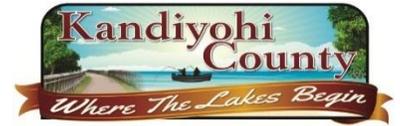


2023

Kandiyohi County

Aquatic Invasive Species Program Summary



Thanks to funding in 2023 from the State of Minnesota Aquatic Invasive Species Prevention Aid program, Kandiyohi County continued watercraft inspections countywide. 6237 inspection hours were logged on twenty public water accesses by Kandiyohi County watercraft inspectors performing 12055 inspections. The primary goal of the Watercraft Inspection Program is to inform and educate the public on the threats of ecologically harmful aquatic invasive plants and animals. Watercraft inspectors work at public water access sites educating the public by providing information to watercraft users and conduct a brief survey, while inspecting watercraft for invasive species. Watercraft inspection shifts were typically six to seven hours per shift between May 17th and September 13th with two shifts per day. In order to more closely match boater activity we continued having shorter shifts at the beginning and end of the day as well at certain locations. Twenty one inspectors were able to be hired for the season. Of those inspectors there were two lead inspectors that were also utilized to assist with scheduling, provide assistance and guidance to others, spot check attendance, fill in shifts at the decontamination unit and do inspections as time allowed at other accesses which provided additional access coverage. In the previous off season it was decided to sell the decontamination unit owned by Kandiyohi County due to lack of use and focus on staffing the one owned by the City of Spicer. The decontamination unit at Green Lake Saulsbury Beach was staffed on all major holidays and from May 27th through September 4th. A total of twenty lake accesses had inspection shifts scheduled with the majority of the shifts being where the decontamination unit was and the busier accesses based on previous year's inspection rate data. Unfortunately we also learned that Long Lake (Hawick) was confirmed to have zebra mussels and Starry Stonewort this year and Bass Lake has been confirmed to have Eurasian Water Milfoil as well. In response to the Starry Stonewort, contractors were hired to survey and treat the infestation in hopes to prevent further spread and reduce the size of the infestation.

INSPECTED LAKES

- Green (Rush Brown , County Park Five, & Saulsbury)
- Andrew south access
- Big Kandiyohi (E &W)
- Diamond (East & West)
- Eagle
- Florida
- Games (NE & SE)
- George
- Long- Hawick
- Long - Willmar (N & S access)
- Nest (NE &W)
- Norway (South access)
- Point

Infested Lakes

Zebra mussels

Diamond Lake
Games Lake
Lake Andrew
Eagle Lake
Green Lake
Lake Calhoun
Long Lake (Willmar)
Willmar/Foot Lakes
Long Lake (Hawick)

Nest Lake
Elkhorn Lake
George Lake
Norway Lake
Lake Florida
Henderson Lake

Eurasian watermilfoil

Games Lake
Lake Andrew
Green Lake
Lake Calhoun
Elkhorn Lake
Lake Florida
Norway Lake
Bass Lake
Henderson Lake

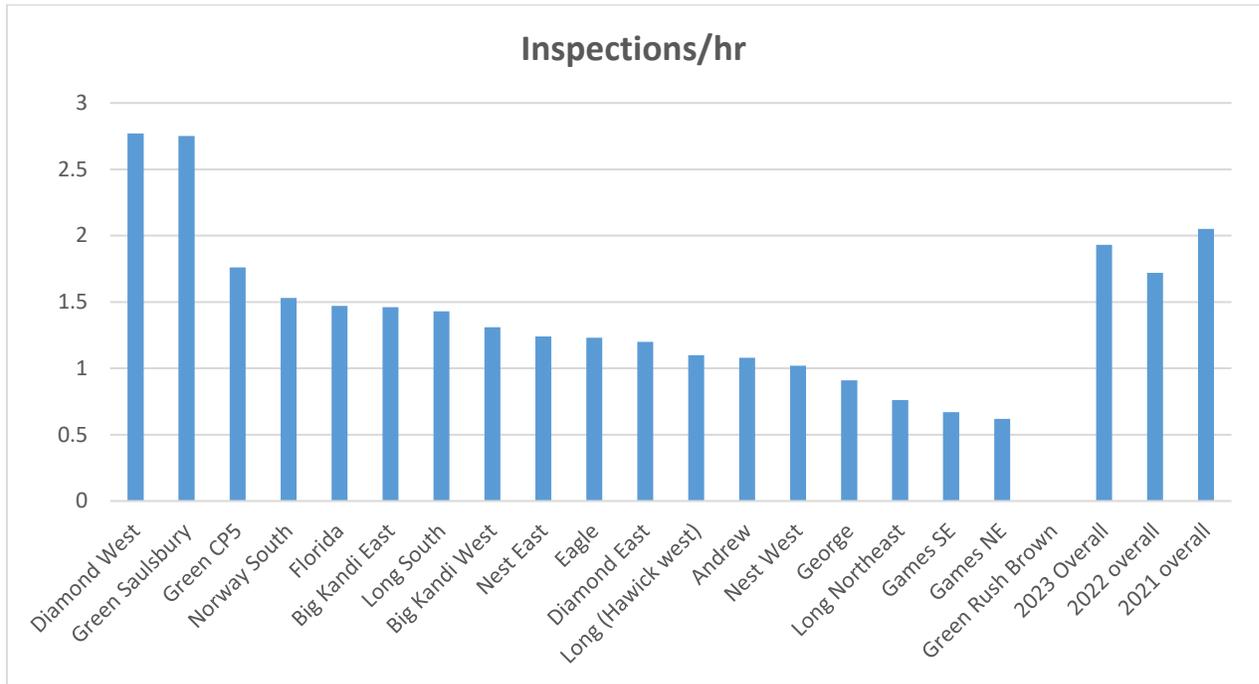
Starry Stonewort

Long Lake (Hawick)

Inspections for 2023 Watercraft Inspection Season

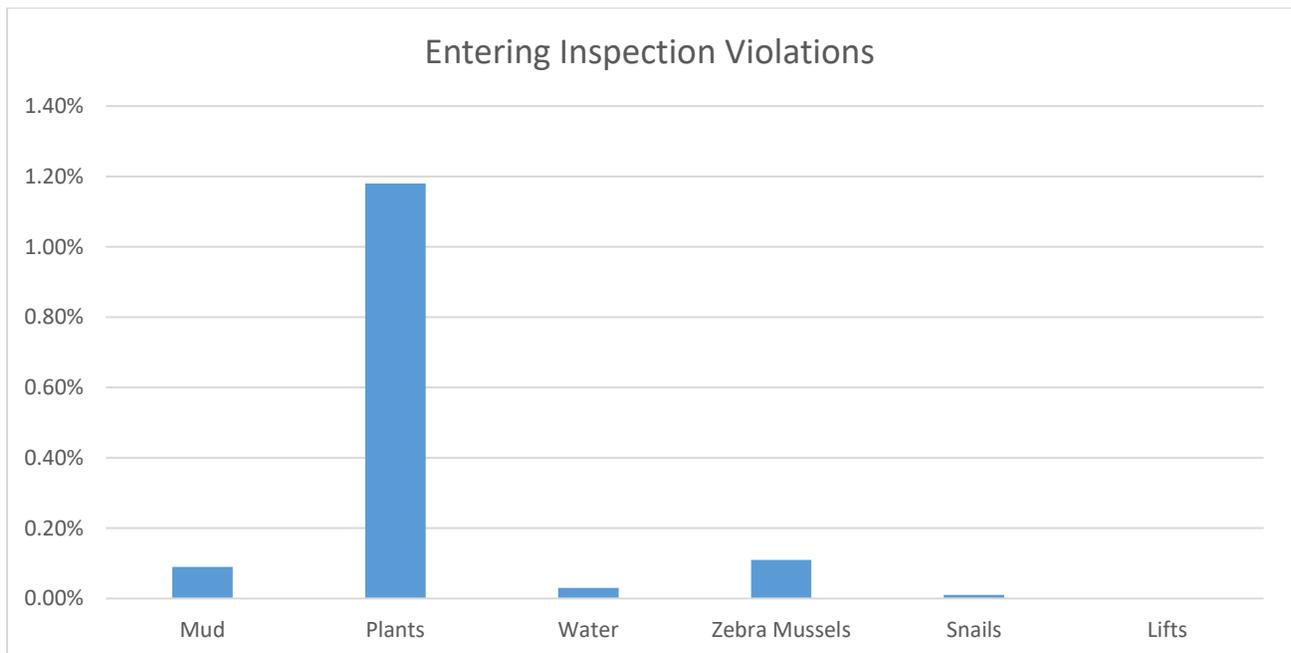
Access	Inspections per hour				
	2023 Hours of Inspections	2023 Number of inspections	2023 Inspection rate per hour	2022 Inspection rate per hour	2021 inspection rate per hour
Green Saulsbury	2038.5	5598	2.75	2.37	2.42
Green Rush Brown	0	0	0	1.37	2.97
Green CP5	717	1261	1.76	1.96	2.03
Diamond West	557.5	1542	2.77	1.79	2.04
Diamond East	47.5	57	1.20	1.22	1.00
Big Kandi East	169	247	1.46	0.57	2.01
Eagle	771.5	945	1.23	1.15	1.62
Florida	371.75	548	1.47	1.28	1.29
Long (Hawick west)	361.5	399	1.10	2.84	2.28
Nest East	116.5	144	1.24	1.01	0.93
Big Kandi West	472.25	619	1.31	0.61	1.50
Norway South	145.75	223	1.53	1.12	1.06
Long Northeast	26.25	20	0.76	1.97	2.50
Long South	43.25	62	1.43	1.47	3.83
Nest West	146.5	150	1.02	0.96	1.28
Games SE	6	4	.67	0.25	0.16
George	58	53	0.91	0.70	1.00
Andrew	151	163	1.08	1.12	0.82
Games NE	32.5	20	.62	0.24	1.37
2023 Overall	6237	12055	1.93/hr		
2022 Overall	4228.3	7255		1.72/hr	
2021 overall	4452.3	9107			2.05/hr

Overall the inspection rate per hour was higher than last year. In order to maximize the effectiveness of the inspection staff I will again plan to keep most shifts to the busiest accesses with limited shifts available as necessary at the remaining ones to continue to keep the clean, drain, dry message as well as where our decontamination station is located in front of as many boaters as possible and will continue to use the shorter morning and evening shifts to match boater activity more closely. In order to try to improve the overall inspection rate I will continue to utilize the two lead inspectors to provide some inspections where it is the busiest next year if there are no other inspectors already working at those locations.

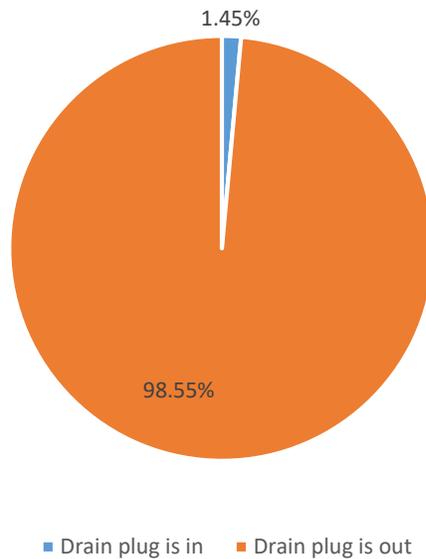


What did inspectors find?

Violations remain rare amongst entering watercraft. A total of 107 violations were found on inspection of entering watercraft by Kandiyohti County inspection staff in 2023. It is likely to find water, weeds, mud, etc. on exiting watercraft so the number of violations found on entering watercraft is used to show how often invasive species may have been transported potentially to another lake causing a new infestation. Of the 12,055 inspections a total of 7,536 were entering watercraft or courtesy inspections. Of those watercraft, 89 (1.18%) boats arrived with plants, 2 (0.03%) with water, 8 (.11%) with zebra mussels, 7 (0.09%) boats arrived with mud, 1 (0.01%) boat arrived with snails, and 0 were lifts. Of the entering watercraft 109 (1.45%) arrived at the access with the drain plug in. There was something found on an exiting watercraft 533 times by inspectors ensuring the law is followed and invasive species are not spread.



Drain Plug Violations on Entering Watercraft



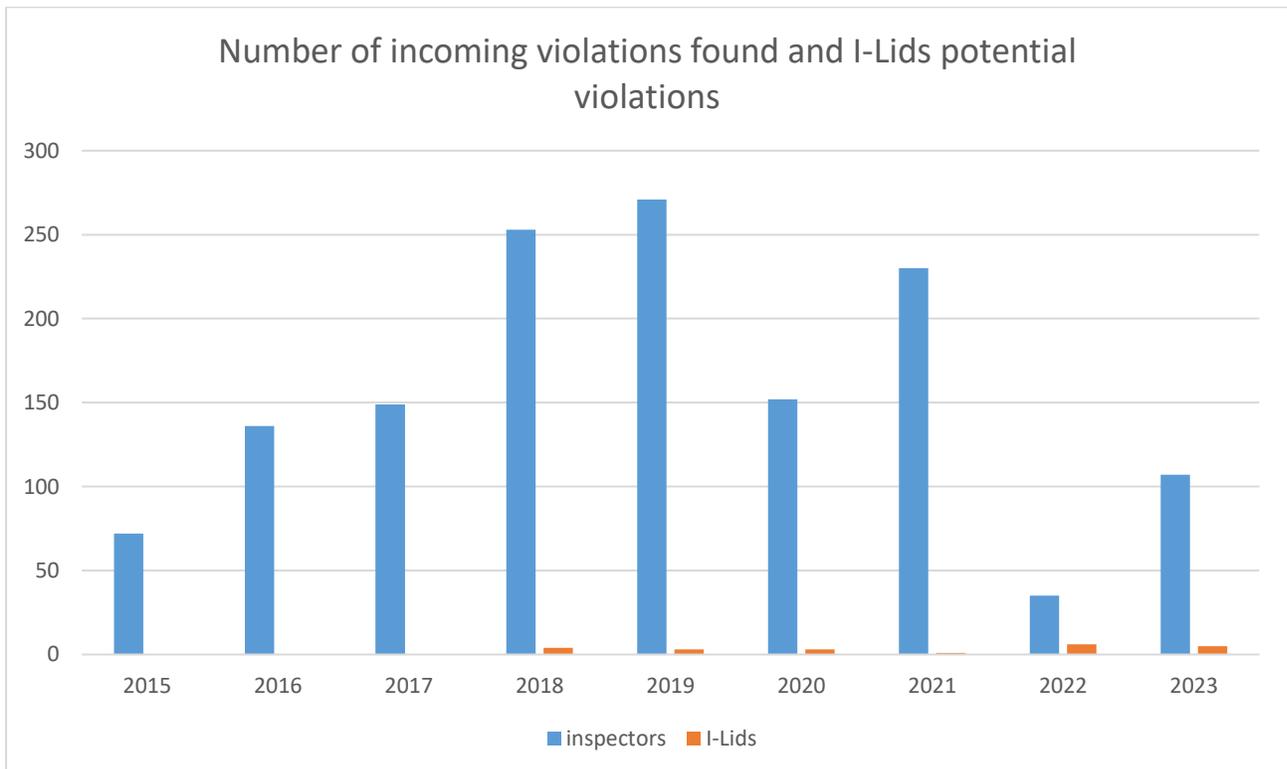
How many decontaminations were done?

Number of decontaminations	
2023 decontaminations	186
2022 decontaminations	99
2021 decontaminations	160
2020 decontaminations	183
2019 decontaminations	140

In 2023 decontaminations were up significantly compared to 2022 thanks in large part to the incentives offered at the decontamination unit. Inspectors continued to offer decontaminations to boaters even when not required as well as used a prize wheel to hand out incentives to boaters that get a decontamination. Only one decontamination unit was utilized in 2023 again after the sale of the second unit. For 2024 I plan on utilizing incentives again to give to boaters to encourage them to get a decontamination. Incentives in 2023 included purchased promotional items that were under \$5 each that displayed the clean, drain and dry message as well as \$5 gift card/certificates to a couple of local businesses that were given to the program. Inspectors will continue to be instructed to offer decontamination to as many boaters as possible and direct boaters from other accesses to the location of the decontamination unit. I will also continue to provide inspectors scenarios of when decontamination is recommended but not required to try to increase the decontamination numbers. For comparison, the DNR only completed 8 decontaminations in Kandiyohi County in 2023 primarily due to a lack of staff most of the season.

Sentry Units

Kandiyohi County also uses sentry units to provide additional surveillance of boaters as well as education and outreach to supplement inspection staff efforts. At seven lake accesses in the county there is a camera positioned to record launches and loading of water related equipment that also has a sign on it and plays an audio message to remind boaters to clean, drain and dry before leaving the access or before launching. One of these was purchased with the State AIS funds the County receives annually and six were purchased through the AIS local grants program with half of the purchase price being paid by the lake associations and the other half paid for with AIS program funds. For 2023 the lake associations that have these sentry units at their access agreed to pay half of the operational expenses for all seven of them leading to cost savings on this budget item that can be used elsewhere in the budget. For 2023 there were 5 violations that were forwarded to law enforcement, however, an additional 3 were observed but not forwarded on by Environmental Sentry Protection LLC. In 2023 an alternative was developed with our maintenance department that plays an audio message only on a motion sensor and placed at the Norway South access. This audio player is much less expensive than the sentry units and has no annual operating expense. At this time no other lake associations have spoken up about switching the sentry units to this system.



I again plan to ask if the lake associations with these sentry units at their accesses are willing to pay half of the operational expenses for 2024 similar to what was done the last three years. Previous years reports from each unit are provided to the lake associations for their consideration.

Aquatic Invasive Species Marketing and Outreach Summary

In 2023 the outreach focus remained targeted to a local audience rather than having broad regional outreach that only reached a small segment of the population to make better use of the limited amount of funds.

1. Lakeland Broadcasting (106.5 the train, 96.3 KWLM)

This was discontinued for 2023 and funding was switched to geofencing to try to reach a larger amount of watercraft users.

2. Wildlife Forever Geofencing

Geofencing was done through Wildlife Forever with ads appearing throughout the season on google and social media pages. Through this campaign the ads were seen many thousands of times and we were able to generate a total of 3,387 visits to the Kandiyohi County AIS webpage where information on the location/hrs of the decontamination unit, watercraft cleaning instructions, and other aquatic invasive species information are.

3. All-Over-Media



The Kandiyohi AIS program aggressively marketed the decontamination program and relied upon local leadership to highlight the unit. Harley Davenport, Kandiyohi resident and leader with Little Crow Anglers, still serves as the face of the program. Community Based Social Marketing focused research indicates that including a leader in program outreach increases the trustworthiness of the messaging. The AIS program used All-Over-Media again to communicate about the

decontamination program. For 2023 the advertising consisted of gas pump toppers, one sheet posters, indoor standees, and one indoor digital ad. For 2024 I plan to remove locations that do not see as much boater traffic to lower the amount spent on this budget item. We were also still unable to get any advertising a Barney's in Willmar which is a valuable location since they also sell bait and are on a major highway near lakes.

SITE NAME	CITY	Pump Top	Standee	One Sheet	Indoor Static Poster
K &J Quick Stop	Kandiyohi	X	X		
Skindeliens Bp Amoco Mini-Mart	New London	X		X	
Spicer Super Stop Inc	Spicer	X		X	
Walts In-Out Oil Change	Willmar	X		X	
Prinsburg Farmers Coop	Raymond			X	
Sunray's Coffee Pot Café	Willmar	X	X		
Pit Stop Convenience Store	Pennock	X			
Zorbaz	Spicer				X
Mels Sport Shop	Spicer	X	X		
Westside Liquor & Market	Willmar	X		X	

4. Giveaways and Outreach Materials

As part of the programming, educational and outreach materials are available for lake associations, education outfitters, bait shops, county parks, public water access sites, and community events, such as the Prairie Woods Environmental Learning Center Earth Day event.



Specimens of invasive species samples and educational displays can be borrowed and used to bolster a group's AIS outreach endeavors although no requests for these were made in 2023. The amount of promotional items purchased was reduced from previous years but boat towels which remain popular with boaters were still purchased and given away. These towels have the decontamination hotline printed on them so boaters can call to find out the location of our decontamination unit and promote the clean, drain, dry message. AIS identification cards for Starry Stonewort and Eurasian Watermilfoil purchased in 2021 were handed out by inspectors again in 2023 again as well. Typically items are distributed at the PWELC earth day event, local fishing group meetings, lake association meetings, and to boaters at the public water access sites.

5. Granting Program

Annually, the Kandiyohi AIS program provides up to 1:1 grants to community groups that are working towards AIS prevention and management. In 2023 thirteen requests with a total proposed spending of \$282,400 were approved with \$74,100 requested from AIS grant funds. Knowing the reimbursements often come in less than the approved requests the full amount requested was approved even though it was more than the amount budgeted. These funds supported school-age educational programming, upgrades to the DNR fair display, treatment of curly-leaf pondweed and Eurasian watermilfoil, and lake surveys.

6. Independent Educator

We are also still working with Randy Fredrickson, a former local teacher, to educate 7th grade students on aquatic invasive species. The program is curriculum based to fit within the current class programming. In 2023 the New London/Spicer school did not allow Mr. Fredrickson to present to their classes. A new teacher was unfamiliar with the curriculum but Mr. Fredrickson has communicated with the teacher on it in hopes his curriculum can be presented in future years. We are planning on contracting again with Mr. Fredrickson for 2023 with hopes that he will be able to deliver the curriculum to both Willmar and New London schools again although Mr. Fredrickson has expressed a desire to move on to other things and has begun a search for someone to take over the program.

7. WRAC Community Service Announcements

In 2023 community service announcements were again placed on the Willmar Community Access channel to inform the public of the hours and location of the decontamination unit. Since this was free to do the value of this was good but it is not known how many boaters this reached or what the impact was.

8. Tools at the access

For 2023 five more aquatic weed removal stations were built for a total of seven and placed at the busiest accesses. These consist of a post with a sign and an aqua weed stick attached with thirty feet of cable so boaters can remove any weeds or aquatic species from their watercraft. The sign also has a QR code that boaters can use their phone to scan with the camera and be taken directly to the Kandiyohi County AIS webpage where there are a basic set of instructions on how to inspect and clean their watercraft and the decontamination hours and location are posted. These are very inexpensive compared to other options since they are put together by myself and the highway department makes the sign for us and appear to be used fairly regularly.



9. Norway Lake audio player

For 2023 a motion activated audio player was developed with help from the Kandiyohi County maintenance department to replace the sentry unit that had been there since the lake association decided they would rather spend their funds on treatment of current invasive species rather than sentry unit operational expenses. The audio player is mounted on a post similar to the aqua weed stick stations so it can be put in storage for the winter. No video is collected by this so it just plays an audio message to remind boaters to clean their water related equipment when entering and leaving and to make use of the aqua weed stick station if needed when a boater pulls onto the ramp. I received feedback from the inspectors and neighbors to the access on this and had the maintenance department make adjustments to it to it during the season. More feedback from the public could help to fine tune the audio player. The audio player has a much lower initial cost than the sentry units and does not have an annual operational expense making this a much less expensive option than the sentry units. If other lake associations would like one or would want to replace their sentry unit with one they could be built and installed.



What didn't work?

1. Sentry Units. The sentry units found five potential violations in 2023 but still remains much lower compared to the inspectors. In addition to this there was another three potential violations they noted but did not forward to law enforcement. The cost per violation found remains much higher than the inspectors as a result. This is important since this was the intended purpose of them and each contact with a boater due to a found violation is a valuable time for education with the boater. These have been in place for nine years with only a total of 27 potential violations reported to date. With so few potential violations found each year it is not often boaters are contacted by law enforcement and educated on the aquatic invasive species laws or receive a citation. Typically these few cases only result in education for the boaters since in MN camera footage cannot be used to issue a citation unless the condition is still present when law enforcement investigates. With half of the annual operational expenses paid for by lake associations for these it was possible to shift some of the funds to other areas of the budget and make better use of the funds. At this time no other lake associations have expressed interest in discontinuing use of them or switching to an audio only player like at the Norway South access so it is planned at this time to place all seven at the accesses again in 2024.

What can be improved?

1. Use of the decontamination unit. Even though decontaminations were up greatly from the previous year there are areas where more decontaminations can be done such as wake boats with ballast. We will continue to offer decontamination to as many boaters as possible and offer incentives to get a decontamination encourage the more reluctant or complacent boaters to take advantage of this service and keep the number of decontaminations done as high as possible. Reminding inspectors of when to recommend decontamination to boaters will also continue to be done again to try to increase the numbers. Temporary signage at the decontamination units will also be utilized when possible to increase the awareness of them to boaters.
2. Education. Carry-over funds from previous years allowed us to expand gas station advertising and make the switch to Geofencing in 2023 although I believe some of the gas station ads are not as cost effective or necessary as others and plan to reduce the number of these for 2024. I also plan to reduce how much is spent on Geofencing a small amount.

In school student education was done in 2023 but only in Willmar Middle School. I am hoping the contacts Mr. Fredrickson made in 2023 will help to be able to incorporate his program at the New London school again in the future. Mr. Fredrickson is also still attempting to find someone to take over the program for future years.

3. Inspection rate per hour. Inspection rate was up in 2023 from the previous year but some inspection shifts were at locations that are known for not being as busy as others so can be improved some. For 2024 I will try to keep a higher number of inspection shifts during peak boating hours or during evening and weekends. Maintaining the focus on the busiest accesses and continued use of shorter shifts where possible to match boater activity should help to at least keep the rate of inspections per hour as high as possible to maximize the effectiveness of the staff. Inspection shifts again will not start earlier than 7am all season again since past data shows less inspections and very few decontaminations occur prior to 7. I do feel there is a limit to how high the inspection rate overall can get though since some lakes do not see the volume of boaters other do but are still important to staff with inspectors. I also plan on hiring a slightly smaller number of inspectors for 2024 so that should also help to keep the inspection rate higher.