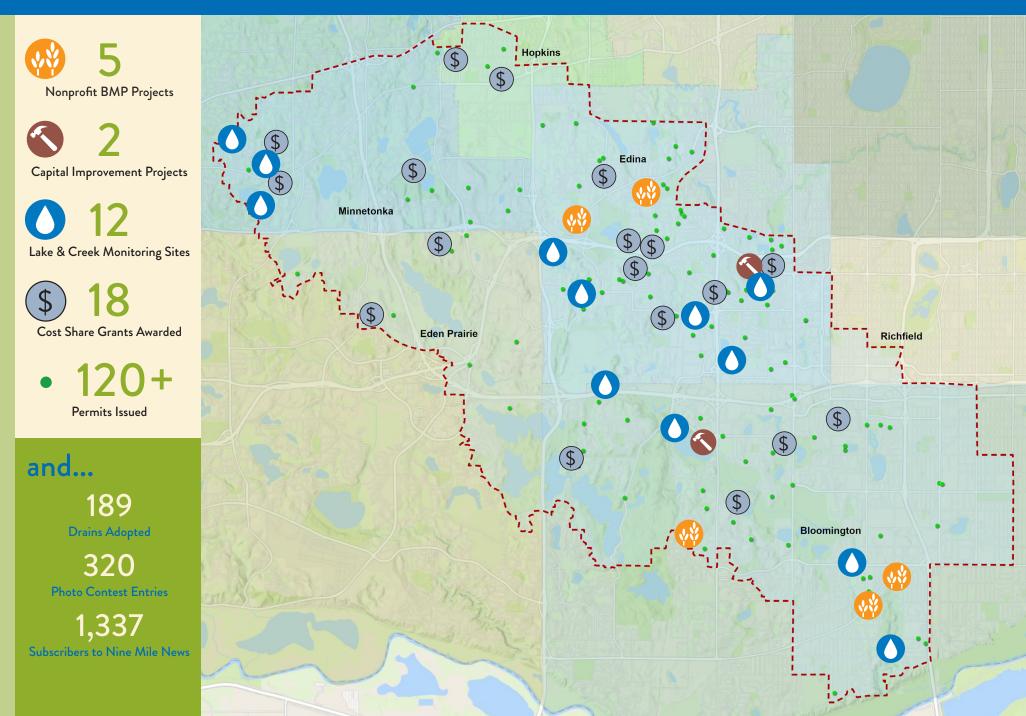
Nine Mile Creek 2020 AT-A-GLANCE



A Message from the Administrator

Dear Friends,

Let me start by saying that I hope that all of you are safe and healthy, and that your family and loved ones are as well. Who really knew in March that we would still find ourselves working from home, having virtual board, advisory committee, staff and stakeholder meetings and events? Through these efforts we have learned a great deal, discovered some obstacles, and enjoyed many successes. What we have learned will only enhance our various programs and work once we are all able to meet again in person.

Although our offices have been closed throughout the summer, our field work, including the implementation of water resource management projects and water resource monitoring programs has continued. This has included:

- Lake and creek monitoring program
- Education and Outreach program
 - Adapting our education and outreach program from mostly in-person hands-on events, to mostly webinars and recorded videos.
- Regulatory program
- Studies
 - Normandale carp analysis and removal of nearly 5,000 carp from the lake
 - Lake Cornelia goldfish and common carp inter-waterbody movement and overall management study
 - Inventory of high-quality wetlands throughout the District to identify protection and enhancement opportunities
- Projects
 - Normandale Lake herbicide treatment to control curly-leaf pondweed
 - Lake Cornelia in-lake alum treatment
 - Nonprofit stormwater BMP project
 - Warranty repair and maintenance work on the recently completed Edina streambank stabilization and restoration project
 - The ordering of the Rosland Park Stormwater Filtration Project to reduce watershed-based phosphorus loads to Lake Cornelia
 - An addition to the District offices (Discovery Point) to provide needed storage and office space

Up-to-date information on our current projects and programs can be found on our website at ninemilecreek.org.

In closing, I just want to thank all of you for your care and concern for District staff, volunteers, and board members, for your continued support through your volunteerism, program participation and, most importantly, your stewardship of our water resources.

Managing the Watershed

Five managers, appointed by the Hennepin County Board of Commissioners to threeyear terms, direct the activities of the District. The Board of Managers work with state agencies, Hennepin County and the cities within the District to implement the goals and policies detailed in the District's State-approved water management plan set forth in state law. Watershed District activities are funded through property tax levies.

Manager Jodi Peterson retired in September from the Board of Managers after serving since 2011. Manager Peterson's insight and balanced perspective were indispensable in the development of the District's fifth generation water management plan and multiple rules revisions. She was also a firm supporter of education and outreach throughout her time on the Board. We thank her for her insight and leadership.

In early October, Erin Hunker was reappointed to the Board, and Peggy Kvam was appointed to fill Manager Peterson's vacancy. As a MN Water Steward volunteer and a former Citizen Advisory Committee member, Manager Kvam has years of experience with the District. In addition, she has served the community in many capacities, including as a Board Member for the League of Women Voters and as a Minnetonka Park Board member. We are happy to welcome Manager Kvam, and to have Manager Hunker join us for a second term.

Managers, Staff & Consultants

MANAGERS

Bob Cutshall (bcutshall@ninemilecreek.org) President / Term Ends: 9/2021 Erin Hunker (ehunker@ninemilecreek.org), Secretary / Term Ends: 9/2023 Peggy Kvam (pkvam@ninemilecreek.org), Manager / Term Ends: 9/2023 Larry Olson (lolson@ninemilecreek.org), Treasurer / Term Ends: 9/2022 Grace Butler (gbutler@ninemilecreek.org), Vice President / Term Ends: 9/2022 Jodi Peterson, Manager / Term Ended: 9/2020

STAFF

Randy Anhorn (952-835-2078), Administrator Lauren Foley (952-204-9690), Permitting & Water Resources Coordinator Erica Sniegowski (952-358-2276), Program & Project Manager Gael Zembal (952-204-9691), Education & Outreach Coordinator Lizzy Boor (952-356-1999), Minnesota GreenCorps Member Megan Jester / Summer Intern

CONSULTANTS

Janna Kieffer (952-832-2600), Engineering Advisor Bob Obermeyer (952-832-2600), Engineering Advisor Louis Smith (612-344-1400), Legal Advisor Michael Welch (612-344-1400), Legal Advisor

AND

2020 Annual Communication

District Projects

NORMANDALE LAKE PROJECT

An herbicide treatment occurred on Normandale Lake and an upstream area on May 8, 2020. The herbicide treatment targeted remaining curly-leaf pondweed in Normandale Lake following the 2018-2019 drawdown of the lake. Curly-leaf pondweed is an invasive aquatic plant that makes it difficult for native plants to survive and can affect water quality. The District will conduct follow-up plant surveys to determine if herbicide treatments are necessary in subsequent years to manage any continued areas of curly-leaf pondweed growth.

The District is working with Carp Solutions to determine the best long-term methods for carp management in Normandale Lake. Carp are an invasive species of fish that cause water quality problems due to their bottom feeding behavior. They stir up lake bottom sediments, which reduces water clarity and releases phosphorus. They also uproot aquatic plants, destroying habitat for waterfowl and aquatic communities. A 2018 fish survey indicated that carp were at a level in Normandale Lake where management of the population is recommended for water quality purposes. As part of this work, box netting occurred in the lake in 2020. A box net lays flat on the bottom of the lake, while carp are trained to gather in the area with cracked corn. The carp are selectively removed when they are gathered at the site and the sides of the net are raised. Using this method, approximately 5,000 carp were removed from Normandale Lake. In addition, a fish survey was done in the fall. No young-of-the-year carp were captured, and preliminary results indicate that the population of bluegills should be sufficient to control reproduction of carp in 2021.



NONPROFIT PROJECT

The District installed six raingardens at five sites in 2020 as part of the nonprofit stormwater BMP project. The raingardens are designed to soak in stormwater and reduce pollution reaching Nine Mile Creek and local lakes. A 2017 LCCMR grant allowed the district to work with Barr Engineering to optimize project locations on land owned by nonprofits, conduct outreach to find willing project partners, and complete preliminary design work. A Hennepin County Opportunity Grant offset District funds for the construction of the six raingardens.

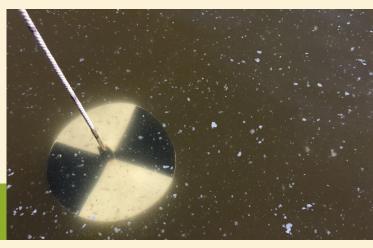
A raingarden installed as part of the nonprofit stormwater BMP project

LAKE CORNELIA AND LAKE EDINA

Lake Cornelia and Lake Edina are shallow lakes in Edina with poor water quality that are on the state's impaired waters list for excess nutrients (phosphorous). Excess phosphorus fuels algal growth and decreases water clarity. The phosphorus comes from several sources, including stormwater runoff from the watershed (external source) and internal sources such as nutrient-rich sediments and decomposition of curly-leaf pondweed. Disruption caused by carp and goldfish may also be decreasing water clarity. The District is working to control phosphorus levels in the lakes and as such, completed an in-lake alum treatment in Lake Cornelia in May 2020. This alum treatment will help reduce the amount of phosphorus coming out of Lake Cornelia, thereby improving Lake Edina and downstream water resources.

Alum is a nontoxic liquid and is applied to the lake from a treatment boat. The alum forms an insoluble aluminum hydroxide floc that settles to the lake bottom. The aluminum binds with phosphorus in the sediment to prevent it from recycling back into the water column.

In addition, the District's board of managers ordered the Rosland Park Stormwater Filtration Project to reduce watershed-based phosphorus loads to Lake Cornelia. A 2019 water quality study recommended implementation of a stormwater best management practice (BMP) located in Rosland Park. The proposed BMP is an aboveground filtration system that will remove phosphorus from stormwater flows and improve water quality in Lake Cornelia. The District has received a Hennepin County Opportunity Grant to partially fund the project. Visit ninemilecreek.org/lake-corneliaproject for more information.



Alum floc seen during an alum treatment

Grants

HENNEPIN COUNTY AIS PREVENTION GRANT

The District was awarded a \$20,000 Aquatic Invasive Species prevention grant from Hennepin County to conduct a study with WSB to track movement of the goldfish in Lake Cornelia and surrounding waterbodies in Edina. This will allow the District to better understand their mobility, spawning patterns, and likelihood to travel/spread within a lake system. Lake Cornelia has an infestation of goldfish. Goldfish are not native to Minnesota. When goldfish are released to lakes and creeks, goldfish are destructive to native species and their habitats. They stir up the bottom sediment when they eat, increasing the cloudiness of the water, releasing nutrients that fuel



algae growth, and impacting aquatic plant growth. Goldfish can survive in low oxygen conditions and can tolerate larger fluctuations in water temperature than native fish. This allows them to thrive and outcompete native fish species in certain conditions, reducing the biodiversity of the water body. This is why we ask you not to release your aquarium pets into our lakes and creeks!

In 2020, the District collected a sample of goldfish to attach antennae to, before releasing them, so that their movements could be tracked. In addition, a goldfish removal method was tested to determine effectiveness of stopping goldfish spread. The District will post the results of the study, when available, at: ninemilecreek.org/lake-corneliaproject.

A goldfish is measured during a 2020 goldfish survey in Edina

HENNEPIN COUNTY OPPORTUNITY GRANT

The District received an Opportunity Grant from Hennepin County to install raingardens on five non-profit properties in Bloomington and Edina, as part of the District's nonprofit stormwater BMP project. The Opportunity Grant funded \$60,000 of the total project cost and offset District capital improvement funds. You can find more detail about the project at: ninemilecreek.org/nonprofits-grant.

MINNESOTA RIVER VALLEY AUDUBON CHAPTER

The District has been working with Normandale Hills Elementary School in Bloomington to install a raingarden on their property. This raingarden will help students learn about stormwater runoff, and the importance of native flowers. In 2020, this project was awarded a \$2,000 grant from the Minnesota River Valley Audubon Chapter. The garden will be installed in the spring of 2021.

COST SHARE GRANTS

In 2020, the District awarded 18 cost share grant totaling approximately \$150,000 in funding. Residents, associations, nonprofits, businesses, and cities are eligible to apply for grants for projects that protect and improve the water and natural resources within the Nine Mile Creek Watershed District.

An ad-hoc subcommittee met in 2020 to review policies regarding the implementation of restoration projects, one project type that is eligible for grant funding from the District. Beginning in 2021, the District will structure its cost share program with an application period and policy guidelines for habitat restoration grants and a separate application period and policy guidelines for stewardships grants. Stewardship grants will cover projects such as raingardens, shoreline buffers, and permeable pavers. For more information visit: ninemilecreek.org/grants.

Lake and Creek Monitoring

The District conducted its annual lake and creek monitoring in 2020. The lake and creek monitoring program collects water quality data from waterbodies across the watershed. In 2020, the District monitored eight lakes (Arrowhead lake, North and South Cornelia lakes, Lake Edina, Lake Holiday, Indianhead Lake, Normandale Lake, Lake Rose, and Wing Lake). The monitoring program provides data about past and present water quality conditions within the watershed. The data establishes a reference point for normal water quality conditions, tracks changes, and informs additional studies. It also allows the District to measure the success of past and ongoing projects that seek to improve the health of District waterbodies. Our monitoring reports are available at: ninemilecreek. org/lake-creek-monitoring.

In addition to water quality monitoring in 2020, the District is studying common carp management options in Normandale Lake to reduce internal phosphorus loading in the lake and is studying the populations and inter-waterbody movement of an infestation of invasive goldfish in a small chain of shallow lakes including the North and South Cornelia lakes, Lake Nancy and Swimming Pool Pond located in the City of Edina. The goldfish study in the Cornelia Lake chain is partially funded by a Hennepin County Aquatic Invasive Species (AIS) Prevention Grant and the Nine Mile Creek Watershed District. The goal of the projects is to understand common carp and goldfish populations and their movement to identify management alternatives to reduce fish biomass to a level that no longer impacts water quality.

Volunteers

Even though we were apart more than ever this year, our volunteers were still able to complete projects to help our lakes and creeks! Thank you to all our volunteers for continuing with your work, while keeping safety in mind. Whether you have adopted a drain in the watershed, or you monitor a lake for the CAMP program, or you get out and take pictures, we value you and your work.

CITIZEN ADVISORY COMMITTEE (CAC)

Thanks to the Citizen Advisory Committee members who helped us navigate these interesting times: Roger Bildsten, Kim Herzog, Scott Jordan, Ember Kapitan, Rich Koechlein, Charlotte Lefebvre, Joshua Lynn, Beth Miller, Bob Prince, Tim Ronhovde, Jonathan Scoll, and Stephen Sinykin, and our Board Liaison to the CAC, Manager Butler. Along with helping choose the photo contest winners, CAC members helped develop new programs and education ideas, film educational videos, and attended virtual conferences to learn more about water.

If you would like to join the CAC, we are accepting applications through January 8th, 2021. Find out more at ninemilecreek.org/citizen-advisory-committee.

CARDINAL CREEK TRAIL RESTORATION

Volunteers, MN Water Stewards, and Citizen Advisory Committee members have spent the past four years removing buckthorn, an invasive shrub, from the sides of the Cardinal Creek trail in Eden Prairie. In partnership with the District and the City of Eden Prairie, the area is finally cleared of the tall mature plants, and ready for something new.



At the end of September, volunteers helped sow a variety of different native seeds on site. These seeds will help hold the soil in place, while also improving wildlife habitat. Volunteers and District staff will continue to monitor this project, and conduct maintenance activities as needed in the coming years. We thank all the volunteers that helped with this project.

Volunteers sowing native seeds on Cardinal Creek Trail; Photo by Barb P

MINNESOTA WATER STEWARDS

In late 2020, the Freshwater Society changed the name of the Master Water Stewards volunteer program to better align with their anti-racist values. The word "Master" has a deep, damaging connection to slavery in this country and the oppression of People of Color and Black and Indigenous communities. Replacing it with "Minnesota" reflects their commitment to including ALL people of Minnesota in caring for water. The District supports this change and will work to update our materials accordingly.

Despite the hardships of this year, the 9 Mile Creek MN Water Stewards still accomplished great work! Three MWS candidates graduated this year, having put in a bird friendly grove, a native prairie, and a raingarden in on their respective properties.

Congratulations, Peggy, Bethany and Sara on your certification as MN Water Stewards! One MWS volunteer also helped with the goldfish study on Lake Nancy, which will help understand their movements through the Lake Cornelia system.

> Raingarden installed as MWS Capstone project



Permitting Program

The District's Rules are the cornerstone of the regulatory program, protecting lake and creek water quality, floodplains, wetlands, and more. This year the 120 permits issued by the District prevented 29,445 pounds of sediment and 606 pounds of algae bloom-causing phosphorous from entering water bodies, as of mid-October. Staff members continued inspections throughout the District to correct erosion issues and approved most permits administratively. We are starting a rollout of software for District staff and consultants to automate certain time-consuming tasks in the program. This and other improvements to the regulatory program will continue through 2021.

Education and Outreach

The District's education and outreach program faced many new challenges this year, as staff adjusted programs to living in a pandemic. However, with the help of staff, interns, volunteers, and the GreenCorps member serving with the District, we were still able to offer programs. This included transitioning our programs to live webinars and recorded videos; we also created and updated numerous brochures and fact sheets behind the scenes. We increased our website blog posts and social media posts as well to help people stay involved with the work of the watershed.

LAKE FACT SHEETS

Thanks to our summer intern Megan and The Design Company, we have new Lake Fact Sheets for the major lakes in our watershed! These flyers have information about the lake's characteristics, like size and recreation opportunities, as well as past or planned projects and data on that lake's water quality parameters. Though we are still putting the finishing touches on them, you will be able to download them in early 2021 from our website, ninemilecreek.org.

WEBINARS AND VIDEOS

Many of the District's programs were converted to webinars this past year for everyone's safety. We also recorded several educational videos about runoff, water



bugs, and a creek tour. You can find recordings of our programs and educational videos on our YouTube channel. Thank you to our partners and presenters who worked to make so many of our programs virtual! You can find our upcoming webinars on our website, ninemilecreek.org.

Check out our YouTube channel for videos and webinars

Upcoming

DISCOVERY POINT HABITAT RESTORATION

The District is in the planning process for the final stage of restoration at its five-acre office and educational site in Eden Prairie. The goals of the restoration are to restore a

more diverse, healthy habitat in the face of aggressive invasive plant species like buckthorn, and to demonstrate for property owners within the District how to stabilize soil, control invasive species, and increase plant diversity in an urban setting. The ultimate vision to create an ecologically diverse site with improved access for the public to the landscape for educational and recreational opportunities. Habitat restoration work began in 2016 with volunteer buckthorn removal and has continued with professional buckthorn removal and native planting efforts in two separate phases. The third, and final phase, will focus on buckthorn removal and native planting on the northern portion of the property and continued management of aggressive invasive species site wide.



Area restored at Discovery Point to native habitat

2020-2021 MN GreenCorps Host Site

We are happy to welcome Elizabeth to NMCWD. Elizabeth is a MN GreenCorps Member serving her 2020 term at the Nine Mile Creek Watershed District. She is a recent graduate in Environmental Science and Geology from the University of Minnesota Duluth and will be involved with our environmental education and outreach program. She hopes to be a leader in the protection and preservation of Minnesota's waters. Outside of protecting the environment, Elizabeth can be found outside rock climbing, gardening, playing acoustic guitar, and baking delicious bread. After this service term, Elizabeth plans to continue her education in graduate school at the UMN. MN GreenCorps is an AmeriCorps program and is a statewide initiative to help preserve and protect Minnesota's environment while training a new generation of environmental professionals.

Nine Mile Creek Watershed District Nine Mile Creek Discovery Point

12800 Gerard Drive Eden Prairie, MN 55346 P: (952) 835-2078 E: ranhorn@ninemilecreek.org ninemilecreek.org

Subscribe

Get updates from the District: subscribe to our newsletter at ninemilecreek.org.

The Nine Mile Creek Watershed District Board of Managers meets the third Wednesday of each month at 7:00 PM virtually until further notice.

Watershed District activities are funded through property tax levies.