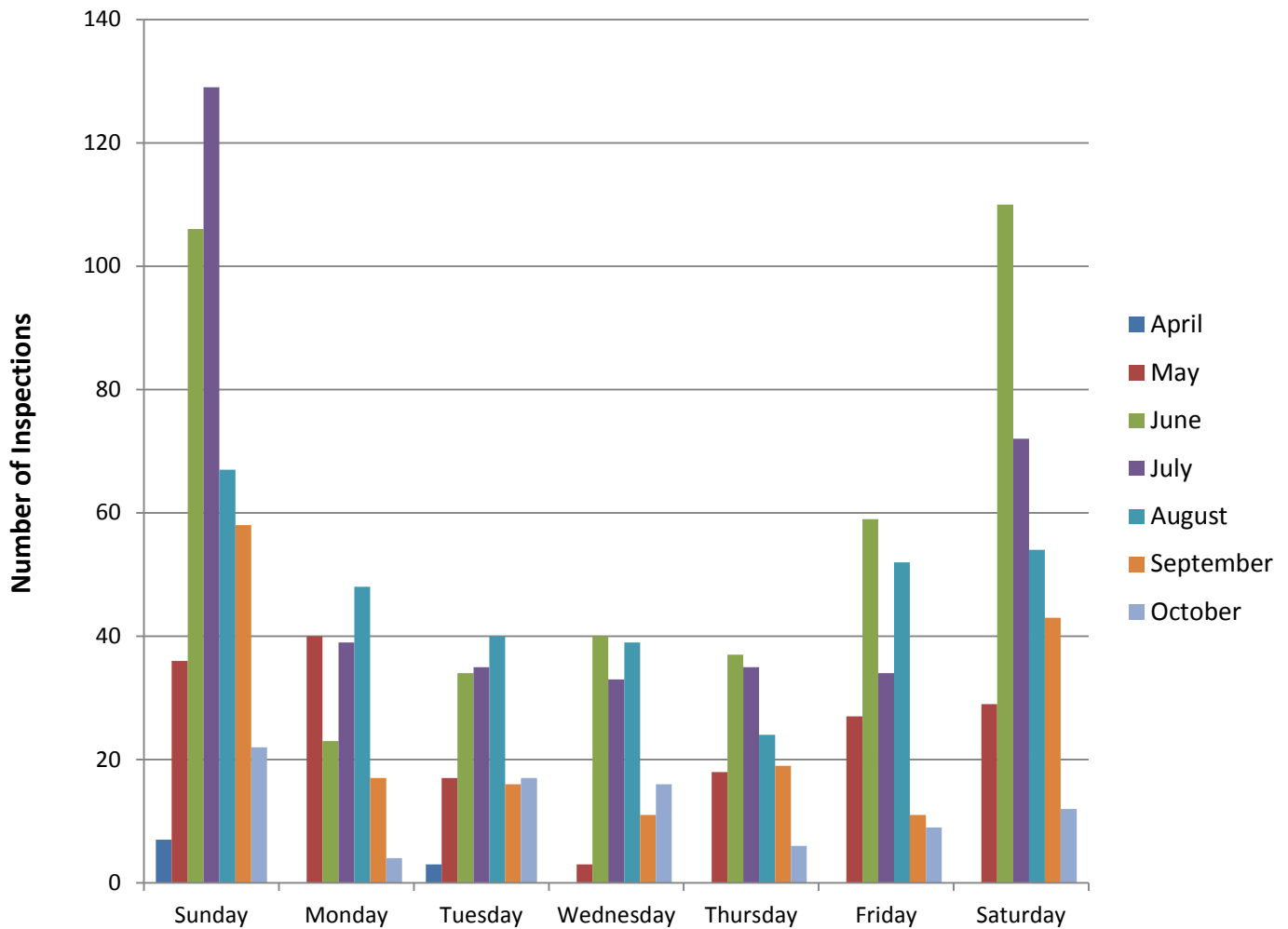


### Number of Visits to Christmas Lake

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

**Discussion:** 67% of vehicles entering Christmas Lake are only using the lake once, followed by 14% using it twice, 8% using it 3 times, and 4% using it four times. There are also a few very high users of the lake, with 2 people using the lake 27 times, 1 person using it 32 times, and 1 person using the Christmas Lake boat launch 51 times.

## Inbound Inspections by Day and Month for Christmas Lake



**Discussion:** Looking at weekday usage throughout the year, during the spring and fall, weekends are by far the busiest time for the Christmas Lake boat launch. During the summer months of June, July and August, weekends are still the highest use time; however there was consistent use during the week during these months as well.

## Holiday/Fishing Opener Usage

| <u>Holiday/Event</u>                                  | <u>Number of Inbound Inspections</u> |
|---|--------------------------------------|
| Walleye/Pike Opener – May 12 <sup>th</sup> (Saturday) | 12                                   |
| Bass Opener – May 26 <sup>th</sup> (Saturday)         | 19                                   |
| Memorial Day – May 28 <sup>th</sup> (Monday)          | 52                                   |
| July 4 <sup>th</sup> – (Wednesday)                    | 24                                   |
| Labor Day – September 3 <sup>rd</sup> (Monday)        | 32                                   |

**Discussion:** Memorial Day and Labor Day appear to be high use times for the Christmas Lake boat launch, with other holidays such as July 4<sup>th</sup> and fishing openers also getting some high use.