

# Making a Difference with Aquatic Invasive Species Prevention Aid

## A Snapshot of Metrics & Accomplishments in the Year 2021

### Overview

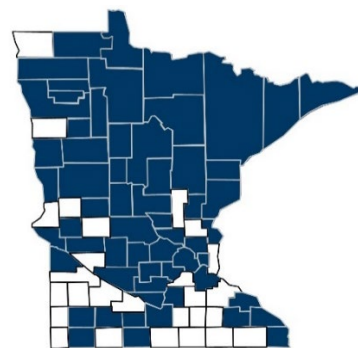
Minnesota Counties receive Aquatic Invasive Species (AIS) Prevention Aid each year. Their programs are diverse, cover a spectrum of activities, and are at different stages of development and implementation. Through cooperation and iterative feedback from counties, the Minnesota Department of Natural 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 in 2021. It is a tool to more easily track measurable achievements and impactful stories of success, and for 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 didn't 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 2021 as well as provided them with 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. And finally the experience and information gathered will help them continuously improve their programs in conjunction with established plans, resolutions, budgets, and reports.

Individual county reports can be requested from each county. DNR Planners collected and compiled all data. The data are not perfect, because counties track information in different ways based on the needs of their program. A total of \$10 million is distributed each year directly to counties, half in July and half in

December. Some counties have rollover funds from previous years, didn't use all funds received in a given year, or didn't submit metrics—therefore this summary is not a complete picture of all funds used in 2021.

**60 of the 83 counties receiving AIS Prevention Aid voluntarily completed and submitted metrics for their 2021 programs. This accounts for 72% of the counties and 88% of the aid received in 2021.**



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

**The results displayed on the following pages summarize metrics from the 60 participating counties and highlight a majority of the AIS Prevention Aid funded activities statewide in 2021.** Photos in this document were provided by the county as credited in the photo captions.

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Due to the global COVID-19 pandemic, AIS program managers adapted their activities in accordance with local, state and federal public health guidance. The following trends appear when comparing metrics in 2019 vs. 2021:

- In-person outreach was limited. This was especially true for schools and youth organizations.
- Use of traditional and social media increased.
- More lakes and rivers were surveyed for AIS using various monitoring approaches.
- Inspection programs grew slightly including hiring more inspectors, more watercraft inspected and more lakes and accesses covered.
- Local law enforcement declined slightly.
- Volunteers and hours served declined.

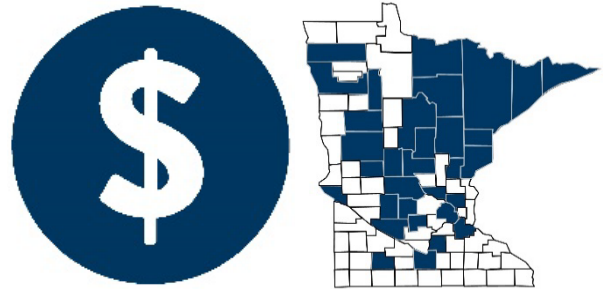
Overall, it was another year of necessary innovation for AIS program managers implementing a variety of activities. Ninety-eight percent of counties conducted public engagement activities, 73% conducted monitoring, 65% conducted watercraft inspections, and 42% funded invasive aquatic plant management.

## Budgets

Fifty counties provided budget details as part of their metrics submission, with an average budget of \$122,126.60 and total budgets ranging from \$6,770 to \$526,700. Averages for each broad category of spending is outlined in the table below. Not all counties spent monies in each of the categories listed.

Category	# of counties	Average % of funds	Average amount of funds
Public Outreach and Education	49	28%	\$18,092
Watercraft Inspection	32	53%	\$97,067
Enforcement	10	7%	\$8,912
Monitoring	24	10%	\$12,751
Invasive Aquatic Plant Management	26	23%	\$21,120
New Infestation Response	6	6%	\$5,842
Program Coordination and Administration	19	30%	\$27,776
Other	24	23%	\$25,276

## Funds Used and Leveraged



**Map: 32 counties have a local grant program**

### Funds Received in 2021

**\$8,758,531**

### Funds Used in 2021

**\$8,154,113**

### Funds Saved in a Contingency Fund

**\$1,510,399**

By **31** counties over multiple years for a variety of activities.

### Funds Distributed as Grants

(AIS Prevention Aid to other organizations)

**\$1,831,794 awarded to 188 organizations**

### Additional Funds Leveraged to Directly Support Aid-Funded Work

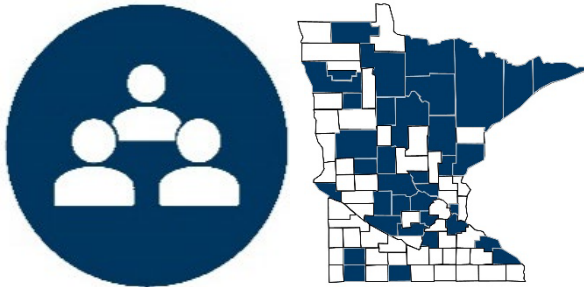
**\$1,472,105 contributed by 209 organizations**

**St. Louis:** "St. Louis County manages its AIS Prevention Program as a grant program. Each year, St. Louis County invites and encourages organizations, through an application/proposal process, to address AIS issues with multidisciplinary, integrated solutions based on science, related to natural resources sustainability, and social and economic concerns. The County supports projects that address one or more of the seven categories and associated actions outlined in the [St. Louis County AIS Prevention Plan](#)."

**Stearns:** "The county's AIS plan utilizes a Request for Proposal process to distribute AIS funds to parties interested in conducting work to "prevent the introduction or limit the spread of aquatic invasive species at all access sites within the county" (MN Statutes 477A.19). Annual, copies of the RFP are sent to all the known lake associations, townships,

cities, watershed districts, and watershed management units.” “Utilization of this process capitalizes on existing AIS efforts in the county, minimizes administrative costs, provides a vehicle to empower local groups/ local governments in addressing AIS issues and seeks to provide a fair and impartial way to distribute AIS funds.”

### People Doing AIS Work



**Map: 36 counties have an AIS Task Force or Committee**

**1,493 people doing AIS work, included:**

#### Staff Supported

**104 full-time staff with an average of 36% of their time dedicated to AIS work**

**60 part-time or seasonal staff with an average of 49% of their time dedicated to AIS work**

**702 Level 1 Inspectors**

**110 Level 2 Inspectors**

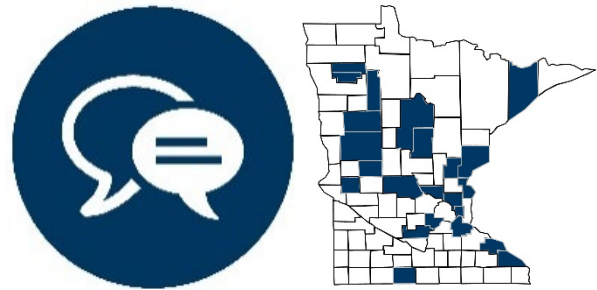
#### Volunteers

**517 served 5,618 hours**

Many AIS program managers wear multiple hats, that is, AIS duties are just one of many of their daily responsibilities. Of the 48 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 have less than 50% of their time to focus on AIS.

Forty-three counties reported using aid funds for staff wages. On average 48% of the aid was used for wages, with a range from 5% to 100%. Sixteen counties reported not using the aid for wages, indicating they use other funding sources to support AIS staff.

### Community Engagement



**Map: 23 counties post on social media**

#### Partnerships

**289 Lake Associations**

**40 Conservation Groups**

**55 Schools and Youth Groups**

**270 Businesses**

**158 Local Governments**

#### AIS Public Education Events Held

**180**

#### People Engaged During Events

**29,047**

#### Social Media

**365 posts seen by 2 million followers**

#### Funds Spent on Paid Advertisements

**\$295,992**

#### Youth Engaged

**7,808 children taught about AIS**

**Shoreland Training Video:** Le Sueur County partnered with 18 Local Government Units (Becker SWCD, Blue Earth County, Sibley SWCD, Nicollet County, Stevens SWCD, Winona SWCD, Sherburne SWCD, Cass County, Brown SWCD, Douglas County, Cook County, Wright SWCD, Kanabec SWCD, Stearns County, Waseca County, Murray County, Ramsey County, and Scott County) to develop a shoreland owner training video that discuss AIS and best management practices as it relates to the 21 day dry time for docks, lifts, rafts, and other water associated equipment. Partners helped contribute in-kind funds and staff time to create the video: <https://youtu.be/Voa-qbmWG-Y>



## Community engagement continued

**Linder's Angling Buzz:** 16 counties invested in the cost of an AIS prevention commercial segment on the television program in 2021.

**Wilkin:** "Wilkin SWCD worked with local sportsman clubs/organization this year to provide AIS education during youth fishing events and tournaments."

**Murray:** "Murray County had the best attendance in years to their fair booth at the Murray County Fair. Two hundred and twenty-seven adults engaged with staff and completed an AIS quiz to be entered to win a prize. A kid's scavenger hunt related to AIS species awareness was also held on Friday of the fair."

**Beltrami:** "Bait bags; Wild Life Forever and five other counties cooperated to produce bait bags and distribute them to bait shops – Don't let it loose."



**Le Sueur:** "Photo of a yard sign that was a part of Le Sueur County's Community Based Social Marketing Grant."

**Houston:** "The Root River SWCD also hosts a Sixth Grade Environmental Day annually for all the sixth graders in Houston



County. One of the seven stations is dedicated to educating these youth about aquatic invasive species. At the 2021 event 260 students gained knowledge on this topic."

**Dakota:** "Below are photos of the new AIS Display. This was created in 2020 and brought to events in 2021."



**Hennepin:**



**Wabasha:** "Bait bins posted at 3 water accesses (Izaak Walton Park, Wilcox Landing, and Half-Moon Landing) in Wabasha County."



Izaak Walton Park



Wilcox Landing



Half-Moon Landing



## Community engagement continued

**Lac qui Parle:** “Rhyana Schicker, LqP SWCD Technician, passes around specimen samples during county fair presentations focusing on AIS Identification and Prevention.”



**Marshall:** “Curt’s NCOR Guide Service: 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, trucker, 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.”



**Anoka:** “Received CBSM grant from DNR to buy and install 5 Aqua Weed Stick Stations around the county. Stations were installed in middle of May and by the end of the season were used over 1,731 times.”



**Olmsted:** “The CD3 station to the left, was installed at the Lake Zumbro Parkboat launch this summer. This station will help boaters with the cleaning and removal of aquatic material from boats and trailers as they are leaving the lake.”

**Meeker:** “AIS Tool Station installed at Lake Ripley.”



**Douglas:** “One of three Aqua Weed Stick Landing Stations installed at Douglas County public water accesses with funds from MN DNR Behavior Change Grant. Photo by Justin Swart.”

**Cottonwood:** “In 2021, 4 Landing Stations were bought and installed on Mountain Lake, Bingham Lake, Cottonwood Lake, and Talcot Lake in Cottonwood County. A Landing Station is where a retractable hook can be found to take off weeds underneath boats loading and unloading into a lake.”





## Community engagement continued

**Martin:** “The photo on the left are bait bags that were purchased from Wildlife Forever. These were given to the local bait shop to use when fisherman purchased bait. Photo on the right includes towels, lanyards, pens, bait bags, bobbers, and water proof phone cases all for giveaway in 2021.”



**Pennington:** “The NW Minnesota Water Festival is a two-day learning event held every September for fourthgraders at the Warren and Fertile fairgrounds. The festival teaches students about water resources and conservation practices. Students learn about watersheds, water quality, ground water, flooding aquatic invasive species, and aquatic life. Eighteen schools (470 students) took part in this year's fun interactive event. One of the station presentations focuses on Aquatic Invasive Species and how people can stop the spread of AIS. Students also play a fun game to help them learn about our native mussels and how zebra mussels affect our native species.”



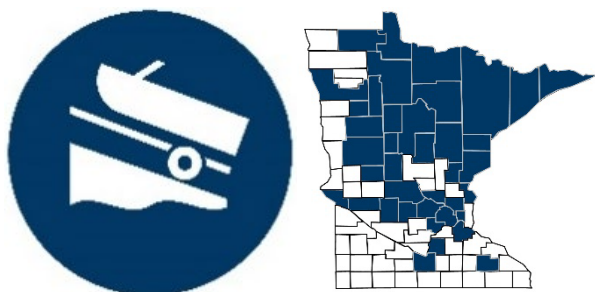
**Red Lake:** “County wide businesses show a willingness to promote Aquatic Invasive Species Prevention by providing educational/promotional materials, provided to them by Red Lake County SWCD, to the public. The Area Businesses really appreciate all the promotional items and they are willing to provide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



**Stevens:** “Brady is showing demonstrating the proper why to make sure your boat is clean when it leaves the lake. We labeled the hot spots to make sure you double check.”



## Watercraft Inspection & Decontamination



**Map: 39 counties have an authorized inspection program**

**Funds used for Inspections and Decontaminations**

**\$3,767,458.53**

**Inspectors Hired**

**702 Level 1 Inspectors**

**110 Level 2 Inspectors**

**Inspections Performed**

**402,611**

**Hours of Inspections Performed**

**202,299.5**

**Average 2.18 inspections per hour**

**Coverage**

**777 accesses**

**629 water bodies**

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

**Plugs Out**

**95.72%**

**Decontamination**

**39 units operated by 20 counties**

**2,886 decontaminations performed**

**Boaters Engaged by AIS Volunteers/Ambassadors**

**2,686**

**Becker:** "On 8/6/2021, This fragment of Eurasian Milfoil was found by an inspector and removed from a boat trailer arriving at Floyd Lake in Becker County. The boater was arriving from Lake Minnewashta in Carver County."



**Crow Wing:** "Crow Wing County hired a lead AIS inspector to assist the AIS Coordinator in their watercraft inspection program this year. The AIS inspector assisted with inspector spot checks, education/outreach, inspector training, fishing tournaments, pilot program, and operated decontamination units in the County."

**Koochiching:** "Koochiching County Environmental Services, Koochiching SWCD, North St. Louis SWCD, and Voyageurs National Park have collaborated the past few years to fill a void in coverage for the Kabetogama Lake and Crane Lake area. This collaboration has provided watercraft inspections on Kabetogama Visitors Center and Ash River Visitors Center Landings. This partnership is looking to provide decontamination services in the years to come thanks to Voyageurs National Park purchasing two decontamination units to be utilized throughout VNP waters, including Rainy Lake, Kabetogama Lake, Ash River and Crane Lake. This partnership has utilized staff, funding, and equipment from all 4 organizations to provide a successful watercraft inspection program throughout the boating season." "Level 2 training provided by DNR staff."



**Carver:** "Carver County was able to significantly increase the use of it's AIS decontamination unit this year by improving Level 2 training, inspector communication, and better preventative maintenance. We went from only 7 decontaminations in 2020 to 61 in 2021."



## Watercraft inspection and decontamination continued

**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.”

**Hubbard:** “Another important component of the Hubbard County AIS Program is watercraft decontamination. Hubbard County operates a central decontamination station located in the City of Park Rapids where boaters can bring their watercraft, boat lift, dock, and gear to have them inspected and decontaminated by our DNR certified Level 2 inspectors. This decontamination service is at no cost to the boater. In 2021, Hubbard County completed 166 decontaminations, the highest yearly total since the station first opened.”

**Ramsey:** “Joe Tillotson using a decontamination unit on a watercraft at Bald Eagle Lake Boat Launch.”



**Otter Tail:** “Otter Tail County AIS Deputy Paul Peterson stopped to have his patrol watercraft decontaminated. Photo Credit: Otter Tail County Sheriff's Office.”

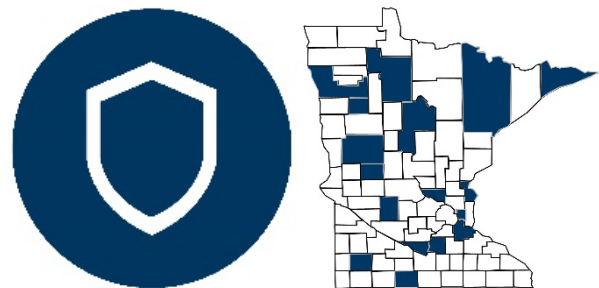
**Kandiyohi:** “Once again, inspection staff was very efficient at finding violations on incoming watercraft despite a much smaller staff than usual and fewer hours of inspections worked. A total of 230 violations were found on incoming watercraft which helps to prevent the spread of AIS and creates an opportunity for one on one education with the boaters on AIS laws and the importance of making sure you clean, drain and dry each time you exit a lake. The rate of inspections per hour also was increased most likely to being able to more closely match the inspection hours to peak boater activity.”

**Cass:** “A watercraft inspector found a juvenile zebra mussel on a pontoon exiting Woman Lake in September 2021. The pontoon had been on Woman Lake the entire



Summer 2021 season. This confirmed previous reports of other zebra mussels found on the lake and Woman Lake was officially listed by the DNR as infested with zebra mussels. Girl Lake was also listed at this time due to connectivity and navigability between lakes.”

## Enforcement



**Map: 17 counties actively enforced AIS laws**

**Funds Supported AIS Work by Local Law Enforcement Officers**  
**\$121,006**

**Local Law Enforcement Officers Trained on AIS Laws**  
**130**

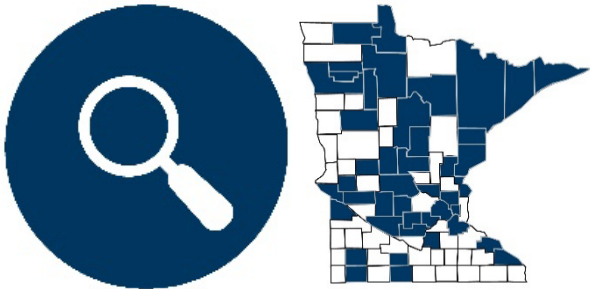
**Local Law Enforcement Officers Conducted AIS Work**  
**100**

**Boaters Contacted by Local Law Enforcement**  
**2,176**

**Nicollet:** “Nicollet County's sheriff's department was able to provide support by discussing Clean, Drain, Dry with boaters they encounter in the Minnesota River, Swan Lake, and our other County water resources.”



## Monitoring



**Map: 44 counties surveyed lakes and rivers**

**Lakes and Rivers Surveyed**  
**698**

**Early Detection Surveys Conducted**  
**702 surveys on 488 water bodies**

**Zebra Mussel Settling Plates Deployed**  
**491 plates on 223 water bodies**

**Zebra Mussel Veliger Tows Taken**  
**245 tows on 107 water bodies**

**Aquatic Plant Surveys Conducted**  
**432 surveys on 230 water bodies**

**People Conducting Surveys**  
**103 AIS Detectors**

**156 people participated in Starry Trek in**  
**19 counties**

**Species Targeted**  
Eurasian watermilfoil, curly-leaf pondweed, flowering rush, non-native Phragmites, purple loosestrife, starry stonewort, common carp, zebra mussels, rusty crayfish, Chinese mystery snail, faucet snails, and spiny waterflea

**Lake:** "In-person plant ID training at Birch Lake. (photo: Lake SWCD)"



**Chisago:** "In 2021, Chisago County collaborated with the National Park Service and St. Croix River Association (SCRA) to monitor for zebra mussel veligers and spiny waterfleas in twelve County lakes and rivers, including Comfort, Fish, Horseshoe, Kroon, Little, Little Green, North Center, North Goose, Rush, South Lindstrom and Spider

Lakes and the Sunrise River at Kost Dam. This was part of a larger St. Croix basin, regional Minnesota/Wisconsin program. Zebra mussel veligers were present in Comfort Lake, which has an established population of zebra mussels. No zebra mussel veligers or spiny waterfleas were found at any of the other Chisago County sites. However, veligers were detected at the Indian Head Flowage North sampling site in the St. Croix River."



**Cook:** "1,091 rusty crayfish were removed from Caribou Lake by Lake Association members at the inflow of Bigsby Lake. Rusty crayfish have migrated from upstream infested Pike Lake and have just begun their entrance into Caribou Lake (confirmed infested in 2020)." "*O. rusticus* from Caribou Lake © L. Mullen."

**Lake of the Woods:**  
"AIS training at Starry Trek Event."



**Kanabec:** "During the 2021 Kanabec County AIS Starry Trek event no new invasive species were sampled from the surveyed public accesses on Pomroy, Knife, Fish, Ann, Quamba, and Lewis Lakes."

## Monitoring continued

**Polk:** "Zebra Mussel test kits in 2021: We have been deploying ZM kits that are made from rope, pvc and cinders to check area lakes for ZM. To date no ZM have been detected in our lakes, we have the Red River of the North that is the only infested waters in our County. We also had our County GIS department create a ZM program to make checking the kits and data collection much easier. We take photos and upload them to ESRI program on our county database."



**Winona:** "Joey Coleman throwing a rake when monitoring for AIS at the Pickwick Mill Pond (Photo by Amanda Gentry)."

**Nobles:** "The largest city in Nobles County is Worthington. Lake Okabena is on the southwest side of Worthington and it drains into Lake Ocheda, which in turn drains into Lake Bella. The County works well with the 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 for future population control. This is happening in Lake Okabena. There is another lake drawdown currently happening on Lake Ocheda. They want to have another successful winterkill of carp and promote vegetation within the lake. The County is ready to assist the district on any endeavor that helps promote better lakes and streams."

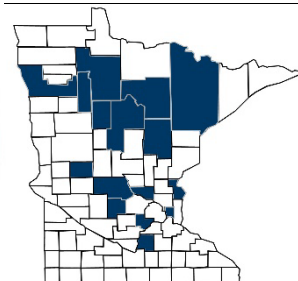
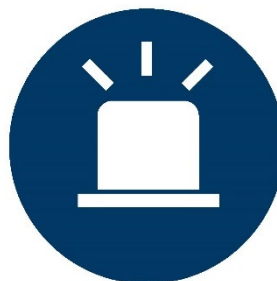
**Sibley:**



**Todd:** "In the Weeds at Starry Trek 2021! Children love a day at the lake! Be sure to sign your family or 4-H group up for a morning of lake exploring and plant I.D. in Todd County. The event is held annually in August."



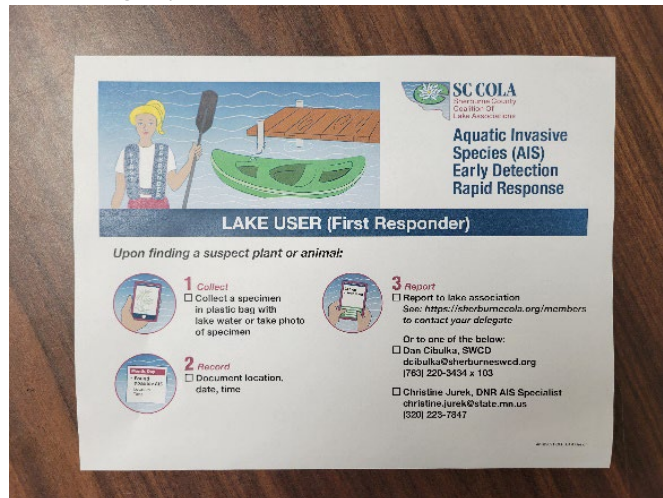
## New Infestation Response



**Map: 16 counties have a new infestation response plan**

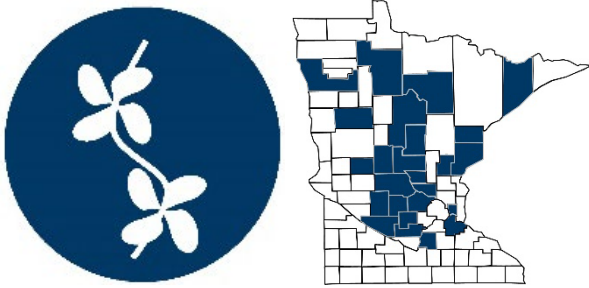
**Responses Coordinated  
16**

**Sherburne:** "Sherburne County COLA AIS EDRR action plan card. Design by Cindi Edwards-Plant."





## **Invasive Aquatic Plant Management (IAPM)**



**Map: 25 counties funded IAPM projects  
with AIS Prevention Aid**

### **Funds Used for IAPM**

**\$578,673.11**

### **Water Bodies with IAPM Activities**

**197**

### **Groups Involved in IAPM Activities**

**147**

### **Additional Funds Leveraged for IAPM Activities**

**\$386,127**

### **Species Targeted**

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

**McLeod:** "Limnopro successfully treated 78 acres on lake Marion for curly leaf pondweed and completed a lake survey for AIS. Clarke Aquatic Services successfully treated 16.2 acres of Belle Lake for Eurasian water milfoil."

**Benton:** "Benton County was delighted to partner with the U.S. Fish and Wildlife Service to support the removal of non-native invasive species from multiple wetlands this year. As shown in our pictures, removal of the invasive species was followed by seeding of native wetland species. This partnership has provided opportunity for the wetlands to regain previous value and function."

