Comfort Lake-Forest Lake Watershed District

2022 Watercraft Inspection Program Yearend Report

COMFORT LAKE
- WATERSHED DISTRICT -
FOREST LAKE
Protecting Your Water Resources

December 5, 2022

Cover Image: 2022 CLFLWD Level 1 Watercraft Inspectors

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2022 Watercraft Inspection Summary Infographic

Introduction

The Minnesota Department of Natural Resource's (DNR) Watercraft Inspection Program is a state-wide program that was first created in 1992. From the beginning, the DNR's goal for the program was "To prevent the spread of invasive species within Minnesota through boater education, watercraft inspections and watercraft decontaminations at public water accesses". In 2011, legislation was signed into law that allowed watercraft inspectors to visually and tactilely inspect water related equipment, decontaminate water-related equipment, prohibit access to boaters that refuse inspection or fail to remove contaminates and require watercrafts be decontaminated prior to launching into Minnesota waters. Contaminates are anything that could harbor invasive species or be invasive itself such as plants, animals, mud, and water. While the DNR hires its own watercraft inspectors for the program, most inspectors in the state are hired and paid for by watershed districts, conservation districts, lake associations, lake improvement districts, and many other organizations. In total, organizations across the state performed over 524,000 watercraft inspections in 2022.

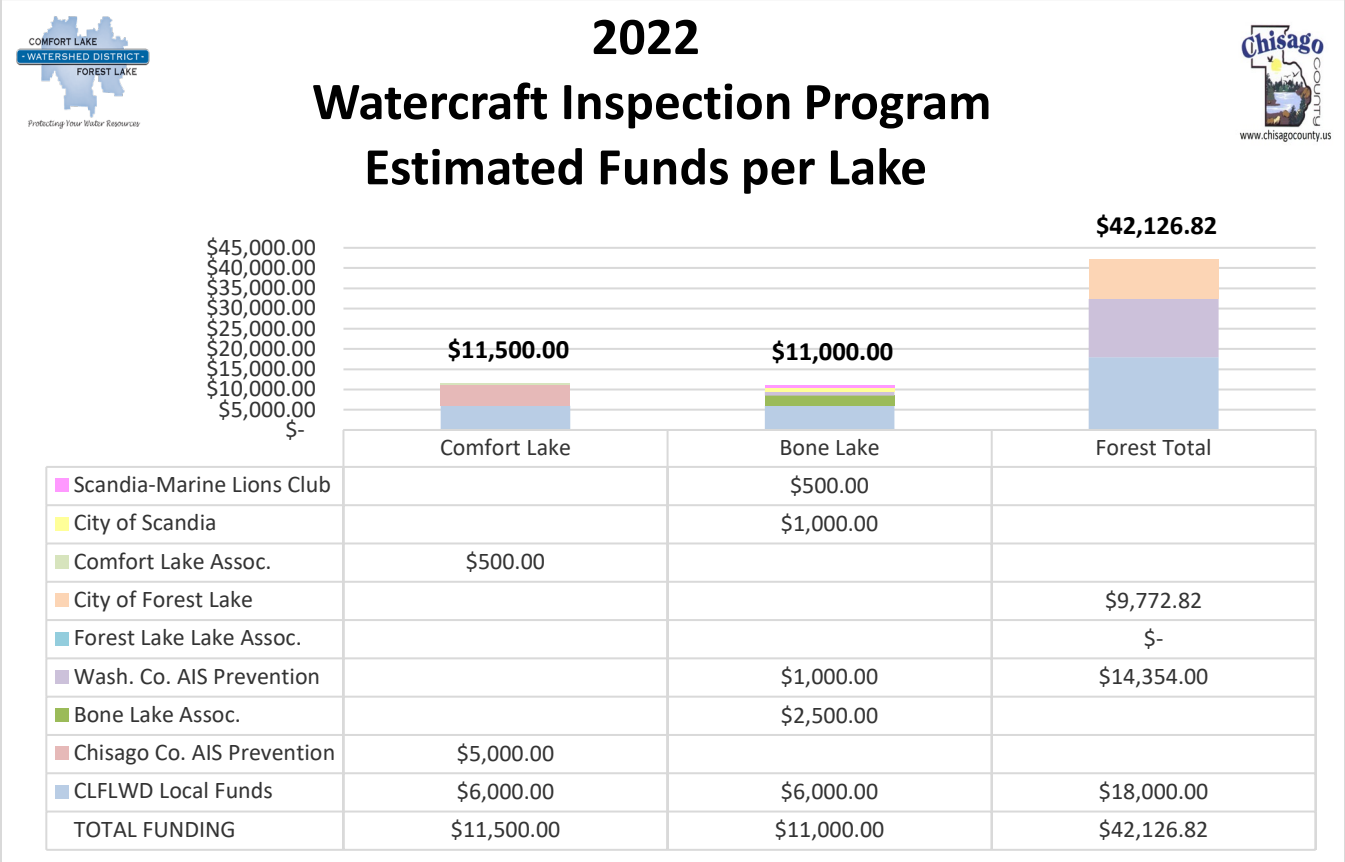
To implement the watercraft inspection program in 2022, the Comfort Lake-Forest Lake Watershed District (CLFLWD) entered into a joint powers agreement with the Minnesota Department of Natural Resources (DNR) for authority to conduct boat launch inspections. The District continued its multi-year partnership with Chisago County to hire, train, and oversee inspectors. Through this partnership, Chisago County managed payroll and human resources for inspectors and received reimbursement from the CLFLWD for hours worked within the District. Chisago County inspectors were stationed at public lake accesses within the CLFLWD (which covers portions of Washington and Chisago counties) as well as throughout the remainder of Chisago County. Additionally, the CLFLWD directly hired several of its own inspectors in order to increase presence at boat launches on weekends and holidays.

There are five public lake accesses within CLFLWD, and inspectors were stationed at each one throughout the summer. Public accesses include one at Bone Lake, one at Comfort Lake, and three at Forest Lake: Forest 1 (located on the west basin at Lakeside Park), Forest 2 (located on the middle basin near Willow Point), and Forest 3 (located on the east basin and in some cases referred to as Hagberg). Hours worked by inspectors at each access are largely dependent upon funding and boater traffic. The Forest Lake 1 access has the highest boater traffic and is therefore assigned the most watercraft inspector shifts within the District.

Watercraft at the District's 5 public accesses were inspected by either a Level 1 inspector or a Level 2 inspector. Both Level 1 and Level 2 inspectors are trained by the DNR and perform visual inspections as well as verbal boater surveys. In addition, Level 2 inspectors are qualified to operate a decontamination unit. This involves using a high-pressure, high-heat spraying machine to remove plants, animals such as mussels, and other potential contaminants from watercraft. Chisago County operates a decontamination unit which rotates between 14 high-traffic accesses throughout CLFLWD and Chisago County including Forest 1, Forest 3, Comfort Lake, and Bone Lake. The DNR also operates a decontamination unit which rotates between Forest 1 and other accesses throughout the East Metro. Level 1 inspectors are not permitted to operate the decontamination unit, and instead solely complete the visual inspections of the watercraft and verbal boater surveys.

Funding and Goals

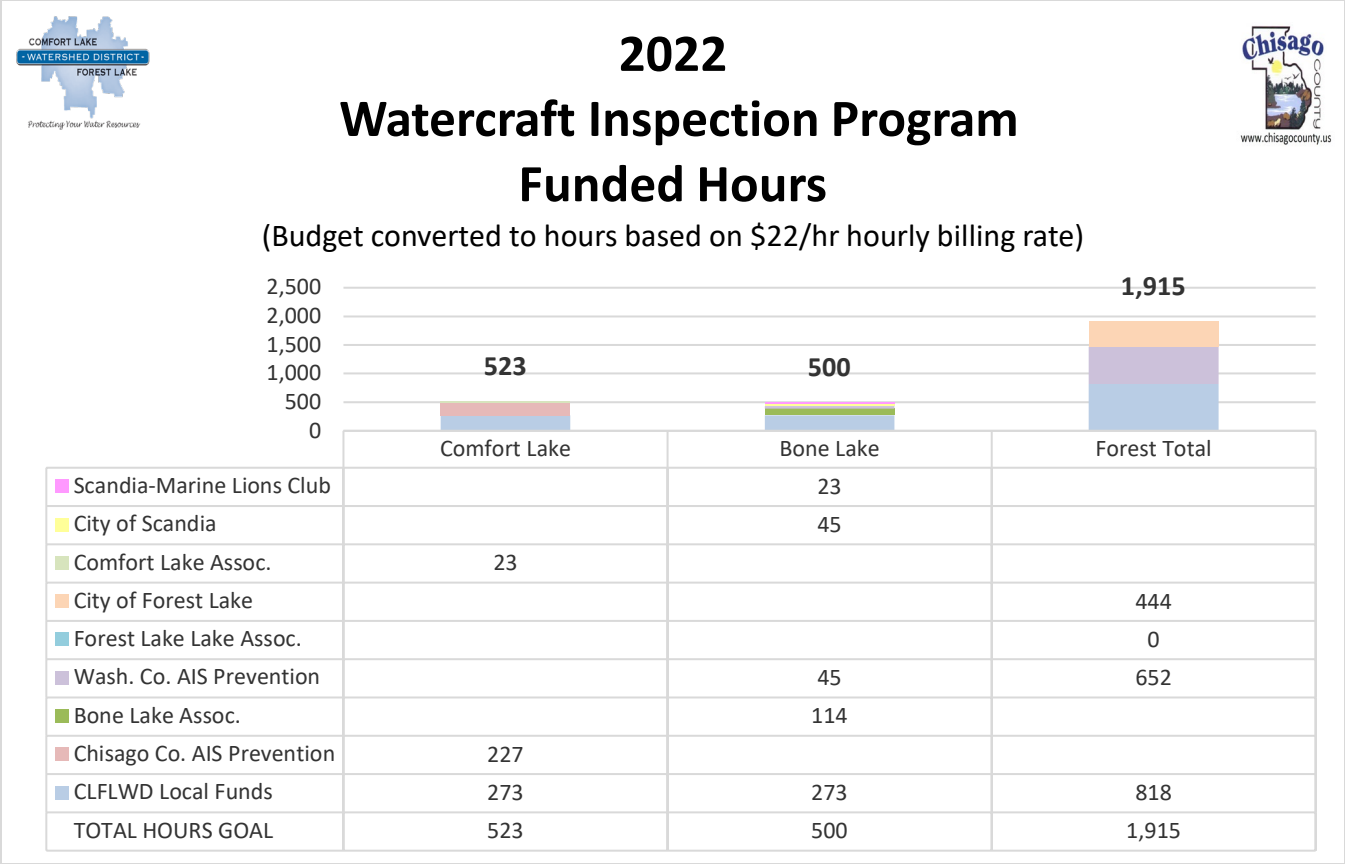
Funding for the CLFLWD's watercraft inspection program was provided by multiple sources including the Aquatic Invasive Species Prevention Aid Program for both Washington and Chisago counties, local municipalities, and local interest groups such as lake associations and the Lions Club. Figure 1 illustrates financial contributions to the 2022 watercraft inspection program. Note that certain organizations opted to allocate funding to specific waterbodies (e.g. Bone Lake Association's donations allocated to Bone Lake).



	Comfort Lake	Bone Lake	Forest Total
Scandia-Marine Lions Club		$500.00	
City of Scandia		$1,000.00	
Comfort Lake Assoc.	$500.00		
City of Forest Lake			$9,772.82
Forest Lake Lake Assoc.			$-
Wash. Co. AIS Prevention		$1,000.00	$14,354.00
Bone Lake Assoc.		$2,500.00	
Chisago Co. AIS Prevention	$5,000.00		
CLFLWD Local Funds	$6,000.00	$6,000.00	$18,000.00
TOTAL FUNDING	$11,500.00	$11,000.00	$42,126.82

Figure 1. Financial contributions for 2022 watercraft inspection program

In order to set goals and determine hiring needs, estimated financial contributions were converted to inspection hours using an average hourly billing rate. For level 1 and 2 inspectors, the billing rate was $22/hour. Figure 2 illustrates the estimated number of hours each financial contribution would cover.



	Comfort Lake	Bone Lake	Forest Total
Scandia-Marine Lions Club		23	
City of Scandia		45	
Comfort Lake Assoc.	23		
City of Forest Lake			444
Forest Lake Lake Assoc.			0
Wash. Co. AIS Prevention		45	652
Bone Lake Assoc.		114	
Chisago Co. AIS Prevention	227		
CLFLWD Local Funds	273	273	818
TOTAL HOURS GOAL	523	500	1,915

Figure 2. Funded inspection hours for 2022 watercraft inspection program

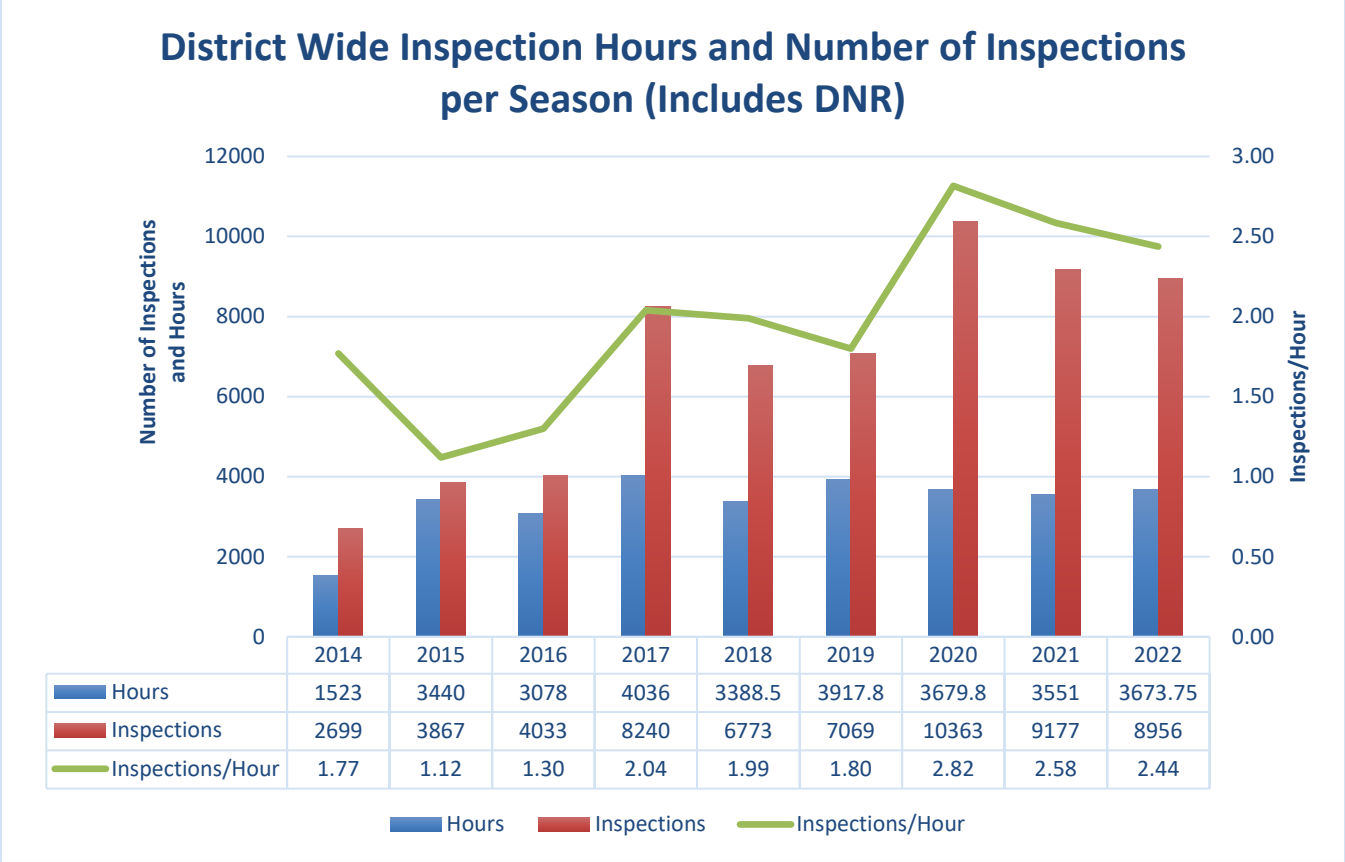
With the available funding, this year the District was able to hire a total of 12 inspectors to perform watercraft inspections at District accesses. Some inspectors were hired through the Chisago County joint program (4 staff), and others were hired directly by CLFLWD (8 staff).

Results

District-Wide

Inspection Hours and Scheduling

District-wide, watercraft inspectors performed **8,956 inspections and worked 3,673.75 hours** in 2022. Inspectors averaged a rate of **2.44 inspections per hour**. Figure 3 summarizes the total number of inspection hours and inspections completed District-wide over the last nine seasons.



	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hours	1523	3440	3078	4036	3388.5	3917.8	3679.8	3551	3673.75
Inspections	2699	3867	4033	8240	6773	7069	10363	9177	8956
Inspections/Hour	1.77	1.12	1.30	2.04	1.99	1.80	2.82	2.58	2.44

Figure 3. District-wide inspections and hours per season

As a planning tool to meet inspection hour goals, District staff take the number of funded inspections hours and divide it by the number of weeks in the watercraft inspection season. This calculation generates an average number of hours to work per week to use all funded hours by the end of the season. The goal number of hours per week of 117 was met by week 4 and was sustained until week 24 near the very end of the season. The number of inspections, and inspection hours by week throughout the season, as well as the rate of inspections/hour, and the hours/week goal can be found in Figure 4 . The spikes in inspections/hours that can be seen in the graph are generally

attributed to holidays or seasonal changes (e.g. week five includes Memorial Day and week ten includes the Fourth of July).

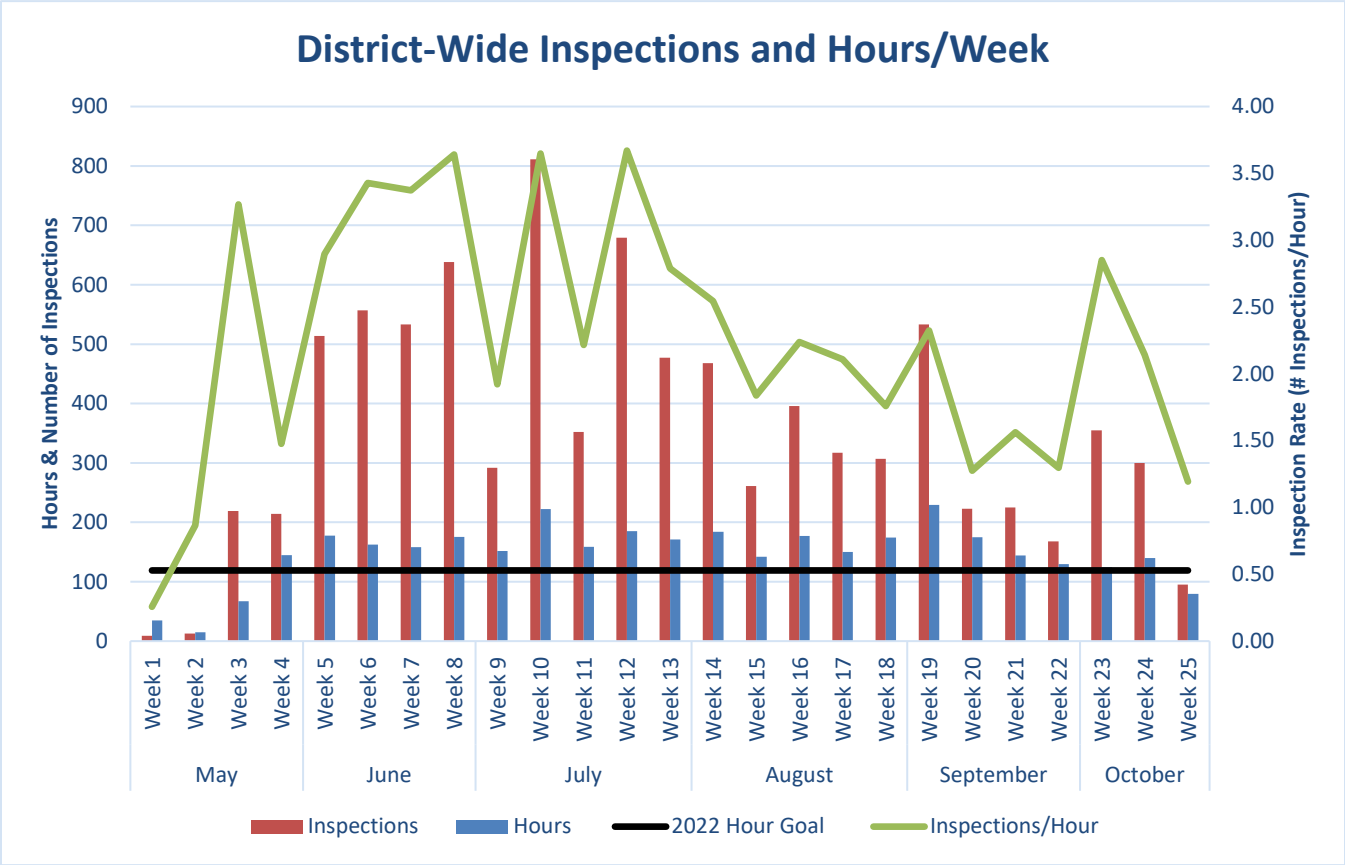


Figure 4. District-wide inspections, hours, rates, and goals

To maximize cost effectiveness and inspection numbers, weekend hours are prioritized for conducting watercraft inspections due to the general higher level of activity. As a result, 57% of hours and 65% of inspections occurred Friday through Sunday. Inspection hours worked during the week (Monday – Thursday) are typically performed by Chisago's and the DNR's inspectors. Figure 5 shows the number of inspections and hours per day for the 2022 season.

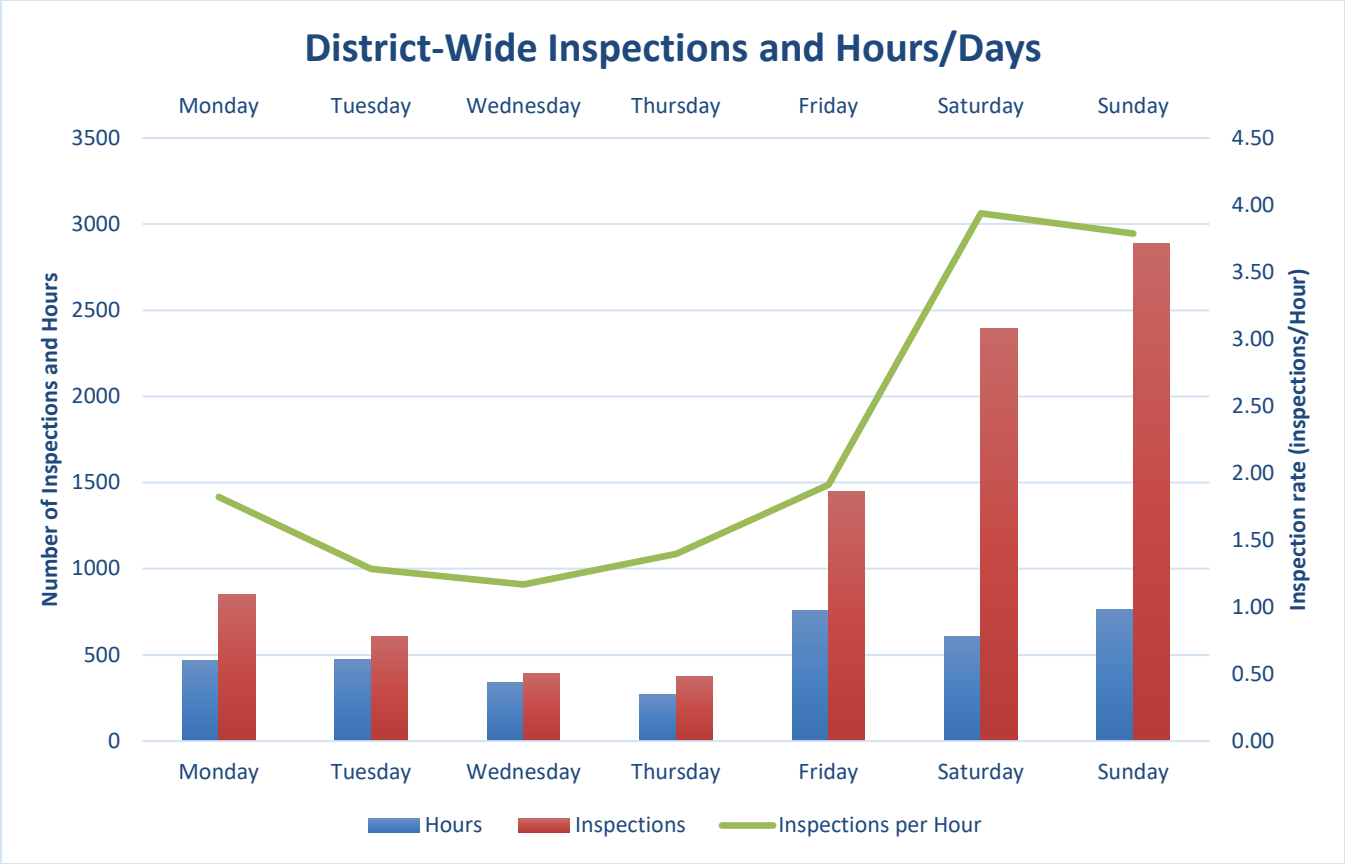


Figure 5. District-wide inspections and hours per day for the 2022 season

Survey Results

In addition to a watercraft inspector's responsibility to thoroughly inspect watercrafts for aquatic invasive species (AIS) and other contaminants, they are also required to complete an inspection survey for each boat that enters or exits a lake. Completed surveys are uploaded to the DNR's state-wide inspection survey database where program coordinators across the state can view the data. Important information such as number of boats entering and exiting a lake, incoming boat AIS violations, and new AIS infestation risk assessment can be calculated. In 2022, a total of 8,956 watercraft inspection surveys were performed on District lakes. Below are some findings from the inspection survey data. A summary of this information can be found in Figure 6.

- **50 watercrafts arrived at District lakes with contaminants such as plants, animals, mud, or water on their equipment**. This number was 65 in 2021, 148 in 2020, 122 in 2019, 140 in 2018, 213 in 2017, 41 in 2016 and 39 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. These watercrafts were cleaned off and/or drained prior to launching. If vegetation or mud could not be removed by hand, watercraft were denied launch.

- **29 watercraft required removal of the bilge drainage plug** upon arriving at District lakes. This number was 33 in 2021, 83 in 2020, 85 in 2019, 115 in 2018, 115 in 2017, 19 in 2016 and 67 in 2015. After educating the watercraft user on the potential of AIS in their bilge water, bilge plugs were removed from the watercraft and all water was drained prior to the watercraft launching in an area that would not flow into the lake.

- **850 watercraft exited District lakes with contaminants such as plants, animals, mud, or water present**. This number was 786 in 2021, 1462 in 2020, 867 in 2019, 931 in 2018, 804 in 2017, 187 in 2016 and 260 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. All contaminants were removed from the watercraft and trailer before departing from the lake.

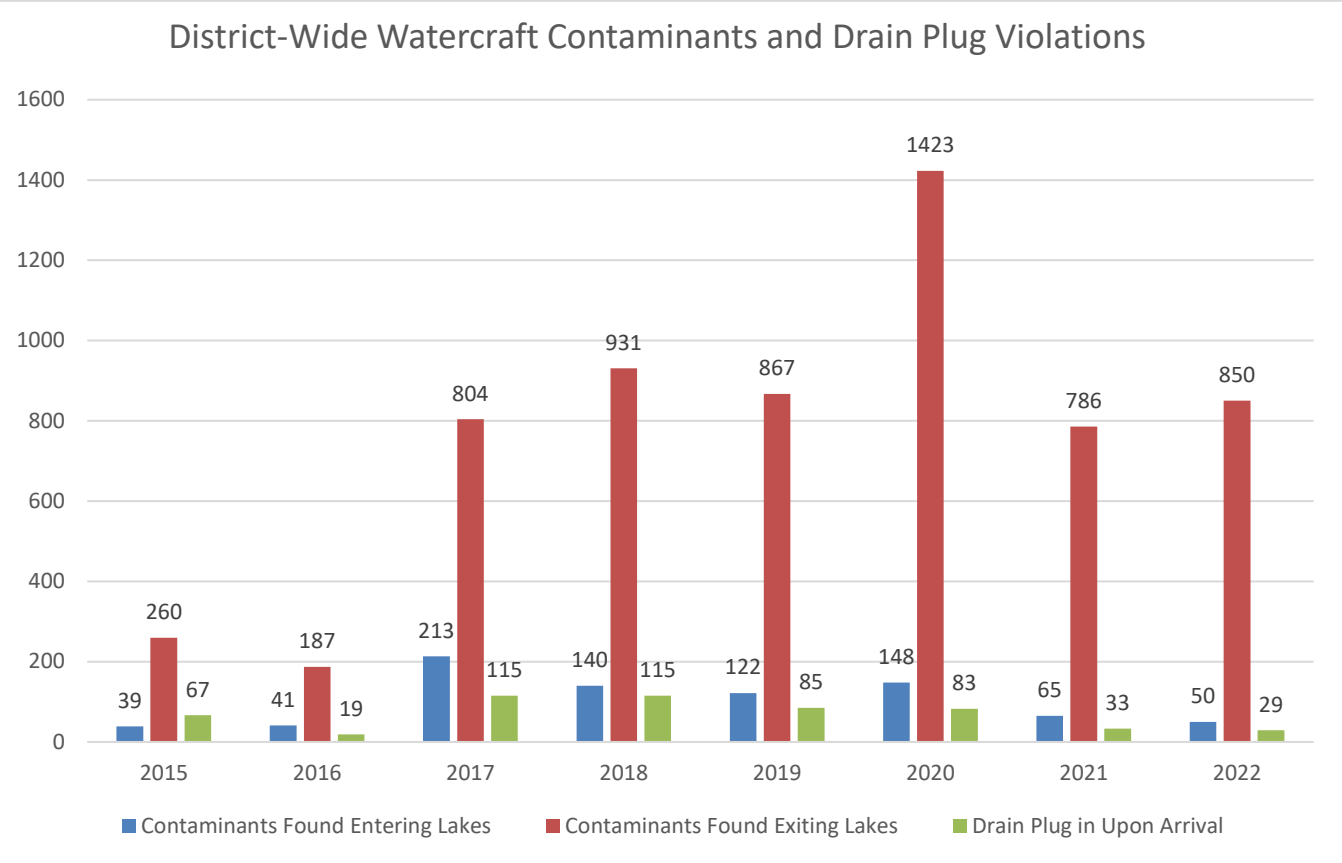


Figure 6. District-wide watercraft contaminants and drain plug violations as reported over the last eight seasons. Contaminants include plants, animals, mud, and water.

Included in the inspection survey are questions regarding the waterbody most likely to be visited next by the boater. Many of the lakes that boaters intend to visit after leaving a District lake do not have all the same AIS present in them. This information stresses the importance of not just

preventing AIS from entering District lakes but also preventing AIS from leaving them. Results of this aspect of the survey can be found in Table 1.

	Next Lake Boaters Intend to Visit after Leaving a District Lake			
Lakes	Eurasian Watermilfoil	Zebra Mussels	Flowering Rush	Spiny Waterflea
St. Croix River	EWM	ZM	X	X
White Bear	EWM	ZM	X	X
Coon Lake	EWM	X	X	X
Big Marine	EWM	X	X	X
Chisago	EWM	X	X	X
Clear Lake	EWM	X	X	X
Green Lake	EWM	X	X	X
Mille Lacs	EWM	ZM	X	SW
Bald Eagle	EWM	ZM	FR	X
Minnetonka	EWM	ZM	FR	X

Table 1. Top 10 lakes boaters intended to visit after leaving a District lake in 2022

Risk of New Invasive Species

Unfortunately, many CLFLWD lakes are home to a number of aquatic invasive species such as curly-leaf pondweed, Eurasian watermilfoil, flowering rush, zebra mussels, and several others. Species such as these are a concern to the District as they have the ability to cause ecological, recreational, economic, and physical harm. While the District manages many of the aquatic invasive species present in its lakes, it is still widely known that the most effective management strategy is prevention. There are still many species that are not yet in District lakes and one of the main goals of the CLFLWD watercraft inspection program is to prevent their introduction.

Starry stonewort and the spiny water flea are two examples of aquatic invasive species found in Minnesota that are not yet found in District lakes. Starry stonewort is an invasive macro-algae that forms dense mats in lakes that can impede boating and prevent the establishment of beneficial native plants. Starry stonewort was discovered in Lake Koronis near Paynesville, MN in 2015 and has since been discovered in 21 additional lakes across the state. In 2022, four new lakes were added to the DNR's infested waters list for starry stonewort, Bemidji and Turtle River Lakes in Beltrami County and Bowen, and Thunder lakes in Cass County.

The spiny water flea is an invasive species of zooplankton which is about the size of a grain of rice that competes with small fish for the same food resource (other zooplankton). The spiny water flea was first discovered in Lake Superior in the early-1980s and has since spread to more than 66 inland lakes in Minnesota including: Mille Lacs Lake, Lake Vermilion, Lake of the Woods, and others.

Both invasive species are thought to be transported primarily by recreational watercraft. Figure 7. contains photos of spiny water flea and starry stonewort.

Figure 7. Spiny water flea (left) and starry stonewort (right). Source: MNDNR

Part of the watercraft inspection survey involves asking the boaters which lake they visited last. The boaters' responses can be cross referenced with records that the DNR keeps of infested waters. This is a way to estimate the risk of these species spreading to District lakes. Note that transportation of water or *any* plants or animals on watercraft, not just invasive species, is prohibited. District watercraft inspectors required that these watercrafts be cleaned off, decontaminated and/or drained prior to launching into the lake.

- **95 boats launching into District lakes came from lakes infested with spiny water flea.** This number was 96 in 2021, 158 in 2020, 111 in 2019, 104 in 2018, 171 in 2017, and 231 in 2016.

- **48 boats launching into District lakes came from lakes infested with starry stonewort**. This number was 48 in 2021, 30 in 2020, 22 in 2019, 61 in 2018, 14 in 2017, and 83 in 2016.

- **In 2022, 101 boats came from a lake infested with brittle naiad, 21 came from a lake with New Zealand mudsnail, 24 from a faucet snail infested lake, and 3 from a lake with the VHS virus**.

Number of entering watercrafts that were last in an AIS infested waterbody						
	Comfort Lake	Bone Lake	Forest 1	Forest 2	Forest 3	Grand Total - All Lakes
Starry Stonewort	6	4	29	2	7	48
Spiny Waterflea	11	10	48	9	17	95
Zebra Mussels	73	78	274	52	109	586
Flowering Rush	39	22	50	8	27	146
Brittle Naiad	9	17	47	9	19	101
Grass Carp	8	17	47	9	19	100
Silver Carp	9	17	47	9	19	101
Big Head Carp	9	17	47	9	19	101
New Zealand Mudsnail	1	1	11	1	7	21
Round Goby	0	0	1	0	2	3
White Perch	0	0	1	0	2	3
VHS	0	0	1	0	2	3
Ruffe	0	0	1	0	2	3
Faucet Snail	1	1	12	1	9	24
EWM	161	186	516	81	197	1040

Table 2. The number of watercrafts entering District lakes that were last in an AIS infested lake. These figures are likely a slight underestimation as a substantial number of inspections did not include enough information to determine which waterbodies boaters were last in.

Bone Lake

Inspection Hours and Scheduling

This season, watercraft inspectors performed **579 hours of inspections** on Bone Lake which resulted in **1007 inspections and associated surveys**. Inspectors averaged **1.74 inspections per hour.** Figure 8. below summarizes the total number of inspection hours and inspections conducted on Bone Lake over the last nine seasons.

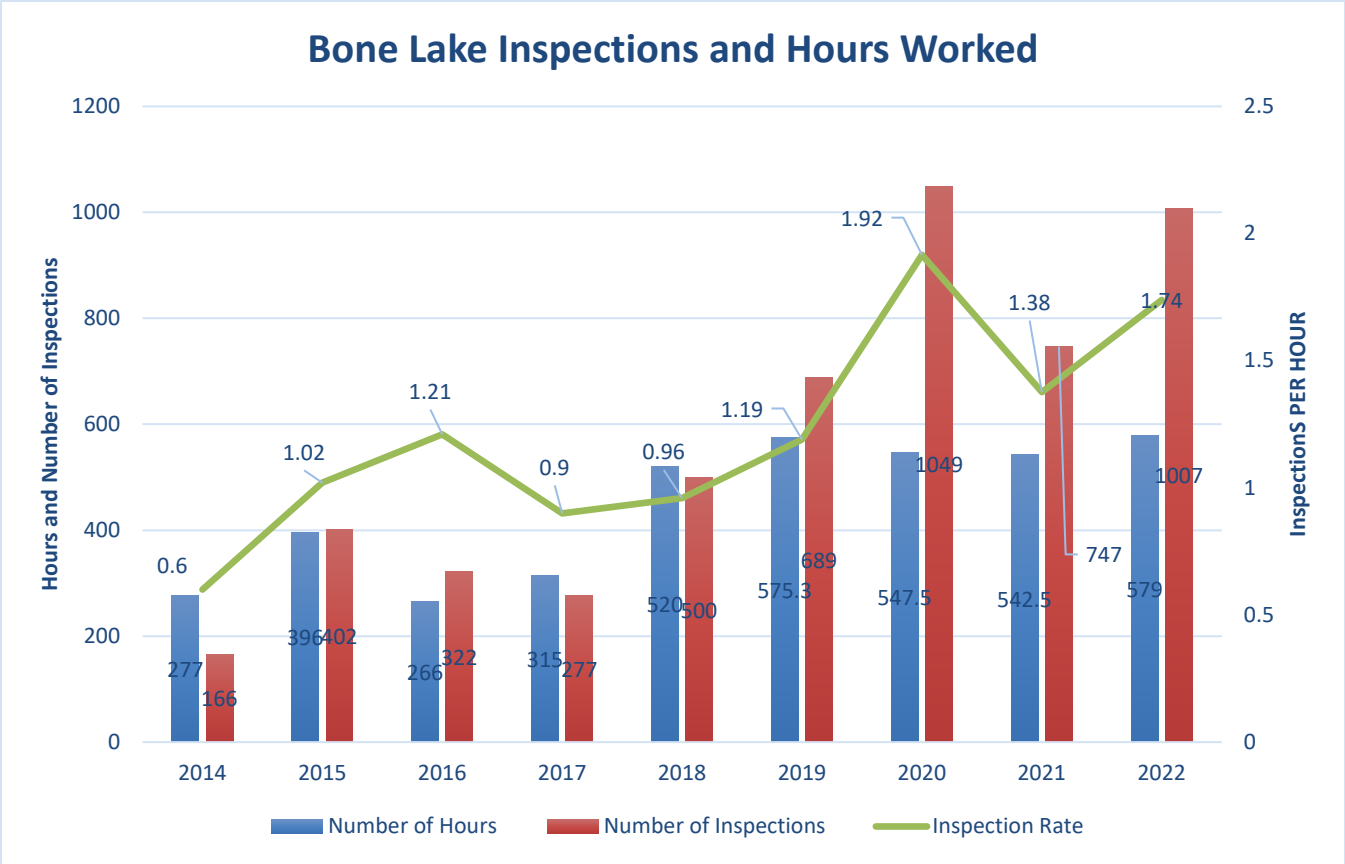


Figure 8. Summary of the total number of inspection hours, number of surveys, and inspection rates for Bone Lake over the last seven seasons.

Survey Results

A total of 1007 surveys were performed on Bone Lake this season. Findings and a summary of the results from the compiled inspection survey data for Bone Lake can be found below and in Figure 9.:

- **1 watercraft arrived at Bone Lake with plants, animals, mud, or water on their watercraft**. This number was 2 in 2021, 3 in 2020, 7 in 2019, 16 in 2018, 11 in 2017, 1 in 2016 and 4 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. These watercraft were cleaned off and/or drained prior to launching into Bone Lake.

- **1 watercraft required removal of the bilge drainage plug upon arriving at Bone Lake**. This number was 13 in 2021, 12 in 2020, 12 in 2019, 8 in 2018, 1 in 2017, 2 in 2016 and 6 in 2015. After educating the watercraft user on the potential of AIS in their bilge water, bilge plugs were removed from the watercraft and all water was drained prior to the watercraft launching in an area that would not flow into the lake.

- **79 watercraft exited Bone Lake with plants, animals, mud, or water present**. This number was 35 in 2021, 47 in 2020, 50 in 2019, 70 in 2018, 59 in 2017, 7 in 2016 and 24 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. All contaminants were removed from the watercraft and trailer before departing from Bone Lake.

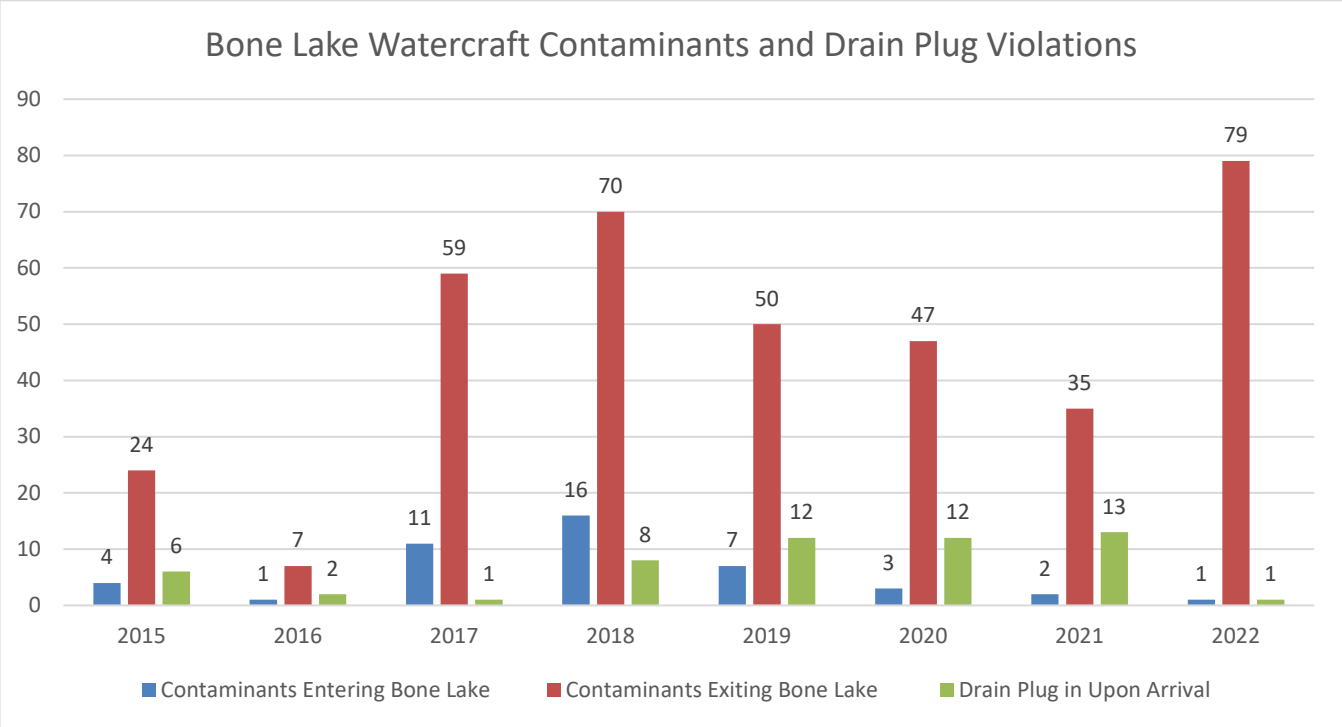


Figure 9. Bone Lake watercraft contaminants (ex. plants, animals, mud, and water) and drain plug violations reported over the last eight seasons.

Risk of New Invasive Species

A portion of the inspection survey process involves asking boaters which lake they visited last. The boaters' responses can be cross referenced with records that the DNR keeps of infested waters. This is a way to estimate the risk of these species spreading to Bone Lake. Note that any watercraft with contaminants such as plants or standing water are required to be decontaminated prior to launch.

- **10 boats launching into Bone Lake came from lakes infested with spiny water flea.** For comparison, this number was 5 in 2021, 14 in 2020, 7 in 2019, 2 in 2018, 5 in 2017, and 25 in 2016.

- **4 boats launching into Bone Lake came from lakes infested with starry stonewort**. This number was 5 in 2021, 2 in 2020, 3 in 2019, 3 in 2018, 0 in 2017, and 2 in 2016.

Forest Lake

Inspection Hours and Scheduling

This season, CLFLWD watercraft inspectors performed 2,071.25 hours of inspections, and DNR inspectors performed 380 hours, totaling **2,451.25 total hours of inspections on the three Forest Lake public accesses**. During this time, CLFLWD inspected 5,860 watercraft and the DNR inspected 1,196 watercrafts, totaling **7,056 inspections and associated surveys**. Together, CLFLWD and DNR inspectors averaged **2.88 inspections per hour.** A summary of this information is presented in Figure 10. and Tables 3 - 5.

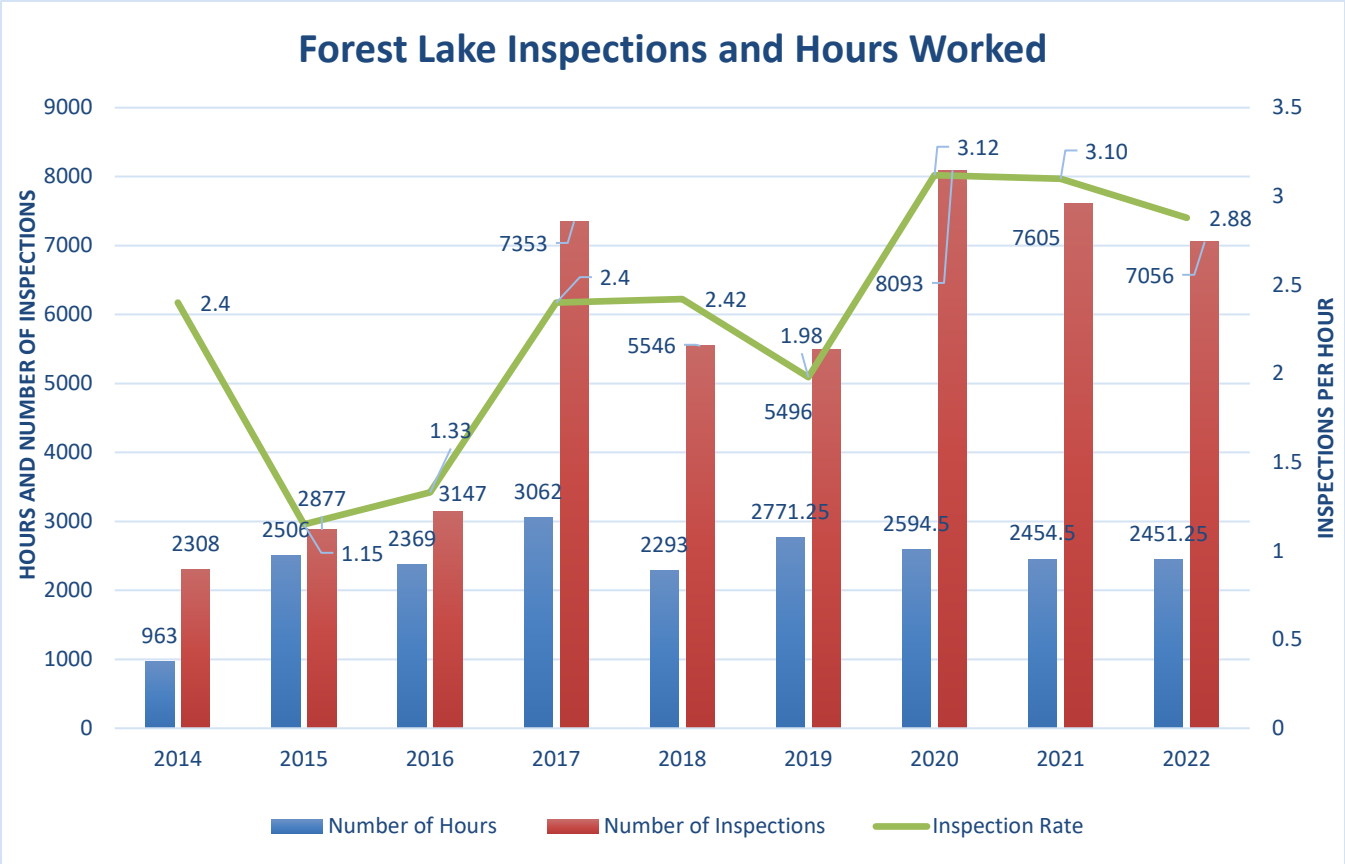


Figure 10. summary of inspections hours, number of surveys, and inspection rates over the last nine seasons at all three Forest Lake public boat launches.

Table 3. Forest Lake inspection hours

	Forest 1 (West or Lakeside Park)	Forest 2 (Middle or Willow Point)	Forest 3 (East or Hagberg)	Total
CLFLWD Inspection Hours	814.25	535	722	2,071.25
DNR Inspection Hours	380	-	-	380
Total Inspection Hours	1,194.25	535	722	**2,451.25**

Table 4. Forest Lake number of inspections

	Forest 1 (West or Lakeside Park)	Forest 2 (Middle or Willow Point)	Forest 3 (East or Hagberg)	Total
CLFLWD Inspections	3,455	676	1,729	5796
DNR Inspections	1,196	0	0	1,809
Total Inspections	4,651	676	1,729	**7,056**

Table 5. Forest Lake inspection rate (inspections/hour)

	Forest 1 (West or Lakeside Park)	Forest 2 (Middle or Willow Point)	Forest 3 (East or Hagberg)	Average
CLFLWD Inspection Rate	4.24	1.26	2.39	2.92
DNR Inspection Rate	3.15	-	-	3.29
Average Inspection Rate	**3.70**	**1.26**	**2.39**	**2.45**

Survey Results

A total of 7,056 surveys were performed on Forest Lake this season. Findings and a summary of the results from the compiled inspection survey data for Forest Lake can be found below and in Figure 11. Below are some findings from the inspection survey data:

- **44 watercraft arrived at Forest Lake with plants, animals, mud, or water on their watercraft**. This number was 61 in 2021, 132 in 2020, 87 in 2019, 117 in 2018, 177 in 2017, 32 in 2016, and 32 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. These watercraft were cleaned off and/or drained prior to launching into Forest Lake. It is against state law to launch a contaminated watercraft at a MN lake, regardless of known current infestations of that lake.

- **20 watercraft required removal of the bilge drainage plug upon arriving at Forest Lake.** This number was 131 in 2021, 62 in 2020, 65 in 2019, 92 in 2018, 110 in 2017, 15 in 2016, and 54 in 2015. After educating the watercraft user on the potential of AIS (e.g. microscopic zebra mussel larvae) in their bilge water, bilge plugs were removed from the watercraft and all water was drained prior to the watercraft launching in an area that would not flow into the lake.

- **755 watercraft exited Forest Lake with plants, animals, mud, or water present**. This number was 727 in 2021, 1191 in 2020, 762 in 2019, 817 in 2018, 670 in 2017, 158 in 2016, and 229 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. All contaminants were removed from the watercraft and trailer before departing from Forest Lake.

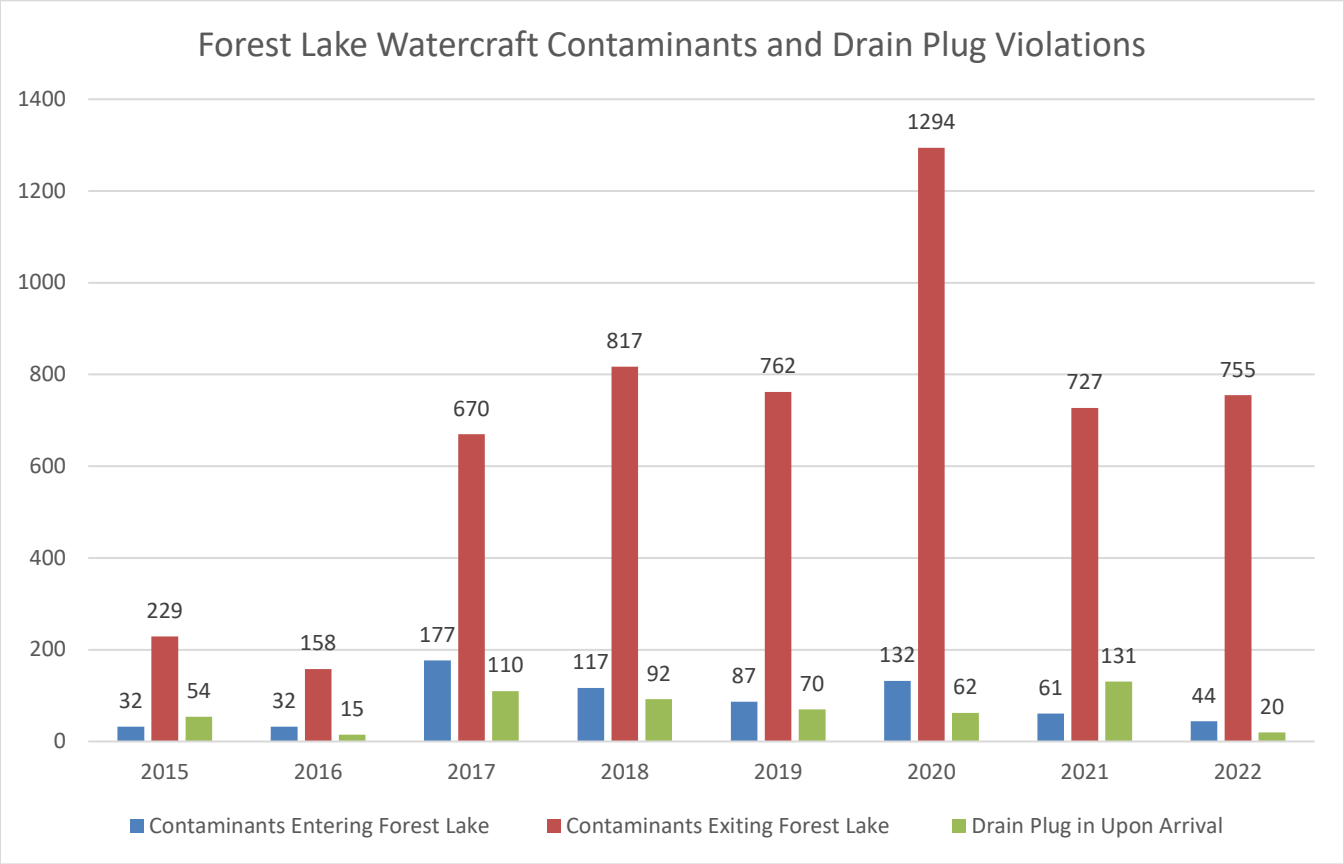


Figure 11. Forest Lake watercraft contaminants and drain plug violations as reported at Forest Lake accesses over the last eight seasons

Risk of New Invasive Species

Part of the inspection survey involves asking the boaters which lake they visited last. The boaters' responses can be cross referenced with records that the DNR keeps of infested waters. This is a way to estimate the risk of these species spreading to Forest Lake. Note that any watercraft with contaminants such as plants or standing water are required to be decontaminated prior to launch.

- **74 boats launching into Forest Lake came from lakes infested with spiny water flea**. This number was 82 in 2021, 131 in 2020, 92 in 2019, 101 in 2018, 153 in 2017, and 183 in 2016.

- **38 boats launching into Forest Lake came from lakes infested with starry stonewort**. This number was 42 in 2021, 27 in 2020, 18 in 2019, 53 in 2018, 12 in 2017 and 74 in 2016.

Comfort Lake

Inspection Hours and Scheduling

This summer, watercraft inspectors performed **643.5 hours of inspections** on Comfort Lake which resulted in **893 inspections and associated surveys**. Inspectors averaged **1.39 inspections per hour.** A summary of this information is presented in Figure 12..

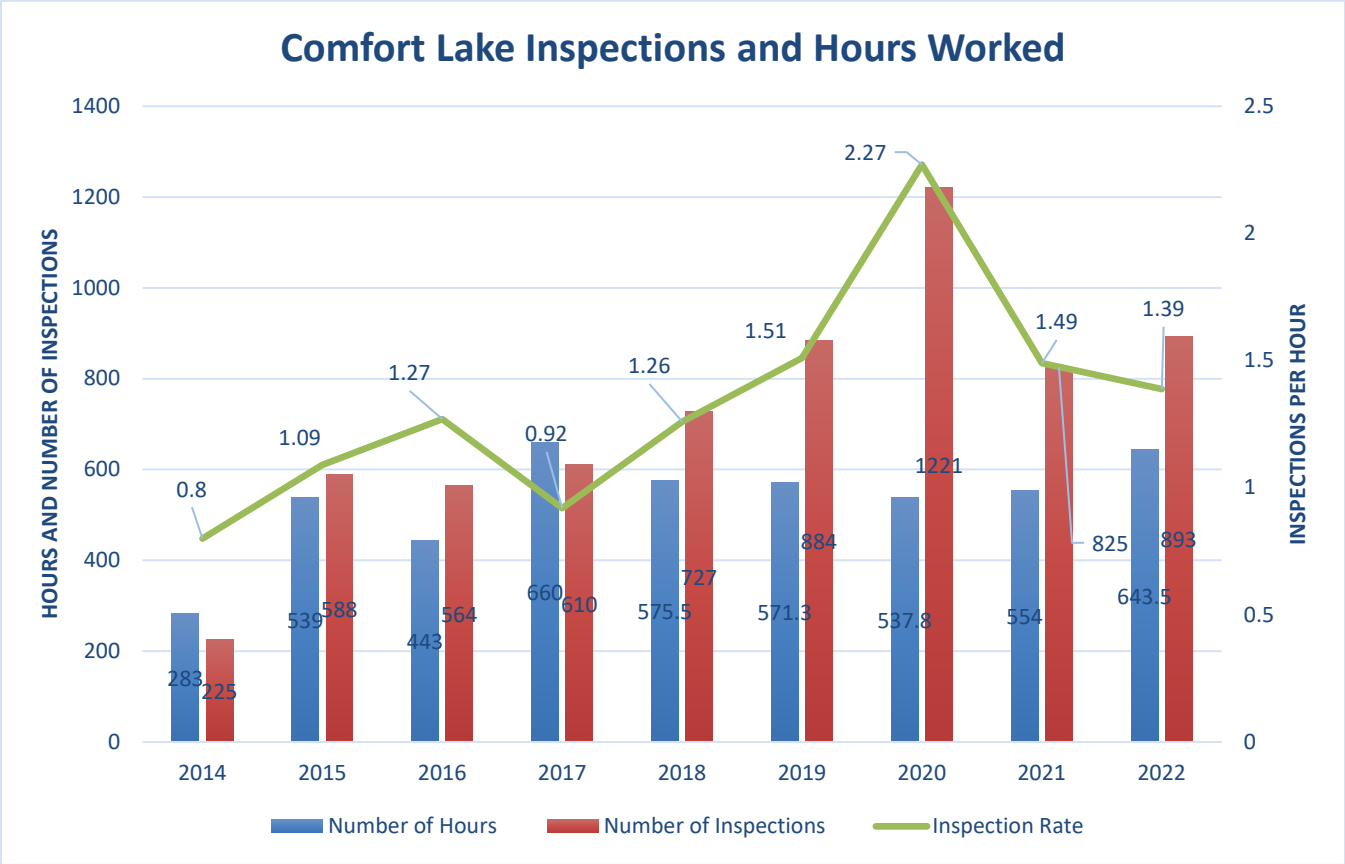


Figure 12. Summary of the inspection hours, number of surveys, and inspection rates completed on Comfort Lake over the last nine seasons.

Survey Results

A total of 825 surveys were performed on Comfort Lake this season. Findings and a summary of the results from the compiled inspection survey data for Comfort Lake can be found below and in Figure 13.

- **5 watercraft arrived at Comfort Lake with plants, animals, mud, or water on their watercraft**. This number was 5 in 2021, 13 in 2020, 28 in 2019, 7 in 2018. 25 in 2017, 8 in 2016, and 3 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. These watercraft were cleaned off and/or drained prior to launching into Comfort Lake.

- **8 watercraft required removal of the bilge drainage plug upon arriving at Comfort Lake**. This number was 10 in 2021, 9 in 2020, 8 in 2019, 15 in 2018, 4 in 2017, 2 in 2016 and 7 in 2015. After educating the watercraft user on the potential of AIS in their bilge water, bilge plugs were removed from the watercraft and all water was drained prior to the watercraft launching in an area that would not flow into the lake.

- **16 watercraft exited Comfort Lake with plants, animals, mud, or water present**. This number was 24 in 2021, 82 in 2020, 55 in 2019, 44 in 2018, 75 in 2017, 22 in 2016 and 7 in 2015. Note that transportation of *any* plants or animals on watercraft, not just invasive species, is prohibited. All contaminants were removed from the watercraft and trailer before departing from Comfort Lake.

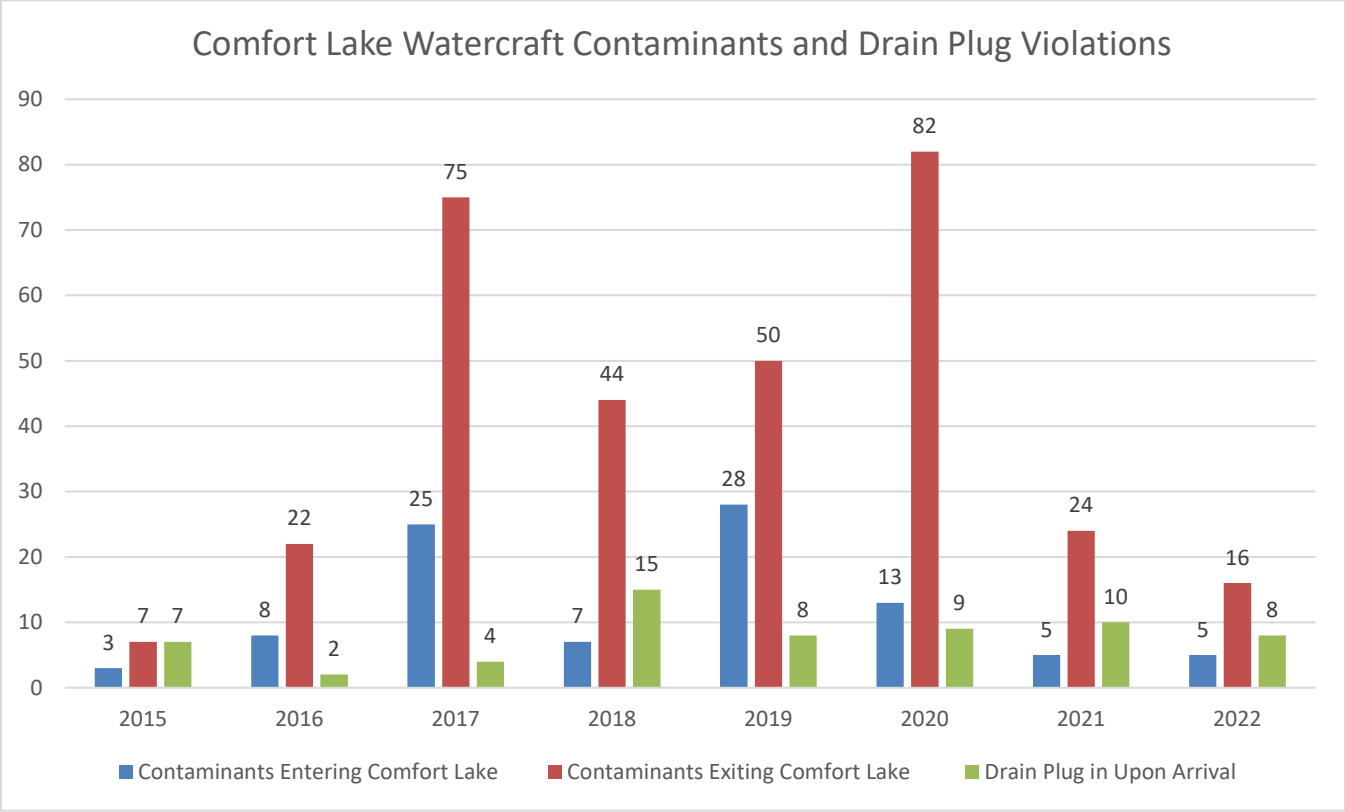


Figure 13. Comfort Lake watercraft contaminants and drain plug violations as reported at Comfort Lake over the last eight seasons

Risk of New Invasive Species

Part of the inspection survey involves asking the boaters which lake they visited last. The boaters' responses can be cross referenced with records that the DNR keeps of infested waters. This is a way to estimate the risk of these species spreading to Comfort Lake. Note that any watercraft with contaminants such as plants or standing water are required to be decontaminated prior to launch.

11 boats launching into Comfort Lake came from lakes infested with **spiny water flea**. For comparison, this number was 9 in 2021, 13 in 2020, 12 in 2019, 7 in 2018, 13 in 2017, and 24 in 2016.

- **6 boat launching into Comfort Lake** came from lakes infested with **starry stonewort**. This number was 1 in 2021, 1 in 2020, 1 in 2019, 5 in 2018, 2 in 2017 and 7 in 2016.

Discussion and Conclusion

The 2020 watercraft inspection season remains the program's busiest year by a significant margin. While inspections rates (boats per hour) are slowly trending downward since the 2020 boom, rates are still up considerably in 2022 compared to 2019 and prior. While this increase in boater traffic means more individuals are enjoying the District's incredible water resources, it also means a greater risk for new AIS introductions. In response to these trends, the District has taken steps to ensure the watercraft inspection program has the capacity and needed support to provide great public access coverage and effectively survey and educate boaters.

The program's biggest continuing challenge has been hiring and retaining seasonal employees. District staff have attended meetings with other watercraft inspection program coordinators and heard their struggles with this same issue. Not only are the required weekend shifts a deterrent to many applicants, but the observed labor shortage following the start of the COVID-19 pandemic has further exacerbated the issue. As the surrounding job market became more competitive (pay and benefit increases), changes were needed for the District's program to keep pace.

The District's watercraft inspection compensation has always been competitive with other programs in the state, however base pay was raised from $15 to $16 per hour in 2022 to match the offerings from other local entry level positions. Additionally, the District implemented holiday pay increases (1.5x the base wage) this season to incentivize inspectors to work all holidays. Holidays are not only the program's busiest days of the year, but also the program's most important for education and outreach. To encourage inspectors to work an average of 20 hours per week or more, end of season bonuses were also implemented. These bonuses were based on both performance and average number of hours per week worked. Lastly, the District implemented a pay raise structure for returning watercraft inspectors. Returning inspectors are highly valued by the District as they not only reduce the administrative stress and workload of interviewing and onboarding new employees, but they are also more experienced and better equipped to perform higher quality watercraft inspections. Pay raises based upon their years of experience with the District further incentivizes their annual return.

The aforementioned compensation changes saw an immediate positive response. Not only did the District have a sizable applicant pool to select from- this season, but the program was able to fill all 8 available in-house positions. Furthermore, of the 8 inspectors, more than half were able to work for the majority of the season. This capacity and availability allowed the District to have great public access presence during the peak summer months, but also better than average coverage during the Fall when historically many inspectors leave (return to school or other seasonal obligation). Compensation changes were undoubtably a large contributor to the overall success of the 2022 season.

Beyond compensation changes, the District also made program changes to existing initiatives such as weed raking. In the past, each inspector was given a personal rake to bring with them to their scheduled access. To reduce the amount of equipment each inspector needed to keep in their personal vehicle, rakes were stationed at each launch and secured using a locking chain. This ensured rakes were never forgotten at home and that one was always available for use. The lock's code was shared with all CLFLWD and Chisago County inspectors. These inspectors were asked

to use their downtime to help keep the public access as clean as possible from floating debris. In 2022, there were 850 exiting violations, almost entirely due to trailers exiting District lakes with plant debris. While the amount of debris floating at the boat launches can be hard to keep up with at certain accesses and times of year, District inspectors received many compliments from visitors on their efforts to keep the access clean.

As was mentioned in last year's yearend WCI report, the District received a behavior change grant from the MN DNR in 2020 to construct and install bait disposal stations. Accompanying these bait disposal stations were educational materials and behavior change commitment strategies for the inspectors. The project was implemented at the beginning of the 2022 season, but bait bins were unfortunately removed shortly after due to ongoing complaints of attracting excessive litter (*Figure 14, example of attracting excessive litter below during off season)* rancid smells during the summer months, and vandalism. Despite this, District inspectors continued to handout the educational materials and educate anglers on proper bait disposal practice. For the 2023 season, bait disposal station signs will be reworked to encourage anglers to dispose of unwanted bait in the trash rather than in onsite bait-specific receptacles.

Figure 14. Bait disposal station at the West Rush public access in Chisago County. Example of excessive trash and litter during the off-season.

In 2022, the watercraft inspection program extended its education and outreach efforts beyond the public accesses with demonstrations at several District hosted events. Specifically, the August 27th District Tour and the Annual State of the Watershed on September 27th. At each of these events, Garrett Miller (AIS Program Coordinator) and Jack Mackenzie (CLFLWD Level 1 Inspector) reenacted a typical watercraft inspection survey and interaction with the boater. The demonstrations not only showed those in attendance what the program does, but also provided spectators with the tools and knowledge to perform their own thorough watercraft inspections. These presentations were seemingly well received and could be a useful educational tool for next season at a variety of events.

Figure 15. 2022 Annual State of the Watershed - Watercraft Inspection Demonstration (Jack Mackenzie left and Garrett Miller right)

Overall, the CLFLWD's 2022 watercraft inspection season was very successful in reaching its hour and inspection goals. These achievements would not have possible without the support of the community, local lake associations, and the District's partners. Their generous financial contributions and feedback are greatly appreciated and go a long way to support the program. In 2023, the District will again seek out passionate water stewards for the watercraft inspector positions that will best represent the District and serve the community to preserve the ecological health and recreational quality of the area's waterbodies.