

Wright County Aquatic Invasive Species Inspections Report 2022

Report Prepared by:

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Wright Soil and Water Conservation District

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Wright County Inspection Team for 2022



Budget

The Wright County Inspection Program is funded through the state Local AIS Aid Fund and contributions from individual lake associations. Lake associations pay for inspections on accesses for their respective lakes as well as a proportional amount to training and coaching. The remaining funds are from the state fund.

Table 1. Inspection program spending by category

Category	Cost
Contractor Admin	\$ 2,000.00
Coach	\$ 7,792.11
Training	\$ 5,061.98
Lake Association Funded Inspections	\$ 83,721.00
State Funded Inspections	\$ 95,715.50
Decon Labor	\$25,597.00
Other Agency Inspections	\$ 3,000.00
Capital/Equipment	\$ 686.71
Consumables/Maintenance	\$1,546.30
Utilities	\$ 1,123.86
Total	\$228,994.46

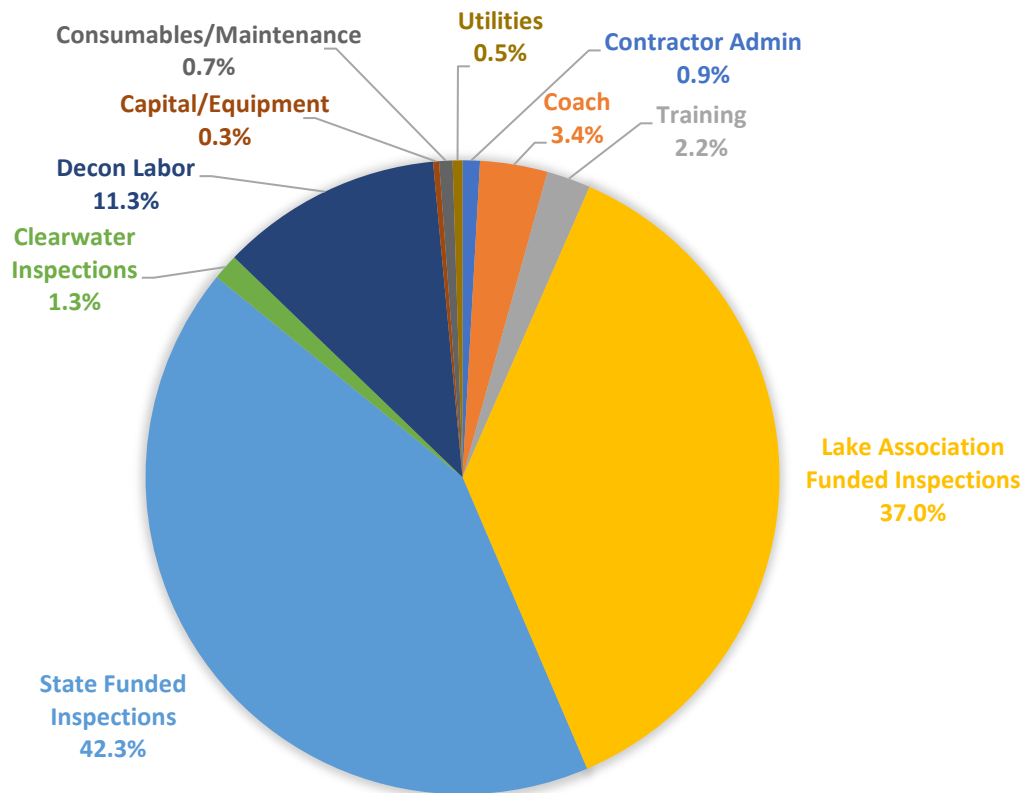


Figure 1. Inspection program spending by category in 2022

Introduction

There were two major changes to the AIS inspection program in 2022. First, we concentrated the majority of state-funded inspector time (85%) to only 11 accesses. At the same time the remaining 15% of state funded hours was spent on 34 other accesses (Figure 2). In comparison, during the 2021 the hours were even distributed between 25 accesses. The goal was to visit as many accesses that allow motorized traffic as possible but to concentrate the majority of hours on accesses of lakes with known invasive species. The second change was shift times. In previous years, shifts almost exclusively took place between 8am and 6pm. In 2022, Wright SWCD required the 15% of shifts to take place before 8am or after 5pm. Lake associations also contributed funds for inspections at particular accesses (Table 2)

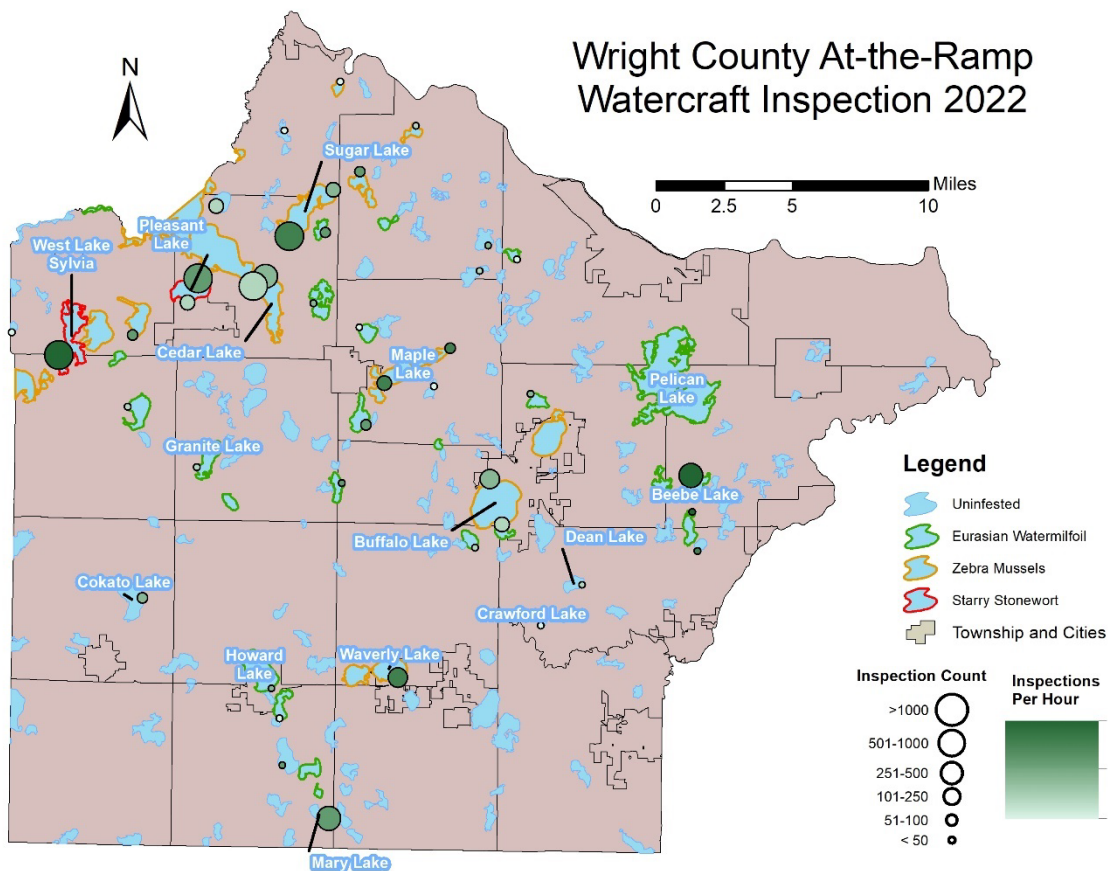


Figure 2. Locations of inspections by Wright SWCD in 2022. A large circle indicates more inspections were done; a darker circle indicates a higher number of inspections per hour. All lakes that have starry stonewort also have zebra mussels and Eurasian watermilfoil, all lakes that have zebra mussels also have Eurasian watermilfoil except Limestone Lake.

Table 2. Inspections, hours and inspections per hour (IPH) by ramp in 2022. *Ramps that were partially funded by lake association dollars

Ramp	Inspections	Hours	IPH	License Plates
Ann	43	25.50	1.7	38
Bass*	214	245.25	0.9	145
Beebe	753	200.00	3.8	475
Birch	1	10.00	0.1	1
Brooks	0	5.00	0.0	0
Buffalo N	360	295.00	1.2	252
Buffalo S	170	305.25	0.6	121
Camp	0	10.00	0.0	0
Cedar DNR*	1,014	1,090.75	0.9	595
Cedar Schroeder*	729	691.00	1.1	446
Charlotte	31	10.00	3.1	24
Cokato	51	36.25	1.4	42
Constance	10	7.50	1.3	8
Crawford	4	10.00	0.4	4
Dean	5	10.00	0.5	3
Deer	8	10.00	0.8	8
Dutch	3	10.00	0.3	3
Eagle	27	30.00	0.9	21
Fish	2	10.00	0.2	2
Fountain	0	10.75	0.0	0
French	13	15.25	0.9	13
Granite	25	34.25	0.7	20
Howard	41	30.00	1.4	32
Ida	10	10.00	1.0	8
Indian	53	30.50	1.7	46
John	54	30.00	1.8	47
Limestone	51	29.00	1.8	36
Locke	7	10.25	0.7	4
Maple E	99	36.00	2.8	72
Maple W	102	34.50	3.0	75
Martha	20	9.00	2.2	15
Mary (Howard Lake)*	621	350.00	1.8	330
Mary (Ney)	6	30.00	0.2	4
Mink	35	31.00	1.1	28
Nixon	4	15.00	0.3	3
Pleasant N*	1,214	748.50	1.6	699
Pleasant S*	120	191.25	0.6	90
Ramsey	51	30.25	1.7	33
Rock	19	10.00	1.9	15
Sugar N	150	147.50	1.0	117
Sugar S*	3,189	1,102.50	2.9	1617
Sullivan	4	10.00	0.4	3
Sylvia*	6,201	1,899.50	3.3	2268
Union	4	10.00	0.4	4
Waverly	472	196.75	2.4	285
Total	15,990	8,063.5	2.0	7089

Inspection Count

Wright County’s inspection season runs from early May to late September. The majority of inspections take place between Memorial Day and mid-August (Figure 3). Inspections in 2022 peaked later in July than is typical with the most inspections occurring on July 30, 2022. Traffic tends to decrease later in the summer but staffing also gets more difficult as students return to school. The only accesses monitored after Labor Day are those that are funded by lake associations.

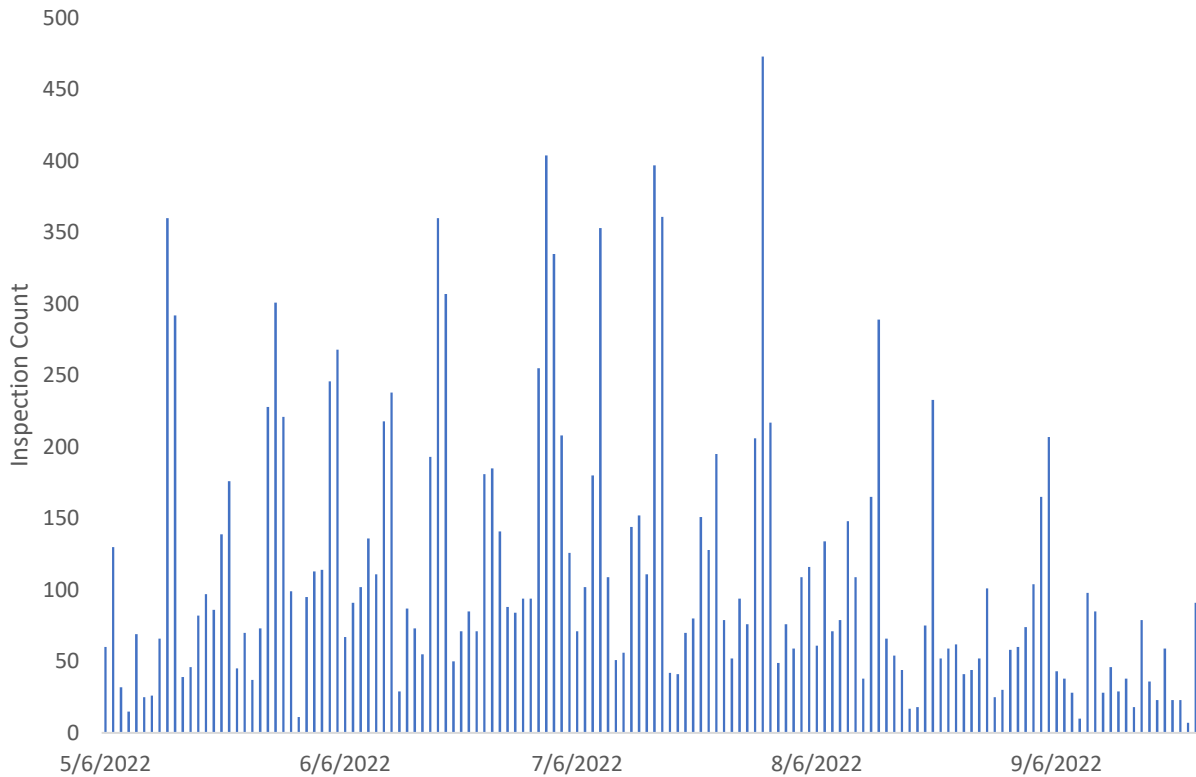


Figure 3. Inspections by date in 2022

The total number of inspections vary from year to year (Table 3 and Figure 4) based on a variety of reasons. Everything from weather, staffing levels, or the economy can affect inspections numbers. Staffing certainly affected the numbers in 2021. For 2022, we were not able to fund as many hours due to price increases. Despite the decrease in hours, we recorded a 27% increase in inspections.

Table 3. Inspection count, hours, and inspections per hour (IPH) each year from 2016-2022

Year	Inspections	Hours	IPH
2016	13,157	n/a	n/a
2017	17,332	8971.00	1.9
2018	16,864	10,274.75	1.6
2019	20,576	12,333.50	1.7
2020	16,570	9,205.75	1.8
2021	12,539	8,216.25	1.5
2022	15,990	8,063.25	2.0

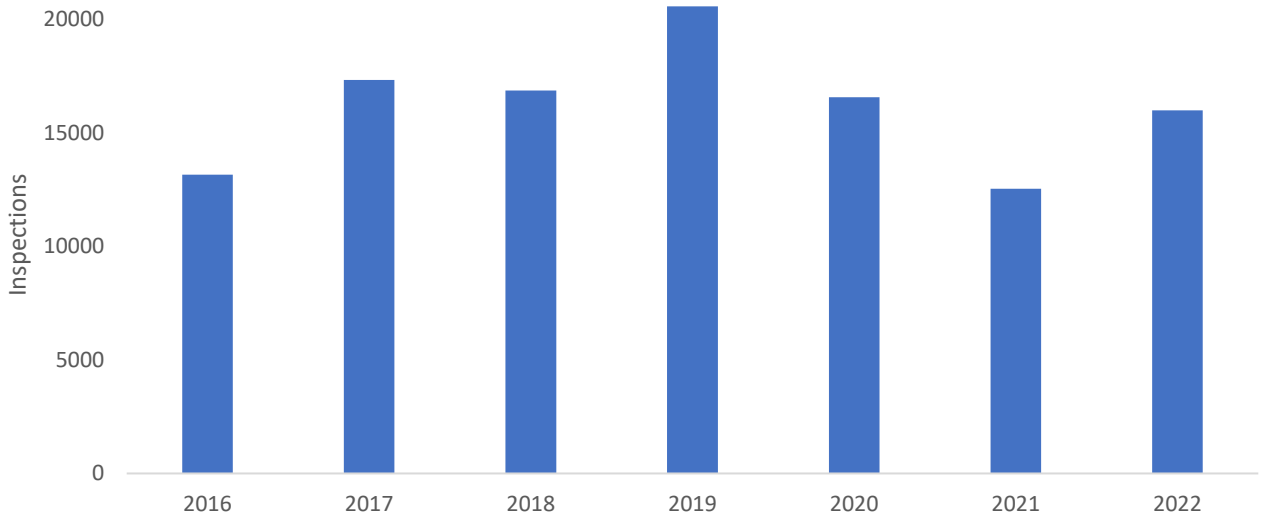


Figure 4. Inspection counts each year from 2017-2021

Inspector Placement

Placement of inspectors is an important aspect of this program. Certain accesses are very busy while others may not have any traffic depending on the day and the weather. Part of our strategy of concentrating the inspection time to just 11 accesses was to improve inspections per hour (IPH). The accesses chosen had a high degree of risk from either incoming boats and/or outgoing boats. These changes resulted in a 33% increase in IPH from 2021 to 2022 (Figure 5).

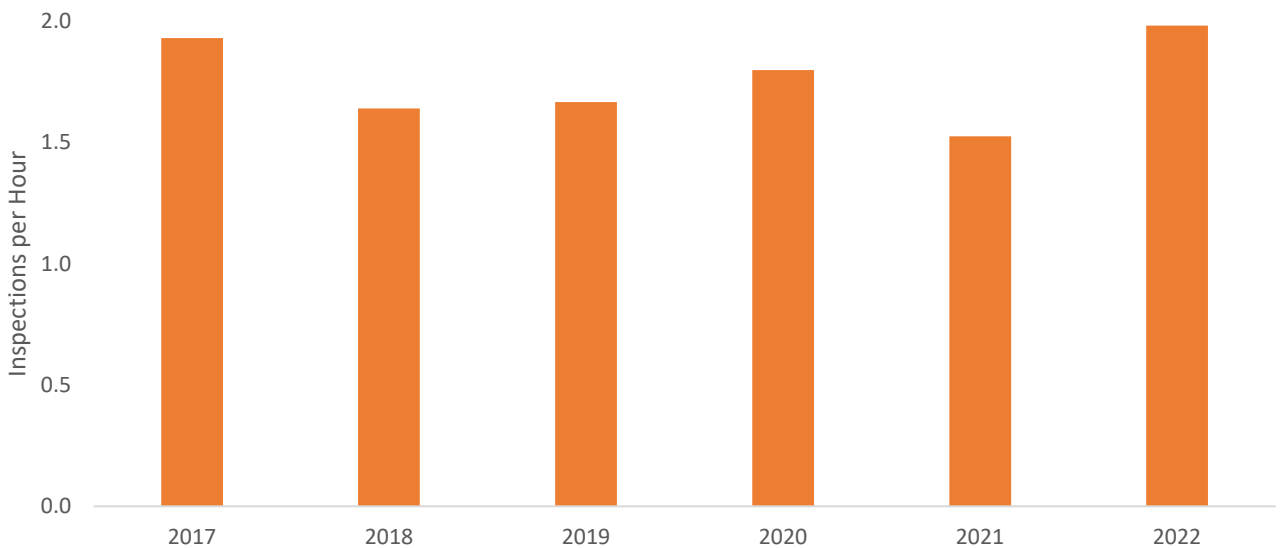


Figure 5. Inspections per hour each year from 2017-2022

We also changed the time of day that our inspectors were scheduled. In previous years shifts were almost exclusively from 8am to 6pm. We increased our range of times to 5am-9pm, although length of

shift did vary. As a result we found that the time of day with the lowest IPH (<1) was weekday mornings before 9am. The times with the best IPH were Saturday and Sunday evenings, often between 3.5 and 4.0 IPH. Evenings were also fairly busy with IPH near 2.0 starting at 5pm until 9pm every day of the week.

Encounters

The number of unique license plates is used as a proxy for the number of individuals encountered by the inspectors (Table 4 and Figure 6). Our goal is to maximize the number of license plates encountered so we are reaching as many boaters as possible during each season. In 2022, we observed 10% more plates compared to 2021.

Table 4. License plates encountered by year from 2016-2021

Year	License Plates	Plates per Hour
2016	7,471	N/A
2017	8,404	0.93
2018	7,433	0.72
2019	10,688	0.87
2020	7,957	0.86
2021	6,445	0.78
2022	7,089	0.88

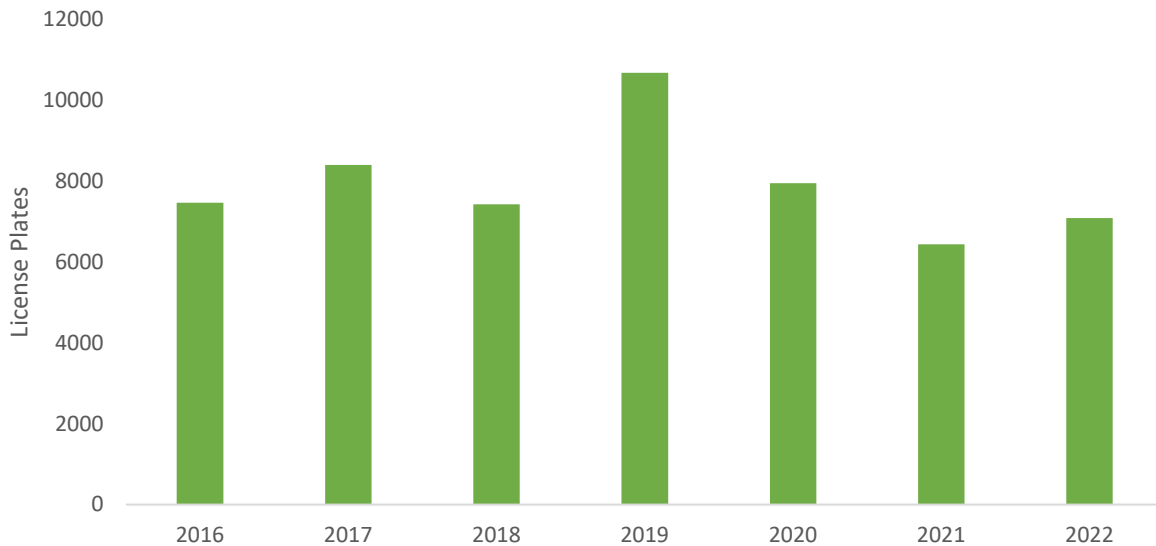


Figure 6. License plates encountered by year from 2016-2022

Each boater has different habits. We want to make sure inspectors are available in all cases to maximize the number of license plates encountered. Some take their boat out on weekends, others go out weekdays after work, lake service providers sometime operate six or seven days a week. Out of the total 7,089 license plates we encountered, 3,383 (48%) were weekend only boaters, 2,657 (37%) were weekday boaters and 1,049 (15%) were encountered both during the weekdays and weekends (Figure 7).

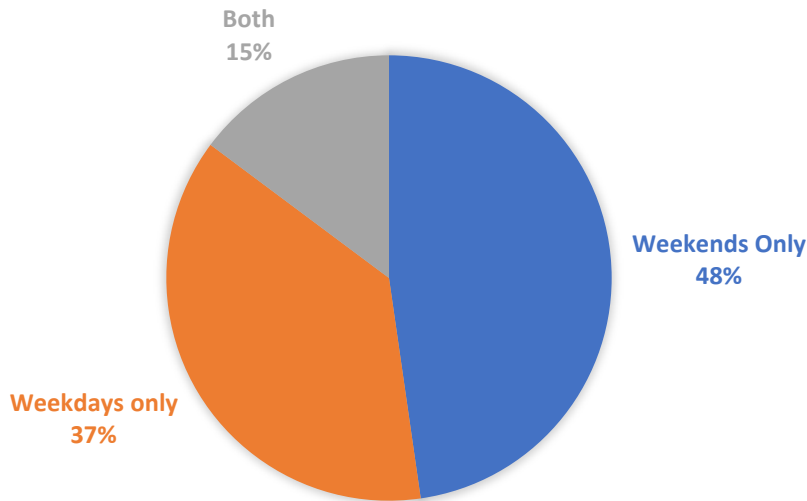


Figure 7. Timeframes of boater encounters in 2022 based on license plates.

Repetition is important to help reinforce the educational aspect of the inspection program. Inspectors are not only trying to find AIS on water-related equipment, but also to teach boaters what actions to take and some of the common places that AIS hide on equipment. In some cases, one person is inspected twice in the same day both upon entering and exiting a lake. Other times they are encountered during several trips throughout the boating season.

However, if we are only encountering the same boater over and over again, the message may lose value. One plate was encountered 81 times, likely belonging to a lake service provider vehicle who is constantly moving equipment around. Therefore, we consider how many license plates we continually interact with and how many of our inspections those interactions account for (Table 5).

When we consider the changes to the inspection program in 2022, especially the fact that we concentrated our efforts to 11 accesses, it was important to make sure we weren't just inspecting the same boaters repeatedly. Compared to 2021, (Table 6) we did see an increase in repetition, especially among boaters we encounter just a few times a season.

Table 5. License plates encountered multiple times and the percent of inspections they account for in 2022.

Number of Encounters	Total Plates	Percent of Plates	Percent of Inspections
>25	17	0.2%	5%
>10	105	1.5%	13%
>5	437	6.2%	28%
>2	1525	21.5%	53%
>1	3643	51.4%	78%
Total	7,089		

Table 6. License plates encountered multiple times and the percent of inspections they account for in 2021

Number of Encounters	Total Plates	Percent of Plates	Percent of Inspections
>25	12	0.2%	5%
>10	59	0.9%	10%
>5	234	3.6%	20%
>2	1061	16.4%	44%
>1	2,894	44.9%	73%
Total	6,449		

Entering vs Exiting

There are several different inspection types. An entering or exiting inspection occurs when the boat is coming or going from the water. Lifts are inspected slightly differently so they are given a different category. A courtesy inspection occurs when the equipment will not enter or exit the water. The majority of courtesy inspections occur at the decontamination site.

Table 7. Inspections by type in 2021

Inspection Type	Count
Courtesy	190
Entering	9404
Exiting	6518
Lift	68
Total	16180

Violations

During an entering inspection the equipment is checked for water, mud, plants, animal, etc. Inspectors also check if the drain plug is in. Table 8 has the percentage of equipment that didn't comply with regulations. It is worth noting that lake users often put the drain plug in during staging but prior to the inspection, these instances are recorded as the drain plug being in. Zebra mussels (zm) were found on equipment a few times, usually on equipment from an infested lake returning to the same lake following storage. There was only one instance of zebra mussels being found on equipment attempting to enter an uninfested lake.

Table 8. Findings during entering inspections

Entering n	Drain plug In	Species Found	ZM Found
9404	6.4%	8.6%	0.2%

Lake Connections

During entering inspections, lake users reported they came from 588 different Minnesota lakes and 18 different states (and Canada) in addition to Minnesota and 46 lakes in Wright County. Just over 4% of users reported they did not know or preferred not the answer the last lake the equipment was used in.

Decontaminations

There was a slight increase in decontaminations in 2022 compared to previous years (Table 9). But still low compared to the best year 2017 when the unit was visible from Hwy 55. Users reported coming from 56 different lakes (including 22 different Wright County lakes). Prior to decontamination 51% of equipment had visible water, plants, animals, etc.

Table 9. Decontaminations by years in Wright County

Year	Decons
2016	155
2017	340
2018	242
2019	221
2020	140
2021	176
2022	190