

Making a Difference with Aquatic Invasive Species Prevention Aid

A Snapshot of metrics and accomplishments in 2022

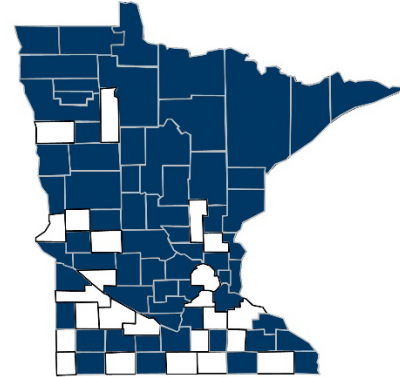
Overview

Minnesota Counties receive \$10 million in Aquatic Invasive Species (AIS) Prevention Aid from the Department of Revenue each year. Their programs are diverse, cover a spectrum of activities and are at different stages of development and implementation. Through feedback from counties, the Minnesota Department of Natural Resources (DNR) developed a template list of metrics to provide a standardized way for local governments and their partners to voluntarily track their AIS Prevention Aid accomplishments. The metrics template aims to track measurable achievements and impactful stories of success. It may be used by counties to show their local residents, stakeholder groups, boards and elected officials how they are making a difference in their communities.

The DNR asked counties to provide values for each applicable metric, leave blank or delete metrics that do not apply to their program, and share stories of success. Overall, local program managers found value in this exercise. They were able to select metrics that reflected the unique work of their programs in 2022 and they got ideas for future metrics to track. It was an opportunity to show their work and populate baseline data. It got them thinking about accountability and how to best evaluate their programs. The experience and information gathered will also help them continuously improve their programs, in conjunction with established plans, resolutions, budgets and reports.

Individual county reports can be requested from county AIS contact(s). The DNR collected and compiled the data presented here. This summary is not a complete picture of all funds used in 2022, because some counties have rollover funds from previous years, did not use all funds received in a given year, or didn't submit metrics. Further, counties track information in different ways based on the needs of their program.

63 of the 83 counties receiving AIS Prevention Aid voluntarily completed and submitted metrics for their 2022 programs. This accounts for 76% of the counties receiving AIS Prevention Aid funds and 86% of the funding received in 2022.



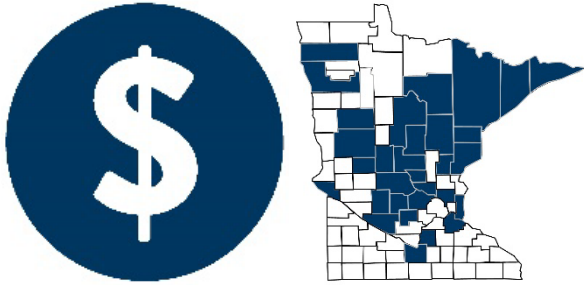
Participating Counties: Aitkin, Anoka, Becker, Beltrami, Benton, Big Stone, Blue Earth, Carlton, Carver, Cass, Chisago, Clay, Cook, Cottonwood, Crow Wing, Dakota, Douglas, Houston, Hubbard, Itasca, Kanabec, Kandiyohi, Kittson, Koochiching, Lac qui Parle, Lake, Lake of the Woods, Le Sueur, Lincoln, Mahnommen, Marshall, Martin, McLeod, Meeker, Morrison, Mower, Murray, Nicollet, Nobles, Olmsted, Otter Tail, Pennington, Pine, Polk, Ramsey, Red Lake, Saint Louis, Renville, Roseau, Sherburne, Sibley, Stearns, Steele, Stevens, Swift, Todd, Wabasha, Wadena, Washington, Watonwan, Wilkin, Winona and Wright.

The results displayed on the following pages summarize metrics from the 63 participating counties and highlight a majority of 2022 activities funded by AIS Prevention Aid. Photos and text in this document were provided by the counties, as credited in the captions.

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Funds Used and Leveraged



Map: 31 counties have grant programs

Funds Received in 2022

\$8,592,981

Funds Used in 2022

\$8,406,842

Funds Saved in a Contingency Fund

\$1,483,427

By **34** counties over multiple years for a variety of activities.

Funds Distributed as Grants

(AIS Prevention Aid to other organizations)

\$1,906,020 awarded to 200 organizations

Additional Funds Leveraged to Directly Support Aid-Funded Work

\$1,269,578 contributed by 159 organizations

AIS program managers reported implementing a variety of activities: 97% of reporting counties conducted public engagement activities, 71% conducted monitoring, 60% conducted watercraft inspections, and 43% funded invasive aquatic plant management.

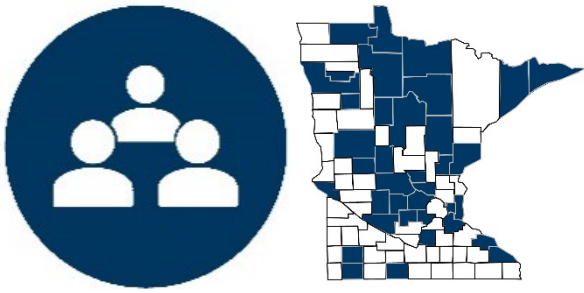
Many counties combine some of their funds and resources to implement regional and multi-jurisdictional efforts such as advertisements, education, research, inspections, management, coordination meetings, etc. Here are some examples shared by reporting counties.

Multi-jurisdictional Collaborations

- Clean Drain Dry Billboards (Becker, Otter Tail, Douglas, and Grant).
- Linder’s Angling Buzz sponsorship (15+ counties).
- Cabin Cast advertisements through Wildlife Forever.
- Mississippi Headwaters Board’s Minnesota Traditions social media campaign.
- Radio and digital outreach campaign (Wabasha and Goodhue).
- Bait bags with “Don’t Let it Loose” messaging through Wildlife Forever (18+ counties).
- Counties sharing inspectors across jurisdictions: Beltrami and Clearwater; Koochiching, North St. Louis County SWCD and Voyageurs National Park; Lake of the Woods and Roseau; Ramsey and Washington.
- Cass County assisted the Leech Lake Band of Ojibwe (LLBO) and Minnesota Aquatic Invasive Species Research Center to set-up monitoring plots for starry stonewort research as well as assisted the LLBO with diver-assisted suction harvesting of starry stonewort in the Mississippi River and Leech Lake.
- For biological control of purple loosestrife, Itasca County in collaboration with the LLBO released 10,435 *Galerucella* beetles and donated 3,300 beetles to Cass and Lake counties.
- Northwest Minnesota Water Festival for 600+ fourth grade students (Kittson, Marshall, Pennington, Red Lake, Polk, Norman and Mahnommen).
- Isanti County, University of Minnesota, and Sherburne SWCD surveyed areas of the Rum River for potential non-native phragmites. Two separate, small and very recently introduced populations were identified and managed through a rapid response action.
- Otter Tail County facilitated a virtual gathering of northern Minnesota AIS program coordinators, with the goal of sharing ideas and improving collaboration. We plan to host monthly check in meetings with the partners going forward and welcoming additional programs to the gatherings. The goal is to develop a statewide network of AIS professionals.
- Cook, Lake and St. Louis counties placed approved signs at Boundary Waters Canoe Area Wilderness entry points.



People Doing AIS Work



Map: 35 counties have an AIS Task Force or Committee

1,350 people doing AIS work, included:

Staff Supported

97 full-time staff with an average of 33% of their time dedicated to AIS work

46 part-time or seasonal staff with an average of 48% of their time dedicated to AIS work

501 Level 1 Inspectors

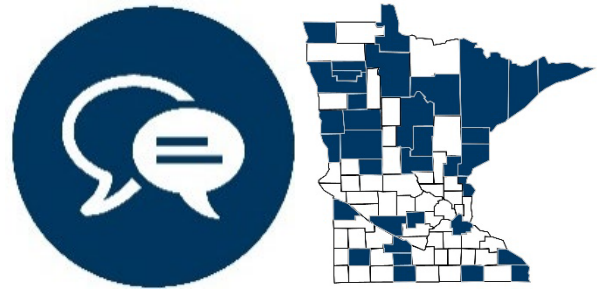
102 Level 2 Inspectors

Volunteers

604 served 5,581 hours

Many AIS program managers wear multiple hats. AIS duties are just one of many of their daily responsibilities. Of the 54 counties reporting on staffing, only 11 staff have 90-100% of their full-time jobs dedicated to AIS work. A majority of full-time staff focus less than 50% of their time on AIS.

Community Engagement



Map: 34 counties worked with youth

Partnerships

285 Lake Associations

41 Conservation Groups

84 Schools and Youth Groups

253 Businesses

145 Local Governments

AIS Public Education Events Held

289

People Engaged During Events

38,913

Social Media

472 posts seen by 192,198 followers

Funds Spent on Paid Advertisements

\$346,958

Youth Engaged

13,386 children taught about AIS

St. Louis: "In past years, St. Louis County has prepared a report that outlines projects, work performed, and statistics of work. The reports identify the accomplishments of the projects. The [2019-2020 AIS Annual Report](#) is the most recent report."

Morrison: "In 2016, Morrison County created an AIS Partnership Grant available to lake associations and lake improvement districts to help fulfill their efforts in battling AIS. This program has been effective in providing a range of opportunities for our existing lake associations to bolster the efforts of AIS education and prevention."

Community Engagement Continued

Becker: “We continued the “Linder’s Angling Buzz” sponsorship with a group of 15 counties. This partnership has sponsored an AIS message on the “Angling Buzz” program since 2016.”

Wilkin: “Wilkin SWCD worked with the local sportsman’s club and attended the fishing derby’s to provide AIS education to anglers. We also attend a presentation in grade school in which kids describe an aquatic invasive species. Along with the local DNR we ask questions to the presenters on how to deal and prevent the spread of these species.”

Blue Earth: “Promotional items (Can coozies, towels, and ice packs) were purchased and distributed by local lake associations, at water accesses and at a regional fishing tournaments.”

Watsonwan: “We reached out to a number of people at the county fair as we had our interactive game at our booth, but also brought it the Prairie Ecology Bus with AIS stuff for people to check out. From what they said, there were about 500 people who went through it during the 6 hours they were there.”

Renville: “On May 18, 2022 Renville County Parks held an Outdoor Education Day. The event was held in Bever Falls County Park. There were 175 students in attendance and 50 chaperones. The goal of the event was to expose students to the county parks and outdoor activities while educating them on a variety of environmental and safety topics. AIS was one of the topics that was presented to the students.”

Murray: “Murray County installed Internet Landing Installed Device Sensors (I-LIDS) on two watercraft accesses on Lake Shetek this year to assist in preventing the spread of zebra mussels to neighboring lakes. The I-LIDS also play an audio message that serves as a reminder to Clean, Drain and Dry. In the 4,800 videos viewed between the 4 I-LIDS, no violations were found.”

Houston: “Educating the youth of Houston County on the importance of protecting our natural resources continues to be a priority for the Root River SWCD. Each year they host an environmental day for the sixth graders in Houston County. Aquatic invasive species is one of the highlighted topics of this event. This year a neighboring SWCD educated 214 students about native and invasive aquatic species.”

Mower: “Going to spend most of our annual AIS funding to Mower County on hosting the week-long Canoemobile program put on by the nonprofit Wilderness Inquiry. With this program, we usually get around 700 children in 4-6 grades from Mower County and two cities outside of the county but in the Cedar River watershed to learn about AIS, water quality and other things while also paddling in 10-person canoes on the Cedar River State Water Trail. Many of our local kids have never been on the water so this is a great way to give them that experience safely while also emphasizing how to be good water stewards, including helping to prevent the spread of AIS.”



Marshall: “Marshall SWCD sponsors NCOR Guide Service with AIS Prevention Aid. NCOR Guide Service wraps their vehicle/boats with AIS prevention messages. NCOR Guide Service’s suburban, tracker, and boat act as a moving billboard/reminder to boaters at the lake to clean, drain, and dry. As a part of this sponsorship, NCOR also posts about clean, drain, dry on his Facebook page and includes segments about the local importance of AIS prevention and clean, drain, dry in his YouTube videos. In a typical year, NCOR Guide Service will appear in local parades and present about AIS prevention at local youth education events.”



Aitkin: “Design for the towels handed out to lake users (Approximately 9,000 towels were given away in 2022).”

Clay: “The Clay SWCD staff assisted in the annual F-M Walleyes Unlimited Inc. River Arts Clinic Fishing Derby as well as the FM Riverkeepers Annual Water Festival on the Red River where over 2,400 middle school aged children, and parents, participated in activities designed to educate and promote awareness of clean and healthy aquatic resources.”



Community Engagement Continued

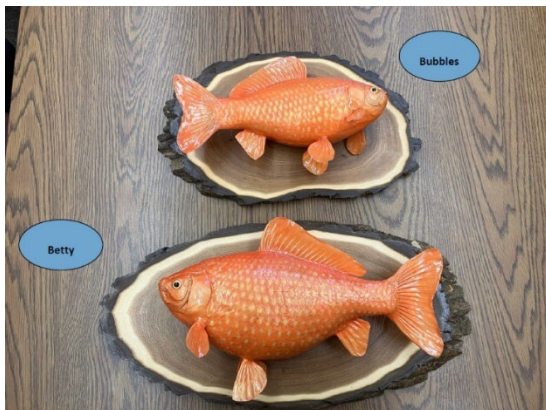


Red Lake: “County wide businesses show a willingness to promote Aquatic Invasive Species Prevention by providing educational/promotional materials, provided to them by Red Lake County SWCD, to the public. The Area Businesses really appreciate all the promotional items and they are willing to provide them to the public.”



Kandiyohi: “The introduction of the two weed removal stations with aqua weed sticks was well received by boaters. I heard that these two stations were used quite a bit over the season by boaters and that more access to tools like these was wanted. I was initially worried that the cable would be left in a mess on the ground but was pleasantly

surprised that most users wrapped it neatly back on the hooks. The low cost of these also makes it a no brainer to build and place more of them. These stations also included a QR code on them that would route users to our website for decontamination and cleaning instructions.”



Dakota: “City of Apple Valley created educational aids in the form of taxidermy goldfish. The city hosted a naming contest for the goldfish mounts, and they were named Bubbles and Betty.”



Otter Tail: “Haley Kugler, Otter Tail County Watercraft Inspector, examines a sample of Starry Stonewort at Lake Koronis, Paynesville, MN. The Otter Tail County AIS Task Force and the Otter Tail County Coalition of Lake Associations facilitated a bus tour to give staff, the public, and County Commissioners an opportunity to view the impacts of this Aquatic Invasive Species. No waterbodies in Otter Tail County are designated as infested with Starry Stonewort.” Photo Credit: Spencer McGrew.



Polk: “NEW CD3 trailered solar powered wayside cleaning system with brush, grabber tools, vacuum, air blower, and plug wrench tools. CD3 unit was positioned at Maple Lake east shore access during the 2022 boating season.”

Olmsted: “Olmsted County Parks will continue to utilize our outreach programs to spread awareness and information to the public. This will be accomplished through the booths at both the Rochesterfest in June and the Olmsted County Fair in July.”



Community Engagement Continued



Stevens: “Stevens SWCD had a set of bean bag boards made that we use at our events to promote the prevention of AIS. These boards have a vinyl sticker placed on top of the boards.”



Lac qui Parle: “Trunk or Treat was a successful, and fun, event we participated in this year. I decorate the trunk with nets, and invasive species, Isuch as carp. We also had our “taxidermy” fish displays of the bighead carp and silver carp, which the kids always seem to be fascinated with. I was

not expected the kids, and adults, to be so interested in this trunk but in a community who values fishing so much, they were further drawn to it. To make sure the message wasn’t missed, I created a little AIS prevention warning and stapled it to each candy- Swedish fish, and sweet tart fish. I can’t wait to build upon it next year. We are already planning for bigger displays with more species, and setting up at the end so that we can encourage more dialog and maybe a photo opportunity with the carp, or the head hole cut out, like we do at the county fair and tournaments throughout the summer.”

Martin: “This bean bag game was given away as a drawing at the Martin County Fair.”



Wabasha: “This was the second year of Wabasha County’s Bait Handling and Disposal Awareness Campaign. The purpose of this campaign is to inform anglers of how to properly dispose of unwanted bait to help influence behavior change. Just as last year, these bins were placed out at Half-moon, Izaak Walton, and Wilcox landings. 12x16” aluminum sign posted above bait bins.”



Pennington: “Pennington Soil and Water Conservation District had a booth at the county fair. An entire table was dedicated to AIS related items and information. [...] An activity and AIS vs Native identification game was on the “Kids Korner” table to teach youth the importance of preventing the spread of AIS and better identify a native vs invasive species. To draw more residents and visitors in to learn about AIS, this year we decided to include a drawing for an adult and youth fishing rod, which was a popular attraction.”

Nicollet: “The Nicollet County Fair was a great success in engaging with members of the community to educate on ways to prevent the spread of aquatic invasive species.”





Cook: “The Aquatic Invasive Species (AIS) Program developed community grant opportunities for projects that prevent or limit the spread of AIS. Northern Waters Crayfish LLC received funds for their pilot project to harvest the invasive rusty crayfish from infested Pike Lake to then sell at local restaurants, farmer’s markets, and host free rusty crayfish boils at festivals. This is an opportunity to convert an invasive species into a regional economy that supports local food production and environmental resiliency. Their efforts have reduced the impacts of rusty crayfish on the ecology of the lake while capitalizing on the deliciousness of fresh, wild caught, mini lobsters.” Photo: Amanda Weberg



Lake: “Crayfish meets pirate at the Festival of Sail Stop Aquatic Hitchhikers! booth.” Photo: Doug Jensen

Watercraft Inspection & Decontamination



Map: 38 counties have an authorized inspection program

Funds used for Inspections and Decontaminations

\$4,279,641

Inspectors Hired

501 Level 1 Inspectors

102 Level 2 Inspectors

Inspections Performed

334,918

Hours of Inspections Performed

179,722

Average 1.97 inspections per hour

Coverage

768 accesses

625 water bodies

Average Percent of Watercraft Recorded as Arriving in Compliance With the Drain Plugs Out

94.8%

Decontamination

36 units operated by 20 counties

2,066 decontaminations performed

Boaters Engaged by AIS Volunteers/Ambassadors

2,140

Kandiyohi: “An inspector successfully prevented a PWC from launching into Long Lake (Hawick) with zebra mussels this year. This lake is one of the few lakes left in our county that are currently not infested with zebra mussels so keeping this from happening is important.”

Beltrami: “Our inspection program shares inspectors with Clearwater County. Inspector will work a few hours in Clearwater County and a few hours in Beltrami County. That way the inspector gets more hour in during the week.”

Meeker: “We increased our number of decontaminations by 500%.”

Roseau: “Roseau County partners with Lake of the Woods County to provide the best AIS prevention measures we can. As Lake of the Woods is within the boundaries of LOW County, Roseau County monitors and provides inspections to the west side of the Lake accesses. We also experienced one of the highest Lake levels in decades. Limited to NO access to some of the boat ramps for the entire boating season.”

Hubbard: “A County watercraft inspector discovered zebra mussels attached to a watercraft attempting to launch into Lake Plantagenet, a designated non-infested waterbody. Again, on Lake Plantagenet, dead zebra mussels were observed on a boat trailer parked at the access. A Conservation Officer followed up with and properly educated the individual.”



Otter Tail: “Otter Tail County Watercraft Inspectors pose with volunteers of the FM Walleyes Unlimited Young Angler Tournament, Little Pine Lake, August 2022. The Little Pine Angler Young Angler Tournament is hosted by FM Walleyes Unlimited of Fargo/Moorhead during the first weekend of August. Minnesota lakes country near Perham, MN.” Photo: FM Walleyes Unlimited



Ramsey: “Conservation Corps Intern Grant Hesse using a decontamination unit on a watercraft at Turtle Lake Boat Launch.”

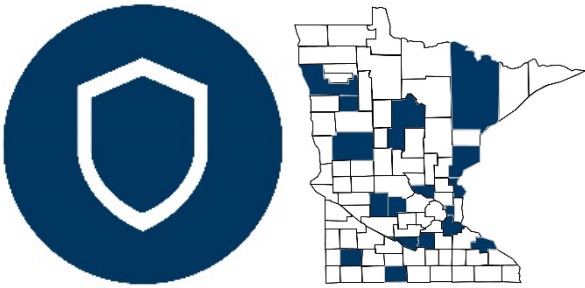


Koochiching: “Level 1 and 2 training conducted in May for Koochiching and Voyageurs National Park staff.”



Douglas: “Douglas County permanent decontamination station at Krueger’s Creek access on Lake Le Homme Dieu.”

Enforcement



Map: 17 counties actively enforced AIS laws

**Funds Supported AIS Work by Local Law Enforcement Officers
\$133,502**

**Local Law Enforcement Officers Trained on AIS Laws
112**

**Local Law Enforcement Officers Conducted AIS Work
115**

**Boaters Contacted by Local Law Enforcement
5,647**

Martin: “Martin SWCD partnered with the Martin County Sheriff’s Department assisting with funding for watercraft patrol officers. The Sheriff’s Department hires seasonal officers to patrol the Fairmont Chain of Lakes and water accesses. This year the officers spent one hundred fifty-eight hours on the water or at public water accesses.”

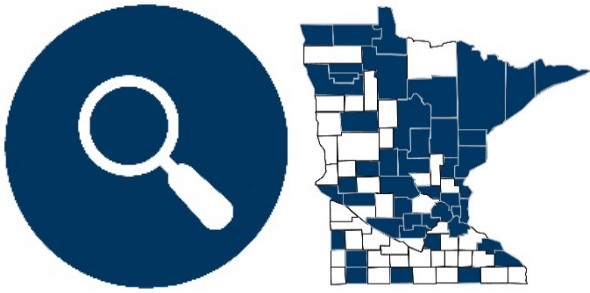


Ramsey: “MAISRC graduate student researchers conduct field work for their project to determine the efficacy of hand inspections completed by boaters. An officer of the Ramsey County Sherriff Dept. is assisting them in their research.”



Cass: “City of Lake Shore police department issued 25 warnings for AIS violations including transporting water, failure to remove drainplugs, and attached aquatic plants. Photo: Officer Sullivan from the City of Lake Shore at the new kiosk placed by Gull Chain of Lakes Association at the Gull Narrows Public Access. The City of Lake Shore performed 2,858 inspections at the Gull Narrows Access in 2022!”

Monitoring



Map: 45 counties surveyed lakes and rivers

**Lakes and Rivers Surveyed
641**

**Early Detection Surveys Conducted
640 surveys on 457 water bodies**

**Zebra Mussel Settling Plates Deployed
369 plates on 160 water bodies**

**Zebra Mussel Veliger Tows Taken
193 tows on 103 water bodies**

**Aquatic Plant Surveys Conducted
402 surveys on 143 water bodies**

**Common Carp Surveys Conducted
7 surveys on 5 water bodies**

**People Conducting Surveys
140 AIS Detectors**

**217 people participated in Starry Trek in
21 counties**

Species Targeted

Eurasian watermilfoil, curly-leaf pondweed, flowering rush, non-native Phragmites, purple loosestrife, yellow iris, starry stonewort, didymo, common carp, zebra mussels, rusty crayfish, Chinese mystery snail, faucet snails, golden clams, and spiny waterflea

Anoka: "5th year of the Zebra Mussel Spotters program. Have 47 volunteers with over 50% response rate when checking their zebra mussel samplers."

Crow Wing: "New in 2022, funds were granted to 11 lake associations that participated in the County's new Starry Search program (\$200 per lake association with a public access). Lake associations received a \$200 incentive by sampling lakes for AIS with a public access (includes chains of lakes). The \$200 incentive went towards materials to build an AIS sampling rake, member's time, and monthly reports. Lake associations took samples on a total of 17 public access on 13 waterbodies. Lake associations worked directly with the County's Environmental Services Coordinator to make sure they fulfilled all the requirements of our new Starry Search program. Our main goal for this program is to stay ahead of Starry Stonewort infestations within the County."

Nobles: "The County works well with the Okabena-Ocheda (O&O) Watershed District because these lakes along with all the lakes/streams within Nobles County are important. The O&O Watershed district tags and monitors carp in Lake Okabena for future population control and the district also does monitoring for any AIS in all three lakes. No zebra mussels were detected in any waterbody within Nobles County. The County does monitoring of AIS on two other lakes within the County."

Sherburne:
"Starry Trek participants."
Photo: Shelly Binsfeld



Lake of the Woods:
"Starry Trek Event volunteers collecting samples."

Kanabec: "Joyce Frick shared this picture of the DNR working on a fish survey on Lewis Lake."





Winona: "Tune Camp Students Monitoring for AIS in Root River."

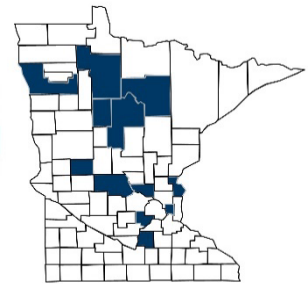


Beltrami: "Grabbing a sample to see what it is. Starry Stonewort Turtle River Lake."



Chisago: "In 2019, Chisago County launched a new program to monitor for new infestations of aquatic invasive species (AIS) located at public water accesses in the county. The goal is to provide early detection and treatment if county staff discover new infestations of AIS. Once a month, the AIS Specialist worked with Watercraft Inspectors to follow a shoreline protocol to monitor all lakes with public water access in the county. The staff throw a double-sided rake at designated locations around the access to gather aquatic vegetation. After collecting aquatic vegetation samples, they identify native/invasive species and record their observations. In 2022, Chisago County staff monitored sixteen lakes. This year there was no new sighting of any AIS. Chisago County will continue the program in the spring of 2022."

New Infestation Response



Map: 12 counties have a new infestation response plan

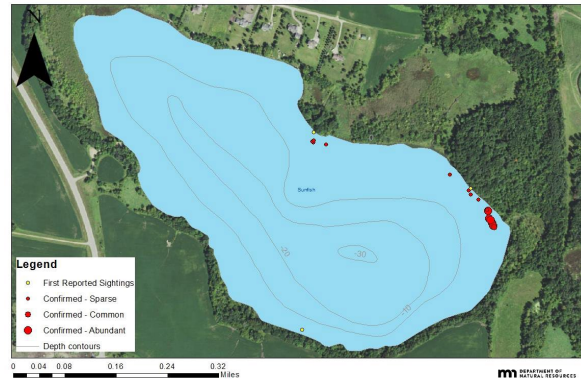
New Detections

45

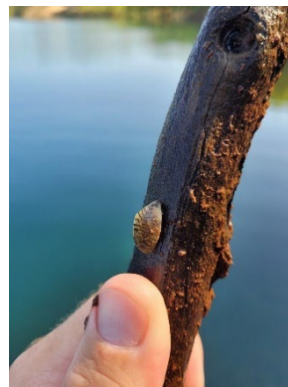
Responses Coordinated

12

Sunfish Lake
Eurasian Watermilfoil New Infestation
8/9/2022

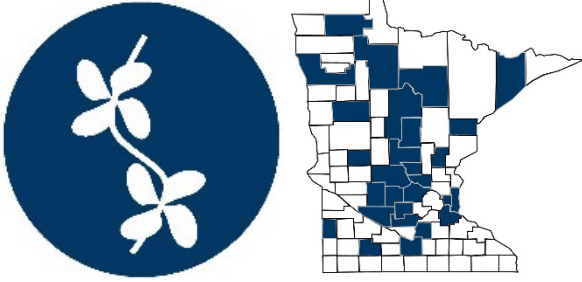


Le Sueur: "Locations of confirmed Eurasian watermilfoil presence. The yellow dots mark the location for the initial sightings (7/27/2022) and the red dots represent Eurasian watermilfoil found on August 9, 2022. The red dots vary in density from sparse to abundant."



Itasca: "The first Zebra Mussel found and documented in the Canisteo Mine Pit Complex; 2022. This is a good representation of the average size and year class."

Management



Map: 28 counties conducted control projects

Funds Used for Invasive Aquatic Plant Management (IAPM)
\$727,672

Water Bodies with IAPM Activities
187

Groups Involved in IAPM Activities
133

Additional Funds Leveraged for IAPM Activities
\$587,311

Purple Loosestrife Biological Control Beetle Release Sites
42

Species Targeted

Curly-leaf pondweed, Eurasian watermilfoil, hybrid watermilfoil, starry stonewort, non-native Phragmites, purple loosestrife, yellow iris, flowering rush, and common carp

Carlton: “Previous years treatment of EWM on Chub Lake continued to show success. Two delineation surveys were conducted in June and September, respectively. The June survey found minimal EWM while the survey in September revealed widely scattered plants that were interspersed with native species. Little Hanging Horn was surveyed this past summer. While previous efforts of hand pulling was controlling the populations near the public access, some established sites were detected further away. Chemical treatment may be suggested for the 2023 season.”

Lincoln: “In 2022, we were able to get a small town, a township, the County, and a Sportsman’s Club to work together to fund the treatment of East Lake Stay. The

County Board also authorized the setting aside of AIS funds to assisting the treated infested lakes in an attempt to address vegetative infestations when they are found and smaller in area.”

McLeod: “Clarke Aquatic Services successfully treated 22 acres of Belle Lake for Eurasian water milfoil. O’Malley Fish LLC from Le Sueur, MN will be Seined the lake (3) three time from January 1, 2022 – November 15, 2022.”

Lake: “After several years of intending to introduce *Galerucella* beetles to a Lake County managed wetland, this year we were able to follow through. In June we collected over one thousand *Galerucella* beetles in St. Louis County with the aid of Itasca SWCD. We were also in communication with AIS Specialist Rich Rezanka, who had released beetles on a neighboring private property the year before and who encouraged us to supplement the population. When we arrived at the wetland to release the beetles, we could see that beetle population from the neighboring property had expanded and spread to the county wetland. We took it as an encouraging sign that the beetles would thrive and make an impact on the wetland ecosystem. This location is one of the very few large purple loosestrife infestations in the county. The others are small enough to manage mechanically and chemically and we are thrilled that the purple loosestrife in Lake County is being successfully suppressed.”

Winona: “Yellow Iris was dug from East Lake Winona banks by SWCD and City of Winona staff. This has been the sixth season removing Yellow Iris from East Lake Winona shores. This effort has been supported by Healthy Lake Winona, a citizen advocacy group motivated to improve water quality and shoreline habitat.”



Cottonwood: “The Weed Harvester was used during the summer to cut fishable trails infested with Curly leaf Pondweed in Mountain Lake.”



Sibley: “Invasive Phragmites – successfully managed, hard to tell but just cattails and other veg. remain.”



Todd: “To address the concerns and improve the ecological integrity of Big Sauk Lake and the waterbodies to which it connects, the Big Sauk Lake Association has developed a plan to sustainably manage the common carp over-population. Photo: A seine netting of Invasive carp pulled from Big Sauk Lake in early 2022. Photo provided by Big Sauk Lake.”



Sherburne: “Eagle Lake carp telemetry.” Photo: Dan Cibulka



Benton: “Benton County was delighted to partner with the Little Rock Lake Association to support the removal of the invasive Curly Leaf pondweed in Little Rock Lake. Removal of the invasive plant removes the dense mats from the water’s surface to increase recreation opportunities and provides native plants an opportunity to reestablish to increase the aesthetic and environmental value of the lake.”



Washington: “In September 2021, six species of native aquatic plants were transplanted into Long Lake from downstream Terrapin Lake. Species collected include fern leaf pondweed (*Potamogeton robbinsii*), slender naiad (*Najas flexilis*), watershield (*Brasenia schreberi*), small pondweed (*Potamogeton pusillus*), floating leaf pondweed (*Potamogeton natans*), and water stargrass (*Heteranthera dubia*). Harvested aquatic plant material was transplanted to two lake-ward transects located on either side of the Long Lake outlet.”

Photo: “Fern leaf pondweed established along plant reintroduction transect.”



Cook: "Caribou Lake Association continued trapping and harvested 2,889 rusty crayfish in 2022. Last summer, in 2021, there were 1,091 rusty crayfish removed from Caribou Lake." Rusty crayfish were confirmed in 2020 in Caribou Lake from connected waterways. Photo credit L. Mullen.



Cass: "AIS Lake Technician collecting beetles for purple loosestrife biocontrol." Photo: Dana Gutzmann