



Aquatic invasive species (AIS) are non-native plants and animals that have been introduced accidentally or intentionally into our lakes and rivers. As a new species to our area, they encounter little or no natural predators. AIS reproduce rapidly and often outcompete our native species for resources. They can drive out and eat native plants and wildlife, spread diseases, and damage infrastructure.

The Itasca County Aquatic Invasive Species Program was created in 2014 to combat the introduction and limit the spread of aquatic invasive species in Itasca County. Under MN Statute 477A.19, Itasca County receives its share of \$10 million distributed to MN counties annually to fight AIS. It is up to individual counties to make decisions on how the funds are to be used while still abiding by all current laws and regulations. Itasca County through a cooperative agreement, allocates these funds received to the Itasca Soil and Water Conservation District.

In a January 25, 2023, article, the Herald Review reported that “in Itasca County tourism is a \$75 million industry that employs more than 1,200 people. The spin-off economic impact of tourism is another \$25 million.” Aquatic invasive species can cause tremendous harm to our environment, our economy, and our health. Tourism, property values and recreational use of our waters in Itasca County are threatened by AIS.

This document is the report of what the Itasca SWCD AIS Program accomplished in 2023 in its fight against the introduction and spread of AIS in Itasca County and was presented to the Itasca County Board of Commissioners by Bill Grantges, Itasca County SWCD AIS Program Manager on March 19, 2024.



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Itasca County’s SWCD AIS Prevention Aid Program: A Snapshot of Accomplishments in 2023

Program Summary

Our year round and seasonal aquatic invasive species (AIS) staff implement a five-part program designed to fight the spread of AIS on multiple fronts. Our Prevention program is focused on Watercraft inspections, decontaminations, and access site improvements. Our Control & Monitoring program specializes in the early detection and control of invasive species populations in the lakes and rivers of Itasca County. Another method we use to fight AIS is the Community Action Projects (CAP) grant program. This grant program provides matching funds for Itasca residents that have a good idea on how to fight the spread of AIS. The Awareness & Training program provides public outreach. Perhaps the least visible but equally important program we have is with Itasca County. The support we receive from our County Commissioners and the Environmental Services department make it possible for us to offer one of the best AIS programs in the State.

Category	Metrics
	<p>AIS Prevention Aid Used \$ <u>637,592</u> AIS Prevention Aid used this calendar year (all State AIS Aid to Itasca). \$ <u>100,000</u> saved in a contingency fund.</p>
	<p>People Dedicated to AIS Work</p> <ul style="list-style-type: none"> <u>2</u> full-time staff with <u>100</u> % of their time dedicated to AIS work. <u>3</u> part-time and seasonal staff with <u>100</u> % of their time dedicated to AIS work (<i>Staff other than inspectors that work seasonally</i>) <u>32</u> total watercraft inspectors, including: <ul style="list-style-type: none"> <u>17</u> trained as Level 1 and <u>15</u> trained as Level 2. <u>\$426,196</u> spent on staff wages. <u>95</u> volunteers conducted AIS work. <u>1,100</u> volunteer hours served
	<p>Partnerships Created and Maintained</p> <p>Local organizations engaged and/or actively conducting aid-funded AIS work:</p> <ul style="list-style-type: none"> <u>15</u> lake associations <u>2</u> conservation nonprofits and/or outdoor groups (e.g., angling, hunting, paddling, sailing, etc.) <u>3</u> schools and/or youth organizations <u>17</u> businesses <u>3</u> local governments <u>1</u> tribal government <p>Yes, our county has an AIS Task Force or Committee</p>
	<p>Funds Distributed, Contributed and Leveraged</p> <ul style="list-style-type: none"> \$<u>42,387</u> of AIS Prevention Aid awarded as grants to other organizations. <u>9</u> organizations awarded grants. \$<u>47,477</u> in funds contributed by other organizations that directly support aid-funded work. <u>10</u> organizations contributing additional funds. \$<u>15,000</u> in other funds leveraged from USFS RAC
	<p>Communities Engaged</p> <ul style="list-style-type: none"> <u>66</u> events were held about AIS or that included AIS topics. <u>10,000</u> residents and visitors directly contacted/engaged about AIS during events. <u>1,200</u> children were taught about AIS.

Category	Metrics
	<p>812 commitments gathered. \$5,000 of aid spent on advertisements (billboards, TV, radio, newspaper, social media, etc.)</p>
 <p>Watercraft Inspected</p>	<p>\$445,568 spent on watercraft inspection including: \$414,568 in AIS Prevention Aid \$31,000 in other funds leveraged from 5 organizations. 27,133 inspections performed. 16,971 hours of inspections were performed. 34 accesses covered by inspectors. 19 water bodies were covered by inspectors. 97% of watercraft are recorded as arriving with drain plugs out. 99.5 % of watercraft are recorded as arriving free of aquatic plants. 5 decontamination units (hot water, high pressure) operated by Level 2 inspectors. 422 decontaminations were performed. 100 boaters engaged by AIS Volunteers/Ambassadors at water accesses. 7 water bodies with cleaning tool stations maintained at 6 water accesses</p>
 <p>Monitoring Conducted</p>	<p>87 total lakes and 6 Miles of rivers (3 Rivers) surveyed for AIS. Surveys included: 90 early detection searches on 90 water bodies 36 zebra mussel settling plates deployed on 36 water bodies. 43 veliger tows taken on 6 water bodies. 5 new detections in the county. (3 New Zebra Mussel Infestations, 1 New Starry Stonewort Infestation, 1 New Purple Loosestrife Infestation) 42 volunteers trained and/or active as AIS Detectors 15 people participated in the University of Minnesota Extension and Minnesota AIS Research Center’s “Starry Trek” event. List of species targeted for monitoring or surveys: Zebra Mussels, Starry Stonewort, Eurasian Watermilfoil, Curly Leaf Pondweed, Flowering Rush, Purple Loosestrife</p>
 <p>New Infestation Response Planned</p>	<p>4 coordinated response(s) to a new AIS population(s) Our county has a response plan developed in 2014 that is updated yearly.</p>
 <p>AIS Controlled</p>	<p>\$25,779 spent on in-lake/river control of AIS, including: \$10,779 in AIS Prevention Aid \$15,000 in other funds leveraged from U.S. Forest Service (RAC Grant for Purple Loosestrife Control within the Chippewa National Forest). 4 groups involved or conducting aid-funded control activities. 64 total water bodies / sites with aid-funded control activities, including: 5 water bodies with invasive aquatic plant management 64 sites with purple loosestrife management where 99,890 biocontrol beetles were released. 50 Lakes / sites with Herbicide Applications for Purple Loosestrife management. List of species controlled: Eurasian Watermilfoil, Curly Leaf Pondweed, Flowering Rush, Purple Loosestrife.</p>

Program Spending Summary

Budget Category	AIS Prevention Aid Spent by the County in 2023	AIS Prevention Spent by Local Grantees in 2023	In-Kind Funds Contributed in 2023	Description
Public Outreach and Education	\$36,944	\$250	\$1,511	Awareness & Training Program
Watercraft Inspection Enforcement	\$445,568	\$31,000	\$0	Inspections and decontaminations
Early Detection/Monitoring	\$25,087	\$0	\$0	Early Detection Surveys, Mapping of known AIS Infestations
New Infestation Response	\$1,980	\$0	\$0	New Infestation Investigation / Mapping
AIS Control	\$22,138	\$0	\$15,000	Conducting AIS Management Projects
CAP Grants	\$49,536	\$0	\$42,730	Matching grants for Itasca residents
Capital Equipment	\$39,624	\$0	\$0	Watercraft, SCUBA Gear
Personnel – Full time (not captured above)	\$68,211	\$0	\$0	Bill Grantges, AIS Program Manager Chris Evans, AIS Specialist
District Admin Costs	\$14,550	\$0	\$0	
Itasca County	\$3,000	\$0	\$0	
Totals	\$638,427	\$31,250	\$75,752	

Plans for 2024

Prevention Program

- Watercraft inspectors will receive additional training on AIS identification as well as topics including:
 - what happens to a lake after it is infested.
 - Teaching watercraft owners how to clean their boats and the not so obvious places AIS hides.
 - Conflict resolution.
 - De-escalation techniques.
- Thanks to funding from a USFS BIL grant, the information kiosks at Plug Hat landing on Winnibigoshish, and Mosomo landing on Cut Foot Sioux will be redesigned and replaced. We will be partnering with the Leech Lake Band of Ojibwe, the USFS and the MN DNR to finalize the design, layout, and placement of the new kiosks.
- We will have 17 high priority lakes with a total of 27 landings where we will station watercraft inspectors. Many of those lakes will have coverage 10 hours a day, seven days a week. Two of the 6 thermal decontamination stations we will have in operation for 2024 will have a minimum of 9 fixed hours per day, 7 days a week. A 3rd thermal decontamination station will be manned 10 hours a day, Friday-Sunday. Our 6th decon station is located at our SWCD office and is available 7 days a week by appointment. This station is used primarily to decontaminate daily all Itasca SWCD watercraft and equipment that was used in any of our county’s waters.
- Our decontamination training program for Lake Service Providers and Fishing Guides will be expanded. This program offers special training on hot water decontaminations, and how to use the Deer Lake permanent decontamination station. Once trained, coded access to the station will be issued for 24 hour use.
- Simple, low cost AIS cleaning stations will be installed on infested lake access points that include public landings, resorts, campgrounds, and private accesses. Cost per unit is estimated at less than \$100. The station is made up of a metal sign with instructions on how to use the provided long handled brush, 3’ reach picker/grabber, universal drain plug wrench and an Aqua Stick scraping tool.
- Expand inspector coverage to include Dora Lake due to the recently discovered Starry Stonewort infestation.

Control & Monitoring Program

- SCUBA will be added as another tool for the Control & Monitoring program to use in 2024. This will improve the accuracy and efficiency of early detection surveys, as well as provide the means to implement control measures on submergent invasive plants.
- The Itasca AIS Program will join the AIS Detectors Spiny Surveillance and Early Detection Project in 2024.
- We will be conducting intensive searches on Docks/Lifts in the Fall once they are removed from the water.

Awareness & Training Program

In 2024 we plan to have a manned booth with AIS activity stations at many public events including:

- Jaycees Home & Sport Show-IRA Civic Center:
- Children's 1st Children Fair- Grand Rapids H.S.
- 5th Grade Youth Water Summit, County Fair Grounds
- Nashwauk 4th of July Parade
- Tall Timber Days- Grand Rapids, 2 days, education tent on Saturday, Parade on Sunday.
- County Fair- County Fair Grounds Commercial Building, 5 days
- Starry Trek

2023 Highlights

- In the fall of 2023, we had great success locating new infestations of Zebra Mussels by inspecting docks and boat lifts as they were being removed from the water for the winter. We plan to continue using this method in 2024 and beyond as an effective Zebra Mussel detection strategy.
- June 23-24, Labs to Lakes: A MAISRC Regional Workshop was held at the Cedar Lakes Casino in Cass Lake. We partnered with a diverse group of regional partners to offer this two day event. Partners included: MAISRC, Minnesota Lake & Rivers, UofM AIS Detectors Program, MN DNR, Minnesota Coalition of Lake Associations (MNCOLA), The Red Lake Band of Chippewa, The Leech Lake Band of Ojibwe, The Association of Cass County Lakes (ACCL), Beltrami County AIS, Leech Lake Association, Cass County SWCD.
- Over 800 watercraft owners in Itasca County participated in the MN DNR "Take The Pledge Program". and Free boat wash banners. Take the Pledge program. Itasca AIS Watercraft Inspectors explained the program to watercraft owners at public water access sites and asked them to Take The Pledge. The Pledge asks you to demonstrate your commitment and care to prevent the spread of AIS in Minnesota by always taking these steps to prevent the spread of aquatic invasive species:
 - Clean my boat and gear to remove plants and prohibited invasive species.
 - Drain all water and leave plugs out during transport.
 - Dispose of unwanted bait in the trash.
 - Never release bait, plants, or aquarium pets into Minnesota waters.
 - Dry docks, lifts and rafts for 21 days before moving them from one water body to another.
 - Taking these additional steps whenever possible: Decontaminate my equipment; Spray my equipment with high-pressure water or rinse it with very hot water; Dry my boat and gear for five days before using in another water body.

Success Stories

Our program has worked to provide AIS identification training to resort owners, fishing guides, and anyone else interested in learning. In 2023, a resort owner on Jessie Lake who was trained in AIS Identification discovered a new Zebra Mussel infestation as they were removing their watercraft and docks from the lake in the fall.

Multi-County Collaborations

- The Itasca SWCD AIS program worked with staff from the MN DNR and Leech Lake Band of Ojibwe to increase the biological control efforts for Purple Loosestrife throughout northern Minnesota. Our AIS field crew collected and donated a total of 20,830 Purple Loosestrife Defoliating Beetles to the MN DNR and the LLBO to be distributed among dense infestations. Collectively, the three agencies released a total of 99,890 beetles in 2023.
- The June 23-24, Labs to Lakes: A MAISRC Regional Workshop mentioned in the 2023 Highlights section above.
- We joined several other counties in the purchase of several thousand 36” picker/grabbers. We distributed 240 grabbers to watercraft owners at public water access sites and the County Fair.

Reports and Products

Prevention Program

2023 Season Incoming Violation Rates			
Type	Count	% of all Incoming	% of Incoming Violations
Plug in	443	3.0%	86%
Plants	72	0.5%	14%
Mud	1	0.0%	0.19%
	516	3.44%	100.00%

All Incoming	# From Infested Lakes	% of All Incoming
15,008	3,633	24%

Of the 3,633 entering from an infested lake:		
Time out of Water	Count	% of incoming from infested lake for that time
Less than 24 hours	982	27.0%
1 to 4 days	872	24.0%
5 days or more	1,768	48.7%
Unknown	11	0.3%
	3,633	100.0%

Prevention Program (continued)

Itasca County SWCD AIS Program								
Inspections per Landing 05/11/23 through 10/14/23								
Landing	Inspections	Decons	In	Out	Hours		Inspections Per Hour	
					Coverage	Man	Coverage	Man
Bowstring NE 31-081201	1,047	8	510	537	618.5	640.5	1.6	1.6
Bowstring NW 31-057603	20	-	15	5	-	-	-	-
Bowstring S 31-057602	530	2	263	267	503.5	514.5	1.0	1.0
Cut Foot Sioux (31-085700)								
Mosomo 31-085703	3,075	185	1,520	1,555	1,526.5	1,911.5	2.0	1.6
Deer 31-071900	3,271	61	1,795	1,476	1,551.0	1,665.0	2.1	2.0
Island 31-091301	850	-	566	284	748.0	748.0	1.1	1.1
Jay Gould Boswell	33	-	10	23	-	-	-	-
Jessie 31-078600	121	-	69	52	116.5	116.5	1.0	1.0
Maple	79	-	48	31	-	-	-	-
North Star 31-065301	303	2	154	149	355.0	375.0	0.8	0.7
Pleasant	2	-	1	1	-	-	-	-
Pokegama 31-053200								
Kings 31-053202	1,212	-	696	516	670.5	678.5	1.8	1.8
LaPlant	10	-	4	6	13.0	13.0	0.8	0.8
Mishawaka 31-053203	1,250	-	738	512	550.0	570.0	2.2	2.1
Sherry's Arm 31-053207	851	6	492	359	364.5	384.5	2.2	2.0
Tioga 31-053201	3,082	132	1,696	1,386	1,491.5	2,308.8	2.1	1.3
Trooptown	28	-	27	1	-	-	-	-
Wendigo Arm	17	-	7	10	-	-	-	-
Round N 31-089602	975	-	590	385	662.5	665.5	1.5	1.5
Round E	2	-	-	2	-	-	-	-
Sand 31-082600	440	2	233	207	502.0	502.0	0.8	0.8
Spider 31-053800	168	-	87	81	132.5	132.5	1.3	1.3
Splithand 31-035300	801	-	401	400	306.0	332.0	2.6	2.4
Swan 31-006700	2,046	-	1,112	934	783.0	803.0	2.6	2.6
North Twin 31-019000	15	-	10	5	-	-	-	-
Trout N 31-021601	668	-	386	282	400.0	440.0	1.7	1.5
Trout W 31-021602	99	-	53	46	85.0	85.0	1.2	1.2
Turtle 31-072501	801	-	463	338	919.5	944.5	0.9	0.9
Wabana NW 31-039202	1,342	-	830	512	807.5	827.5	1.7	1.6
Wabana SE 31-039201	1,011	-	574	437	629.5	639.5	1.6	1.6
Wabana Town Hall	4	14	1	3	360.0	370.0	0.0	0.0
Winnibigoshish (11- 014700)								
Plughat 11-014701	2,980	10	1,657	1,323	993.0	1,304.0	2.8	2.2
Totals	27,133	422	15,008	12,125	15,089.0	16,971.3		

*** Inspections/Hour calculation does not include DNR inspections or DNR hours**

Control & Monitoring Program

Lake Name	Early Detection Surveys	IAPM Projects	Veliger Settling Plates	Plankton Tows
Arrowhead – 31080500	√			
Balsam – 31025900	√	√	√	
Barwise – 31027800	√	√		
Bass – 31057600	√	√	√	
Batson – 31070400	√			
Bello – 31072600	√			
Biauswah – 31086200	√	√		
Bigfork River – (Wirt Area)	√	√		
Big Island – 31067100	√			
Blandin Reservoir – 31053300	√	√		
Blind – 31041800	√	√		
Bluewater – 31039500	√		√	
Bower – 31005200	√	√		
Bowstring – 31081300	√	√		
Bray – 31014700	√	√		
Buck - 31006900			√	
Burns – 31065400	√			
Burrows – 31041300	√			
Caribou – 31062000	√		√	
Clubhouse – 31054000	√	√	√	
Coon / Sandwick – 31052400	√			
Cottonwood – 31059400	√			
Crooked – 31019300	√	√		
Crystal – 31037200	√	√		
Cutfoot Sioux – 31085700	√	√		
Deer River - W Deer Lk Rd to Clara DR	√	√		
Deer - 31071900	√	√	√	√
Deer – 31033400	√		√	
Dora – 31088200	√			
Dunbar – 31090400	√	√		
Eagle – 31045400	√	√	√	
East Smith – 31061600	√	√		
Forest – 31037400	√	√		
Grave – 31062400	√		√	
Hale – 31037300	√	√		
Hatch – 31077100	√	√		

Lake Name	Early Detection Surveys	IAPM Projects	Veliger Settling Plates	Plankton Tows
Hartley – 31015400	√	√		
Holman – 31022700	√	√	√	
Island – 31075400	√			
Island – 31091300	√		√	√
Jay Gould – 31056500	√			
Jessie – 31078600	√	√	√	
Johnson – 31058600	√	√	√	
LaRue Mine Pit – N/A	√	√		
Lawrence – 31023100	√		√	
Leighton – 31073900	√	√		
Little Bowstring – 31075800	√		√	
Little Jay Gould – 31056600	√			
Little Jessie – 31078400	√		√	
Little Long – 31061300	√	√		
Little Sand – 31085300	√			
Little Splithand – 31034100	√		√	
Little Trout – 31039400	√			
Little Turtle – 31077900	√	√	√	
Little White Oak - 31074000		√		
Little Winnibigoshish – 31085000	√			
Long – 31057000	√	√		
Loon – 31057100	√	√		
Lower Balsam – 31024700	√	√		
Lower Lawrence – 31023800	√	√		
Maple – 31055200	√	√	√	
McKinney – 31037000	√	√		
Middle Pigeon - 31089200			√	
Mike's – 31096600	√	√		
Mississippi River – GR to LaPriarie	√	√		
Moose – 31072200	√	√	√	√
Moose – 31089800	√			
Napoleon – 31029000	√	√		
North Star – 31065300	√			
North Twin - 31091300			√	
O'brien Reservoir – 31003200	√	√		
Pokegama – 31053200	√	√		

Control & Monitoring Program (continued)

Lake Name	Early Detection Surveys	IAPM Projects	Veliger Settling Plates	Plankton Tows
Portage - 31082400		√		
Prairie – 31038400	√	√		
Prairie River – Hwy 2 Bridge to Miss.	√			
Rice – 31071700	√	√		
Round – 31089600	√	√	√	√
Ruby – 31042200	√			
Rush Island – 31083200	√		√	
Sand – 31082600	√	√		
Sand – 31043800	√	√		
Shallow – 31084000	√		√	
Siseebakwet – 31055400	√		√	√
Smith – 31065000	√	√		
Snaptail – 31025500	√	√		
South Sugar – 31055500	√	√		
Spider – 31053800	√	√	√	
Splithand – 31035300	√		√	√
Swan – 31006700	√	√	√	
Thistledeew - 31015800			√	
Tioga Pit – 31094600	√			
Trout – 31021600	√	√	√	
Trout – 31031041300	√	√	√	
Turtle – 31072500	√	√	√	
Twin – 31002600	√	√		
Wabana – 31039200	√		√	
Wasson – 31028100	√	√		
Whitefish - 31084300			√	
Winnibigoshish - 31014700		√		

In 2023:

- Approximately 2,200 staff hours were spent in the field conducting early detection surveys and implementing AIS management plans.
- Control & Monitoring crews surveyed a total of 701 Miles of Shoreline (Lakeshore and River Miles Combined).

Photos of AIS Activities

Photo Credit: Chris Evans – Itasca SWCD

Juvenile Zebra Mussel attached to a native Mussel, Jessie Lake



A size of the Zebra Mussels found in Jessie Lake



1st 2 Zebra Mussels found on Turtle Lake attached to dock wheels



Members of the Itasca SWCD AIS Control & Monitoring Crew mapping Starry Stonewort on Dora Lake



Photos of AIS Activities (continued)

Photo Credit: Bill Grantges – Itasca SWCD

Tall Timber Days education tent
Itasca SWCD AIS Awareness & Training Program



Tall Timber Days Parade
Itasca SWCD AIS Prevention Program

