BOARD OF WATER AND SOIL RESOURCES

2021 January Snapshots

'A leader in so many ways'



Prior Lake-Spring Lake Watershed District water resources project manager Maggie Karschnia talks with a young volunteer during an October 2019 buckthorn removal event at a Prior Lake city park. Photo Credits: Prior Lake-Spring Lake Watershed District

Prior Lake-Spring Lake Watershed District water resources project manager Maggie Karschnia named 2020 Outstanding Watershed District Employee



When Maggie Karschnia joined the staff of Prior Lake-Spring Lake Watershed District in 2015, the district's carp management consisted of an annual carp tournament to help control the invasive species' populations.

Today, under Karschnia's leadership, the district is implementing an innovative integrated carp management plan that was named Program of the Year on Dec. 3 during the annual Minnesota Association of Watershed District's annual conference.

It's not the only recognition

the district earned at the annual conference. Karschnia, the district's water resources project manager, was named 2020 Outstanding Watershed District Employee by the Minnesota Board of Water and Soil Resources (BWSR).

"Maggie has an unwavering ability to recognize what needs to be done," said Diane Lynch, former district administrator, who retired in early December 2020. "She's a scientist, she's an environmental educator, she's a great project manager and a leader in so many ways."

Sediment-stirring, aquatic plant-

uprooting common carp played a significant role in landing four of the 12 lakes within the district on Minnesota's impaired waters list. The integrated carp management plan first approved in 2017 and updated annually — aims to address high carp populations via creative removal and management strategies.

"We've been trying some unique and innovative ideas that I don't believe anyone else has tried yet," Karschnia said.

Carp are radio tagged to determine migratory routes, aggregation areas and spawning grounds. District staff developed two unique carp capture systems: push traps and specially modified box traps both allow carp to enter a trap but bar them from exiting. Commercial fishermen seine carp as opportunities arise from November to April, with four large hauls vielding up to 17 tons of carp per seine so far. Smaller hauls are conducted in the summer months and generally yield several dozen to several hundred fish per effort.

Karschnia isn't afraid to try new things when it comes to carp management: within the past year, she's started experimenting with training the carp using underwater speakers. By playing a specific sound when carp are fed, she said carp can begin to associate that sound with a reward and are more likely to swim toward the sound. While it hasn't worked as well as originally hoped, Karschnia said it's important to try new things when managing a clever and prolific species such as carp.

The district has developed volunteer programs that allow community members to join the effort. Local residents can take online training and participate in carp baiting and tracking. A "carp espionage" program invites people who live on or near a lake, wetland or stream to fill out a short form when they spot carp. Data generated by community efforts are used to analyze conditions and patterns that inform the management plan.

"People really are pretty fascinated by carp," Lynch said. "They can live to be 80 years old. These are amazing creatures, and they



Maggie Karschnia (left) pictured with Mary Newman of WSB Engineering during a carp seine event in 2018.

are very smart."

Karschnia is involved in a variety of district initiatives in addition to carp management. In partnership with Scott SWCD, she helped revitalize a farmerled council by facilitating meetings through her role as project manager. The council brings together farmers from Scott County to explore and test best management practices, like cover crops.

"She took the ball and got it moving" Lynch said of Karschnia's efforts with the council. "It's really important that we help private landowners with efforts to protect water quality. Through her leadership and partnership with (Scott) SWCD, there have been a number of programs provided to farmers."

Prior to joining the district, Karschnia spent seven years working for the Minnesota Land Trust as a wetlands and grasslands program manager. She also previously worked at the Minnesota Department of Natural Resources in the Scientific and Natural Areas program, and with the Wisconsin Department of Natural Resources conducting aquatic plant surveys.

Karschnia applied her experience with conservation easements early on in her role with the watershed district by overseeing efforts to monitor easements to ensure compliance with water resource protections, and by providing landowners with the tools they needed to implement best management practices.

"The district had many easements and weren't sure what steps to take next to get them into compliance," Karschnia said. "I used my easement background from the Minnesota Land Trust to set up procedures and policies for easement enforcement and amendments and to start establishing good relationships with the landowners."

Karschnia's passion for conservation extends beyond her day job. She volunteers for the Wetland Health Evaluation Program (WHEP), a joint effort between Dakota and Hennepin counties that engages citizen volunteers to help monitor wetlands in their communities.

She also serves as vice president of the Minnesota Association for Environmental Education Board, which seeks to strengthen the role of education as a solution to pressing environmental and societal challenges. The board provides resources and scholarships. organizes conferences and events to promote professional development and networking, and helps environmental educators access jobs, grants and other resources.

"I feel like environmental education plays a role in all aspects of my job," Karschnia said. "Whether I'm sending a newsletter to easement folks or posting an update on Facebook, it's embedded in everything I do."

In her free time, Karschnia enjoys fly fishing and other outdoor activities. She submits a gingerbread house to Norway House's annual Gingerbread Wonderland event. This year, she re-created Hogwarts School of Witchcraft and Wizardry in gingerbread from the book series by J.K. Rowling. She also applies her artistic talents to conservation: she created freehand drawings of plant examples and diagrams for a recently revised version of the plant ID manual for WHEP.

"Maggie is very curious and creative, and she loves challenges," Lynch said. "She does a great job at getting people excited about conservation."