

HENNEPIN COUNTY MINNESOTA



Aquatic invasive species prevention program

2024 Accomplishments Report



Preventing the spread of aquatic invasive species: 2024 accomplishments

History and context

Hennepin County has received funding from the State of Minnesota since 2014 to implement plans to stop the introduction or limit the spread of aquatic invasive species (AIS). In 2019, county staff engaged more than 60 stakeholders in evaluating the AIS prevention program, guidelines, and funding options. From this evaluation, adjustments were made to the county's program, guidelines, and funding options. The county's [AIS prevention aid guidelines](#) were also adjusted. These guidelines are directing the use of funds received from 2020 through 2025.

In Hennepin County, there are 59 public accesses and 951 trailer launch parking spots (50 trailer launches and 9 carry-in). The public access administrators include 15 cities, two park districts, Hennepin County Environment and Energy, Minnesota Department of Natural Resources Division of Parks and Trails, and the National Park Service.

AIS are "non-native, aquatic organisms that invade water beyond their natural historic range" (Minnesota Statute 477A.19). These species may harm economic, environmental or human health and threaten our natural resources. A list of prohibited, regulated and unregulated non-native species is available at dnr.state.mn.us/invasives/laws.

2024 efforts:

In 2024, Hennepin County received \$312,645 to prevent the introduction or limit the spread of aquatic invasive species. Following the AIS prevention aid guidelines, this funding was distributed with the following administrative processes: \$100,000 towards expanding existing countywide watercraft inspection programs; The remaining annual funding is allocated approximately ½ through competitive pass-through grants; and approximately ½ other initiated projects.

The following provides a summary of the project accomplishments in 2024.

County project partnerships

The county leveraged many partnerships in 2024. Details about many of these partnerships are contained within this report.

Organizations partnered with in 2024

| |
|--|
| Lake associations – 7 |
| Non-profits – 3 |
| Municipalities – 1 |
| Watersheds/WMO/conservation district – 2 |
| Park districts – 2 |
| Private companies – 7 |
| County departments – 1 |
| Research university departments – 3 |
| Multi-counties projects – 2 |

Presentations about AIS by county staff

Hennepin County staff conducted presentations about aquatic invasive species at five events, trainings, or meetings in 2024. These presentations reached approximately 175 people.

- Eagle Lake Preservation Association – January 30
- Lake Independence Association – April 20
- Fish Lake Area Residents' Association – April 24
- AIS Detector course – May 9
- Minnetonka Power Squadron – September 12
- Wayzata Sailing – October 29

Early detection

Early detection efforts involve training citizen volunteers to work alongside scientists to conduct lake surveys as well as to look for signs of AIS in their daily activities. These efforts focus on early detection of AIS where management options may still be available.

AIS detector class

In May, Hennepin County sponsored a University of Minnesota AIS Detectors class, held at the French Regional Park on Medicine Lake in Plymouth. There were 21 total class participants. Of the participants, 57% reported they intended to start activities related to AIS response (prevention, education, management, etc.) and 100% indicated they enjoyed the class. These volunteers joined other AIS Detectors in Hennepin County to complete 152.25 hours of volunteer service in the county in 2024.

AIS on-lake training and survey

Members of the lake associations participated in AIS on-lake training/surveys with a limnologist in 2024. Groups reviewed laminated samples of Starry Stonewort and discussed identifying the plant and similar native plants. Printed AIS field guides were provided to participants. On-lake surveys were conducted and included tosses to collect and identify plants. No new AIS was found during the surveys. More than 17 different plant species were identified. This work was funded through a Hennepin County AIS Prevention grant.

Early detection assistance

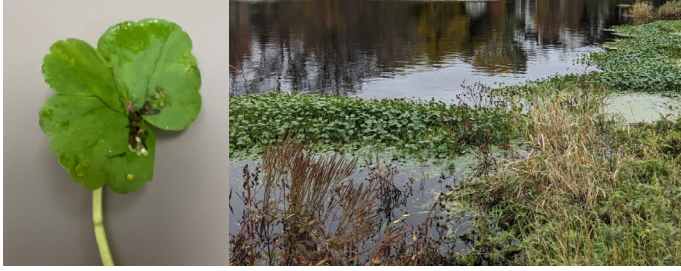
When questions come in from the network of volunteers, trained AIS professionals from Bolton & Menk are available to provide quick and personal answers.

Eurasian watermilfoil in Golden Valley

A new infestation of Eurasian watermilfoil was discovered the summer of 2023 in Sweeney Lake, a recreational and scenic waterbody in Golden Valley. Thanks to its early discovery during a routine aquatic plant survey, the action of the lake community, and an established AIS Rapid Response Plan by Bassett Creek Watershed Management Commission, a prompt and coordinated response was carried out. The milfoil was treated five days after discovery and again in 2024. As of July 2024, no Eurasian watermilfoil was detected. A special shout-out goes to very cooperative and patient residents and public throughout the process.



Water pennywort in Eden Prairie pond



A pond in Eden Prairie was found to be infested with water pennywort in 2023 after complaints were received from homeowners. Eden Prairie staff contacted the Riley Purgatory Bluff Creek Watershed District (RPBCWD) staff and the Minnesota Department of Natural Resources to report the finding. It was believed the plants might not survive through the

winter. Early in the summer of 2024, RPBCWD staff searched the pond, upstream pond, and creek near the outlet and did not find any evidence of pennywort. However, after another investigation in late August 2024, pennywort was found in the pond in small clusters. The pennywort was meticulously pulled and does not appear to do well with competition from native plants. No new plants were found in a follow-up inspection. Pennywort is sometimes sold at garden centers, which can be a potential source of introduction to lakes and ponds.

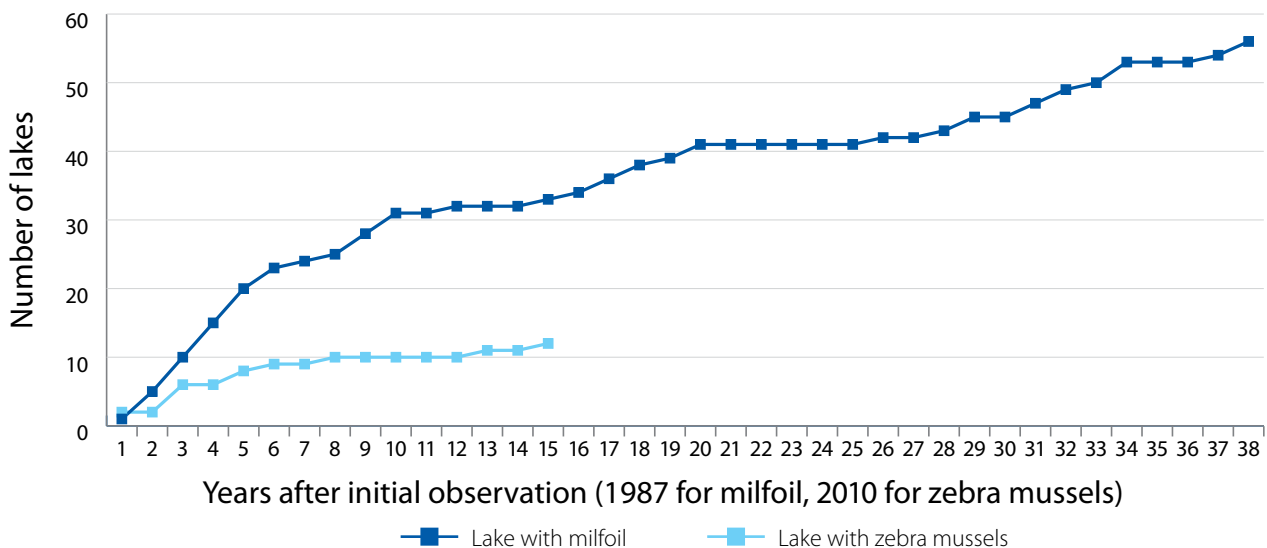
Zebra mussels in Rice Lake



Zebra mussels were found by a Hennepin County trained early detector volunteers and confirmed by the Minnesota Department of Natural Resources in fall 2024. Rice lake is connected and downstream of Fish Lake which has been infested with zebra mussels since 2022.

Spread of Eurasian milfoil and zebra mussels in Hennepin County lakes

This graph shows the spread of both Eurasian milfoil and zebra mussels in Hennepin County lakes starting from the first year discovered (milfoil: 1987, zebra mussels: 2010). The chart illustrates that given the same number of years since detection, 20 less lakes have zebra mussels than had Eurasian milfoil. This is a decrease of 62.5% when comparing milfoil and zebra mussels. When milfoil was discovered, there were few AIS prevention programs in the county in contrast to the robust AIS prevention programs that exist today. While it is difficult to evaluate the direct impacts of prevention efforts, this chart serves as an indicator that the AIS prevention efforts by the numerous stakeholders are making a difference and slowing the spread of AIS in Hennepin County. This chart only includes lake data (not pond, marsh, wetland, rivers or creeks).



Boat access redesign and boat cleaning stations

Boaters state that a common barrier keeping them from taking correct prevention actions is a lack of available space and AIS prevention tools. The county has established processes to initiate access redesign projects aimed at reducing these barriers and utilizing behavior change psychology to help create social norms for AIS prevention. Any access administrator can call county staff to discuss possible projects at any time of the year. Current strategies include: the CD3 waterless cleaning system, which provides the tools to facilitate the actions; pavement markings to influence traffic flow, designated locations to take AIS prevention measures; and signs to prompt the desired behaviors. County staff will work in cooperation with access administrators to determine which approach(es) work best with their access. Currently, 20 accesses in the county have what is considered a high-level redesign including a CD3 waterless cleaning system, pavement markings, designated locations to take AIS prevention measures, and signs to prompt the desired behaviors. This work is in partnership with 11 cities, the Three Rivers Park District, Lake Minnetonka Conservation District, and the Minnesota Department of Natural Resources Division of Parks and Trails.



Inspections and decontamination

The county continued to work with local partners including Three Rivers Park District, Minneapolis Park and Recreational Board, and the Christmas Lake Homeowners Association to supplement and enhance existing watercraft inspection and decontamination programs. This is a strong partnership which uses county funding to increase watercraft inspection hours, number of inspections completed per year, and number of public accesses on lakes countywide.

Pass-through grant watercraft programs

Two additional watercraft programs were administered through the county pass-through grant process.

- WaterGuards staff inspections included five part-time inspectors and 599.75 hours of educational encouragement and watercraft inspections utilizing WaterGuards staff at 15 public accesses.
- Waterfront Restoration ambassador staff worked 759 hours at five different accesses.

Hennepin County inspection data and summaries

These Hennepin County statistics are from the Minnesota Department of Natural Resources Watercraft Inspection Program database:

40,473

total watercraft inspection interactions

(boater AIS compliance rate per access entrance was 97% for vegetation and 98% for drain plugs out.)

32,415

(79%) of county watercraft inspections were conducted by local stakeholders (park districts, county, cities, lake associations).

County AIS funding accounted for 26% of all countywide inspections.

60%

of all public accesses with trailer launching availability have at least a part time access inspection program.

44%

of accesses with trailer launching have a CD3 station at exiting locations.

Extra AIS enforcement

New in 2024, Hennepin County Environment and Energy partnered with the Hennepin County Water Patrol to conduct extra AIS enforcement countywide. Several deputies were trained by Minnesota Department of Natural Resources Conservation Officers and worked to enforce AIS laws throughout the county. This extra enforcement occurred when access inspectors were not present and were conducted at random times and locations.

The following citations were issued:

- 2 – Prohibited transport of aquatic macrophytes (plants)
- 1 – Failure to remove/open drain plug/other devices while transporting

The following verbal warnings were issued:

- 20 – Prohibited transport of aquatic macrophytes (plants)
- 6 – Failure to remove/open drain plug/other devices while transporting
- 1 – Enter or attempt to enter access with invasive species attached
- 2 – Failure to drain water-related equipment before transport

This table summarizes the hours and inspections funded solely from the county AIS state aid.

Bde Maka Ska

Minneapolis Park and Recreation Board

- 713.25 hours, 399 inspections

Bryant Lake

Three Rivers Park District

- 760 hours, 828 inspections

Bush Lake

WaterGuards, LLC

- 26 hours, 22 inspections

Christmas Lake

Christmas Lake Homeowners Association

- 509 hours, 414 inspections

Eagle Lake

WaterGuards, LLC

- 4 hours, 13 inspections

Fish Lake

Three Rivers Park District

- 860 hours, 1,223 inspections

Lake Harriet

Minneapolis Park and Recreation Board

- 713.25 hours, 419 inspections

Little Long Lake

Three Rivers Park District

- 136 hours, 82 inspections

Long Lake

WaterGuards, LLC

- 29 hours, 29 inspections

Waterfront Restoration, LLC

- 133 hours, 302 interactions

Medicine Lake

Three Rivers Park District

- 721 hours, 2,328 inspections

Lake Minnetonka – Carsons Bay

WaterGuards, LLC

- 46 hours, 71 inspections

Lake Minnetonka – Surfside Park

Waterfront Restoration, LLC

- 312 hours, 611 interactions

Lake Minnetonka – Grays Bay

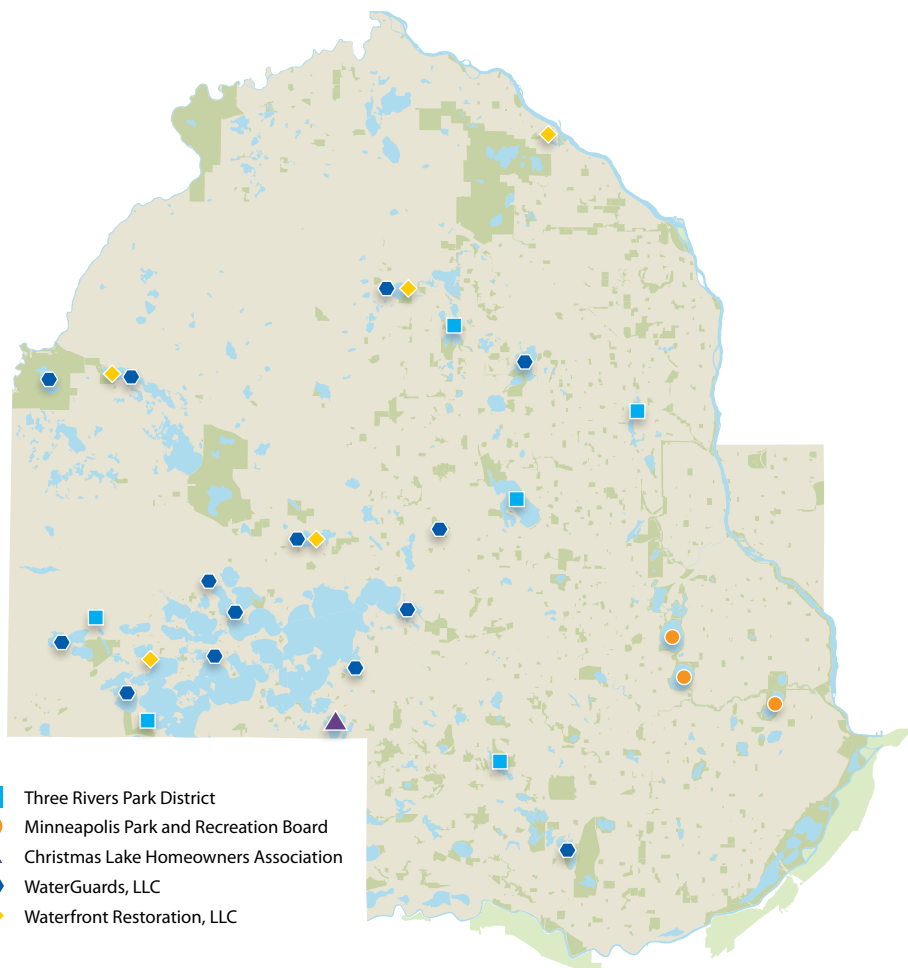
WaterGuards, LLC

- 34 hours, 84 inspections

Lake Minnetonka – Halstead Bay

WaterGuards, LLC

- 100 hours, 148 inspections



Lake Minnetonka – Maxwell Bay

WaterGuards, LLC

- 35 hours, 121 inspections

Lake Minnetonka – North Arm

WaterGuards, LLC

- 76 hours, 252 inspections

Lake Minnetonka – Regional Park

Three Rivers Park District

- 655 hours, 1,869 inspections

Lake Minnetonka – Spring Park

WaterGuards, LLC

- 34 hours, 62 inspections

Mississippi River – Point Park

Waterfront Restoration, LLC

- 77 hours, 234 interactions

Lake Nokomis

Minneapolis Park and Recreation Board

- 713.25 hours, 414 inspections

Parkers Lake

WaterGuards, LLC

- 34.5 hours, 17 inspections

Lake Rebecca

WaterGuards, LLC

- 16 hours, 5 inspections

Lake Sarah

WaterGuards, LLC

- 47 hours, 134 inspections

Waterfront Restoration, LLC

- 110 hours, 239 interactions

Twin Lake

Three Rivers Park District

- 91 hours, 51 inspections

Weaver Lake

WaterGuards, LLC

- 7.25 hours, 8 inspections

Waterfront Restoration, LLC

- 126 hours, 193 interactions

Whaletail Lake

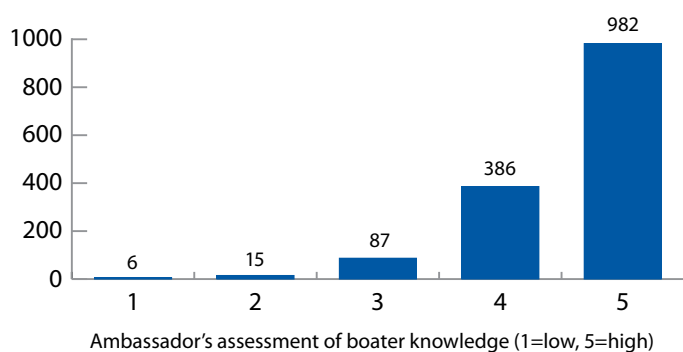
WaterGuards, LLC

- 87 hours, 33 inspections

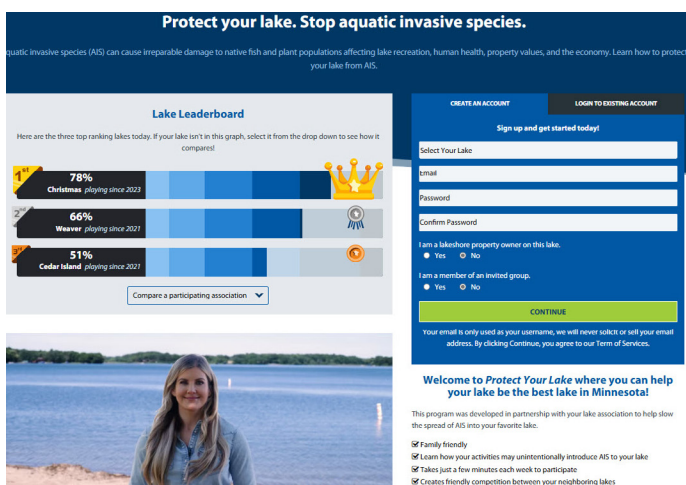
Watercraft access ambassador program

Waterfront Restoration ambassador staff worked 759 hours at five different accesses with 1,481 interactions. It is noteworthy that ambassadors are the only watercraft AIS prevention program approved at the Lake Minnetonka Surfside public access. Significant increases were observed in boaters initiating self-inspections from 60% in 2023 to 89% in 2024.

Previous AIS prevention knowledge of boaters recorded during the ambassador program

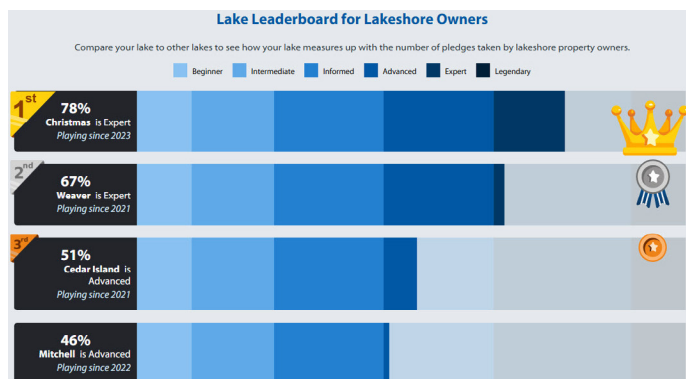


Lake Pledge



The county piloted Lake Pledge as a website and app late in the 2021 boating season with lakeshore homeowners on several lakes. The primary focus of Lake Pledge is to educate and obtain a pledge from lakeshore residents to take actions that better prevent the introduction of AIS into lakes they live by, in which pledge actions are specifically tailored to how they recreate. In 2022, this program was opened-up to all lake users in the county to take the pledge.




Unlocking these fun and rewarding badges can fuel a sense of accomplishment, act as milestones marking progress, and marking the journey to becoming more AIS aware.



An update to Lake Pledge in 2024 makes it possible for groups to join and is a great way to educate about AIS prevention. Lake Pledge could be a good post-class activity to challenge participants to use after they learn about AIS at your site. It could also be used as a group during water-based outdoor education or longer water-focused activities.

Groups should join Lake Pledge to learn what they can do to help prevent the spread of AIS in Hennepin County lakes. Group members will work together to earn badges and printed certificates as they take pledges and view videos.

At the end of 2024, a total of 1,064 people signed into Lakepledge.com and 864 completed the pledge for their activities (81% success rate). Pledges have been made on 24 different lakes along with the Minneapolis Chain of Lakes and the Mississippi River. Depending on the percentage of homes pledging, participating lakes can obtain the Lake Titles of Beginner, Intermediate, Informed, Advanced, Expert, and Legendary. The county now has two lakes that

| Lake Leaderboard for Lake Visitors | | |
|--|--|--------------------------|
| Compare your lake to other lakes to see how your lake measures up with the number of pledges taken by lake visitors. | | |
|  | Christmas <small>Playing since 2022</small> | 175 took a pledge |
|  | Weaver <small>Playing since 2021</small> | 104 took a pledge |
|  | Minnetonka <small>Playing since 2022</small> | 102 took a pledge |
| | Mitchell <small>Playing since 2022</small> | 98 took a pledge |

obtained the AIS Prevention Title of “Expert” (Christmas and Weaver), two lakes are “Advanced”

(Cedar Island and Mitchell), two lakes are “Informed” (Bush and Fish). A shout-out to Mitchell Lake for increasing to 46% of their lakeshore homes finishing the pledge, which is no small feat given there are 170 lakeshore homes around the lake!

Upper Midwest Invasive Species Conference

In November, several county products were on display for the art show at the conference themed “Art as a Voice for Science.” The Hennepin County AIS prevention AIS art sails grant project with Wayzata Sailing won the People’s Choice Award for utilizing the most unique medium. Congratulations to the artists Moira Villiard, Gwen Richards, Geno Okok, and Aimi Dickel!



Education projects

Youth use advocacy to advance AIS efforts

Partnering with the Friends of the Mississippi River organization, a county grant helped to bring the important issue of invasive carp center stage with high school youth in the Environmental Stewardship Institute (ESI). This issue gave them an opportunity to participate firsthand in advocacy. For many participants, this was the first time they had ever done anything like this, and they were both challenged and empowered by this work.

Accomplishments of this project include:

- Played a part in the approval of \$12 million in funding for carp deterrent south of the metro area by the Minnesota Legislature
- Created infographics, a slide show, and social media posts about invasive carp
- Created and hosted an art workshop related to invasive carp
- Participated in Lake Phalen WaterFest, Longfellow River Gorge Festival, and Youth Climate Justice summit reaching approximately 375 people

Video for youth: Keep your pets out of the pond

Hennepin County created a short video to help 4th and 5th grade youth to learn more about AIS. Video creation with Bolton & Menk and funded through a Hennepin County AIS prevention grant. Content includes an introduction to what AIS means, an overview of the risk of AIS in the environment, common AIS found in stores, and information on what to do with unwanted pets. This video will be distributed for use in classrooms in Hennepin County and will also be available on Hennepin County’s website. Please share with any partners that work with youth in 4th or 5th grade.

Interactive display completed and available to borrow



A portable interactive AIS display was created to help spread the message about preventing the introduction of AIS throughout Hennepin County. Display creation was funded through a Hennepin County

AIS prevention grant. The display features realistic AIS models with a landscape containing boats and buildings as representations of pathways of AIS, including lesser-known sources such as garden centers and pet stores. The display will be loaned out and the design and details are available at no cost for water resource professionals to replicate.

Water access inspector training video: integrating behavior change



The county developed a short training video (3 minutes) for use during water access inspector training. The video clearly models how to integrate behavior change into water access inspections.

The video can be shared with water access inspectors to have them view during training.

The video was designed to display on mobile devices. Have inspectors review it on occasion to strengthen their inspection interactions.

Lake Minnetonka Power Squadron and Wildlife Forever partnership

Lake Minnetonka Power Squadron partnered with Wildlife Forever to promote AIS prevention actions during the summer of 2024. They handed out AIS literature at a boat show and parade and other events. They also actively encouraged members to sign up for Lake Pledge. Printed AIS resources are now a standard part of their table setups at events.



Communications

Digital newsletters

AIS early detection newsletter



AIS early detection e-newsletters were sent out to 1,599 countywide partners and volunteers in the spring and fall of 2024.

- [Spring 2024 edition](#)
- [Fall 2024 edition](#)

Subscribe to the newsletter:

- [Click this link](#)
- Click through the prompts to open a list of newsletter subscription options
- Open the Environment option
- Click the Aquatic Invasive Species: Early detectors newsletter to subscribe

Additional newsletters

Promotions of AIS prevention actions, Lake Pledge, and AIS grants were run in Hennepin County Environment and Energy's Green Notes newsletter (7,374 subscribers) and Environmental education news (6,547 subscribers). These articles were also shared in five county commissioner digital newsletters.

Social media

AIS prevention actions, promotions of Lake Pledge, and AIS grants were included on Hennepin Environment and Energy's social media channels on Instagram (2,487 followers), Twitter/X (1,700 followers), and Facebook (11,000 followers) throughout the year.

Website

The hennepin.us/aisprevention webpage was maintained and updated throughout 2024. There were a total of 976 page visits in 2024.

Programmable message boards

In 2015, a capital improvement project and partnership with the Hennepin County Sheriff's Office, Hennepin County Emergency Management and Lake Minnetonka Conservation District made improvements to the Spring Park public access on Lake Minnetonka which included a programmable message board. In 2016 the county received a grant application to partner with the Hennepin County Sheriff's Office and Emergency Management to install programmable electronic message boards on the two busiest Lake Minnetonka boating channels, Arcola and Narrows channels.

Throughout the 2024 season, multiple messages, including AIS prevention messages, were displayed every day from approximately one hour after sunrise to 1.5 hours before sunset. AIS prevention messages were displayed for 40% of this playtime reaching boaters traveling through these busy boating channels, using the public access, and reaching the 17,900 average daily traffic on Shoreline Drive.



Communications partnerships

Minnesota Traditions

The county partnered with 19 other counties to participate in the Minnesota Traditions AIS campaign. The campaign goal is to motivate and influence behavior change through proactive positive messages. Minnesota Traditions currently has hundreds of videos for social media and over 57,000 followers between YouTube, Facebook, X (Twitter), and Instagram.

Angling Buzz

The county partnered with 16 other counties to participate in AIS prevention messaging with AnglingBuzz TV. This campaign included billboards, TV commercials, a web page, YouTube videos, digital newsletters, and social media posts on Facebook and Instagram. These AIS prevention messages had a large reach, one with over a million impressions. See below for details.

Website: **1,408,624** page views

YouTube: **1,200,000** views

Newsletters: **54,500** subscribers

Facebook: **60,000** followers

Instagram: **47,700** followers

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