

Aquatic invasive species prevention program

Preventing the spread of aquatic invasive species:

2021 to 2022 accomplishments

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 county's AIS prevention program, guidelines, and funding options. From this evaluation, adjustments were made to the county's AIS prevention program, guidelines, and funding options. From this evaluation, adjustments were made to the county's [AIS prevention aid guidelines](#) and this is currently directing the use of funds received from 2020 through 2025.

Aquatic invasive species are "non-native, aquatic organisms that invade water beyond their natural historic range" (Minnesota Statute 477A.19). AIS 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.

In 2021 Hennepin County received \$315,633 to implement projects that prevent the spread of aquatic invasive species. In 2022 Hennepin County received \$314,522. The following provides a summary of the accomplishments in 2021 and 2022.

Early detection

Early detection of new AIS populations is a crucial line of defense to prevent establishment and minimize new AIS infestation impacts. Early detection efforts involve training citizen volunteers to work alongside scientists to conduct lake surveys as well as to look for signs of aquatic invasive species in their daily activities.

In 2021 Hennepin County partnered with the Lake Izaak Walton League Chapter and held an AIS identification workshop. It was attended by 27 people who are now on the lookout for AIS.



Hennepin County participated in the University of Minnesota Extension Starry Trek in 2021 and 2022 which is a coordinated event to search for Starry Stonewort statewide. Over 1,700 locations (in addition to lake accesses)

on Lake Minnetonka were searched through a partnership with the Lake Minnetonka Association. A scuba diver was also used in 2022 to search 4 busy Lake Minnetonka accesses. The great news is that starry stonewort was not identified in any new county lakes.

Boat access redesign and boat cleaning stations

The county's research shows that redesigning accesses can be an effective tool to prevent the spread of aquatic invasive species. In 2018, the county conducted observations of boater's behaviors and found that public accesses redesigned to emphasize aquatic invasive species prevention actions had half the violation rates and self-inspection rates increased by one-third. The county's current behavior change strategies at accesses include:

- CD3 waterless cleaning system that provides the tools for boaters to take appropriate actions.
- Pavement markings to influence traffic flow.
- Stop bars to designate locations to take AIS prevention measures.
- AIS prompt signage.



Lower Twin Lake

In 2021 Hennepin County installed a CD3 outpost at the Lower Twin Lake public access in Robbinsdale through a partnership with Three Rivers Park District. In 2022, partnering with the Lake Minnetonka Conservation



Grays Bay boat cleaning station

District, City of Minnetonka, and Minnesota Department of Natural Resources, Hennepin County installed two CD3 boat cleaning stations at the Grays Bay public access on Lake Minnetonka. The Grays Bay access is considered the top-used public access in the State of Minnesota and in 2022 alone, we recorded 2,696 total tool uses.

As of 2022, there are 22 CD3 stations at 19 different water accesses throughout Hennepin County. On Sunday, September 19, 2021, at 3:21pm a boater used the air tool at Carson's Bay on Lake Minnetonka. This was the 100,000th tool use in the county since the pilot project in 2017. A celebration event was held at Bush Lake in Bloomington.

Working with Hughes Company Innovations, a deep dive into the wealth of the CD3 tool use data was completed in 2022. This utilized data science and descriptive analytics. [Read the full report \(PDF\).](#)

Inspections and decontamination

In 2021 and 2022, 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 their existing access inspections and decontamination programs. These partnerships continue to be effective, with the county funding directly resulting in increases of watercraft inspections, lakes inspected, and decontaminations.

Boating has always been an extremely popular activity but reached a significant peak during the COVID-19 pandemic in 2020. This is apparent when looking at watercraft inspections per hour with the inspection programs. Watercraft inspection programs averaged 2.91 inspections per hour in 2020 and 1.82 inspections per hour in 2022, a decrease of 37.5%.

Media outreach

In partnership with 18 other MN counties, the USFWS, Wildlife Forever, and KARE 11 we participated in TV and social media campaigns of CabinCast, Minnesota Traditions, and Lindner Angling Buzz. These campaigns focused on boater AIS prevention messaging throughout the state.

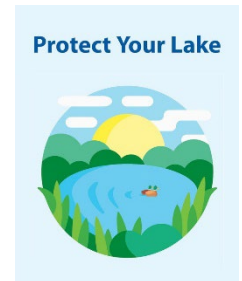
Two county projects were featured on episodes on Minnesota Bound: [Goldfish project on Lake Cornelia](#) in July of 2021 and [AIS art sails on Lake Minnetonka](#) in June 2022.

Education

Lake Pledge

In 2021 the county piloted the website/app [Lakepledge.com](#). The primary focus of the pilot was to educate and obtain a pledge from lakeshore homeowners to take AIS prevention actions for their specific activities.

Following a successful pilot, the program was expanded to all lake users in 2022. As of 12/31/22 we have 506 individuals signed up with a 73% success rate of completing the pledge for their specific activities. The Lake Pledge website and app were presented at the 2022 Upper Midwest Invasive Species Conference, Green Bay, WI.



Ambassador program

In 2022 the county funded an ambassador program to increase boater self-inspection when inspectors are not present at five public accesses. Ambassadors provided boaters education materials. Ambassadors logged 611 hours and direct interactions with 2,041 boaters.

One of the five locations for the program was at Surfside public access. The City of Mound allowed ambassadors at this access on Lake Minnetonka where watercraft inspection programs have not been permitted previously. The ambassadors at Surfside observed 32% violation rates with the most common being a drain plug violation.



Over the season there was an observed increase in AIS knowledge, self-inspections, and watercraft compliance at all accesses where ambassadors were present. [Read the program report \(PDF\)](#).

AIS art sails



In 2021 and 2022 Hennepin County partnered with Wayzata Sailing to work with underrepresented local artists to create AIS prevention art on 24 sailboat sails. These sails are used by more than 500 youth every year and are extremely visible when boating on Lake Minnetonka. The sails were displayed at the 2022 Upper Midwest Invasive Species Conference in Green Bay, WI.

Goldfish reduction at Wood Lake Nature Center

In 2021 and 2022, the county helped introduce bass and bluegills into Wood Lake to reduce the goldfish population in partnership with the City of Richfield Wood Lake Nature Center. Goldfish were first detected in 2014 and the nature center staff noticed a reduction in aquatic biodiversity and water quality. This project created a public educational campaign directly talking to about 5,000 people on how to properly dispose of unwanted pet fish.

Research and pathway analysis

AIS in pet stores and garden centers

In 2021 county garden centers and pet stores were visited to determine if any prohibited species were being sold and the extent of restricted species available. Red swamp crayfish, a prohibited specie, was identified being sold in the county. Working with the state, this issue was addressed. This research has led to creating a county program to help educate county businesses. [Read the report \(PDF\)](#). Our project encouraged the Minnesota Department of Natural Resources to do their own statewide project and they presented their findings at the 2022 Upper Midwest Invasive Species Conference in Green Bay, WI.



Invasive goldfish study

In 2021, we tracked goldfish movements during Spring spawning season on the Lake Cornelia system in Edina. This project is in partnership with the Nine Mile Watershed District and continued to expand our findings from a 2020 study. Within these two basins, it was estimated that about 14,000 goldfish existed with some individual fish measuring over 11 inches.

Boater behavior observations

In 2022, we expanded our observational study when inspectors are not present to five river accesses in Dayton, Champlin, Brooklyn Park on the Mississippi River and the Bloomington access on the Minnesota River. The overall compliance rate for these river accesses was 75.3% (42 observations). This was a lower compliance rate than we observed in previous studies. [Read the report \(PDF\)](#) to learn more.

In past lake access observational studies (2017 to 2019) we saw an 83.4% compliance rate when inspectors were not present. When access inspectors are present, we typically record compliance rates higher than 95%.

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