NINE MILE CREEK IN 2023

Annual Communication of the Nine Mile Creek Watershed District



COMPILED DECEMBER 2023

2023 ANNUAL COMMUNICATION

NINE MILE CREEK WATERSHED DISTRICT

NINE MILE CREEK DISCOVERY POINT

12800 Gerard Drive Eden Prairie, MN 55346 P. 952-358-2276

E. esniegowski@ninemilecreek.org

ninemilecreek.org

Cover background picture by Ryan Gottsleben Cover water drop inset picture by Charlie Anderson, 2023 Photo Contest Winner

TABLE OF CONTENTS

2023 at a glance	ii
From the Administrator	1
New positions and staff growth	2
Education and outreach	3
Cost share grants	3
Grants received	3
Volunteer programs	3
Planning	4
Lake and creek monitoring	2
District projects	5
Upcoming in 2024	6
Regulatory program	7
Managers and consultants	7



Paddle Pals, Photo by Benjamin Landsteiner, 2023 Photo Contest winner

2023 AT A GLANCE

Download the full infographic here: ninemilecreek.org/wp-content/uploads/2023-at-a-glance.pdf



The District presented or partnered on 50 education events around the watershed. These programs reached over 3,000 people of all ages.

152 PERMITS PROCESSED

1.075

PERMIT INSPECTIONS

LAKES

All District lakes are monitored on a rotating basis. Points on the creek are monitored every year. Additionally, the District took sediment cores from two lakes.

MONITORED





The District awarded 12 grants totaling over \$109,000 in funding. Projects included shoreline buffers, raingardens, and salt reduction initiatives.

LAKE STUDIES

Lake studies evaluate current water quality in lakes to identify potential management strategies for those lakes.

PROJECTS IMPLEMENTED

Some of the many projects implemented over the year included an herbicide treatment on Normandale Lake and streambank maintenance in Hopkins. In addition, we conducted carp and goldfish management in multiple lakes.



The District has added staffing capacity as it continues to implement projects, programs, monitoring, and other initiatives laid out in its ten year water management plan. 2023 saw the addition of a few new full-time positions, and growth of current staff into new roles.



FROM THE ADMINISTRATOR



After 30 plus enjoyable years working in the water resources management field (the vast majority in the Twin Cities Metro Area), it is with mixed emotions that I am hanging up my Secchi disc at the end of 2023. The last seven plus years as the Administrator of Nine Mile Creek Watershed District have been especially rewarding. During this time, we have implemented numerous projects and expanded programs to protect and enhance our natural and water resources.

As for my retirement, I am looking forward to more time for travel, family and yet to be determined adventures and passions. I have greatly enjoyed working with the District's wonderful staff and board members, our partners and community members and my professional colleagues. Even when times were difficult, I knew I could count on your support. Please accept my heartfelt thanks. Keep up the great work!

ERICA SELECTED AS NEXT ADMINISTRATOR

The Nine Mile Creek Watershed District Board of Managers has selected Erica Sniegowski as the next District Administrator, following Randy Anhorn's retirement on December 31, 2023. As Administrator, Erica will oversee District operations, including coordinating with the board of managers and developing the District's annual budget and work plan.

Erica has worked in the water resources field for over 15 years, having worked at the Mississippi Watershed Management Organization for five years before starting at the Nine Mile Creek Watershed District in 2012. Erica is currently the Deputy Administrator at the Nine Mile Creek Watershed District and has also managed capital improvement projects and overseen the education and outreach program and grants program in her time at the District. She has a Bachelor of Science degree in Biology from Iowa State University, a Master of Science degree in Water Resources Science from the University of Minnesota (UMN) and is graduating with a Master of Public Affairs degree from the UMN's Humphrey School of Public Affairs in May 2024. When not at work, Erica spends her time at hockey rinks and baseball and lacrosse fields watching her kids play youth sports and also enjoys reading and spending time outside.

New Administrator Erica Sniegowski will take over from Randy Anhorn in

STAFF

Randy Anhorn: Administrator (Retired December 2023)

Elizabeth (Lizzy) Boor: Watershed Specialist /eboor@ninemilecreek.org / 952-395-8207

Brett Eidem: Natural Resources Project & Planning Manager / beidem@ninemilecreek.org / 952-356-1999

Dylan Monahan: Administrative Assistant (part-time) / office@ninemilecreek.org / 952-206-0980

Erica Sniegowski: Deputy Administrator / esniegowski@ninemilecreek.org / 952-358-2276

Zach Stafslien: Regulatory Program Manager / zstafslien@ninemilecreek.org / 952-204-9690

Gael Zembal: Education & Outreach Coordinator / gzembal@ninemilecreek.org / 952-204-9691

Alissa Schmidt / 2022-23 MN GreenCorps Member

NEW POSITIONS AND STAFF GROWTH

EXPANDING WORKLOAD

The District has added staffing capacity as it continues to implement projects, programs, monitoring, and other initiatives laid out in its ten year water management plan. 2023 saw the addition of a few new full-time positions, and growth of current staff into new roles.

Jordan Wein hired as Water Resources Project Manager starting in 2024 — The District is excited to announce the hiring of Jordan Wein as our new Water Resources Project Manager. Jordan will start with the District in mid-February and his job duties will include coordinating lake studies, developing a fisheries management program, and the planning and implementation of water resources projects within the watershed.



Jordan Wein Water Resources Project Manager

Jordan graduated with a B.S. from North Dakota State University with a Fisheries and Wildlife Management degree and completed his M.S. at the University of Minnesota in Ecology, Evolution, and Behavior. He spent a year collecting data that led to the groundwork development of many commonly used fisheries management techniques for invasive carp. He then spent two years as a natural resources manager in the Peace Corps volunteering with his wife in Ghana, West Africa. Following this, Jordan has gained nine years of project management experience dealing with invasive fish in Minnesota, Nebraska, Michigan, California, and North Carolina and brings with him an understanding of ecosystem impacts of fisheries on lake and creek health. In his spare time, Jordan enjoys camping with his family, following local MN sports teams, and coaching the winter drumline program with Burnsville High School.



Lizzy Boor Watershed Specialist

Lizzy Boor moves to full-time Watershed Specialist position — Lizzy has been working with the District for just over three years. She first started working for the District in 2020 as an Education and Outreach Minnesota Green Corps service member. The District then hired her part-time as an intern while she finished her Master's degree. In May 2023, Lizzy was hired full-time to take over coordination of the cost share grant program and assist with project-related outreach. Lizzy received her B.S. in Environmental Science and Geological Sciences from the University of Minnesota-Duluth and recently completed her M.S. in Water Resources Science at the University of Minnesota-Twin Cities. In her free time, Lizzy loves to cook, rock climb, and go swing dancing.



Zach Stafslien Regulatory Program Manager

Zach Stafslien hired as Regulatory Manager — Zach graduated with a BSCE from Minnesota State University- Mankato with a Civil Engineering degree. He is a registered professional engineer in Minnesota and has experience in construction inspection, stormwater design, stormwater site review, and compliance with regulatory requirements. As Regulatory Manager, Zach reviews permit applications, assists permit applicants, and oversees permit site inspections to ensure compliance with District rules. In his free time, Zach likes to backpack, camp, garden, and canoe on local lakes.

EDUCATION & OUTREACH

The District's education and outreach programs strive to connect people with the water and natural resources of the Nine Mile Creek watershed. These programs aim to encourage stewardship behaviors in all those who live, work, and recreate in the District. In 2023, the District presented or partnered on 50 events around the watershed. These programs reached over 3,000 people of all ages. New programs included a series on urban soil health in partnership with the City of Minnetonka and the Riley Purgatory Bluff Creek Watershed District. Staff also presented programs and field trips for six schools and attended numerous community events in each of our cities, teaching about water pollution, native plants, and raingarden maintenance. See upcoming events at: ninemilecreek.org/upcoming-events.

PROJECT OUTREACH

GreenCorps Member Alissa tabling at a Farmer's Market

In addition to our general water education, we also provide outreach to those living near or impacted by our projects. Project managers work with interested community members to share information on project activities, impacts, costs, and timelines. Learn more at <u>ninemilecreek.org</u>.

COST SHARE GRANTS

GRANTS AWARDED

In 2023, the District awarded 12 cost share grants totaling over \$109,000 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. Eligible projects include raingardens, shoreline buffers, permeable pavers, habitat restoration, and projects that reduce chloride use, among others. For more information on available grants visit: ninemilecreek.org/grants.

Starting next year, the District will switch to a rolling grant deadline where applications are reviewed and approved each month. For your best chance at funding, plan to apply early in the year!

GRANTS RECEIVED

The District leverages grant funds from state and federal entities to make levy dollars stretch further. These grants help us perform innovative projects and monitor them for longer than we could without. This is the case with the Rosland Park Filtration Vault: we received grant funds last year from the MN Stormwater Research Council to monitor how this new technology performs. Learn more here: ninemilecreek.org/rosland-park-filtration-vault.



In 2022, we received a Federal Emergency Management Association (FEMA) grant for our <u>Atlas-14 Flood Risk and Resiliency Project</u> (which was in its third phase in late 2023). This grant was part of the Hazard Mitigation Assistance Program.



VOLUNTEER PROGRAMS

Our volunteer programs help people improve their community and neighborhood natural resources. Volunteers also helped at community events like farmer's markets, as well as school field trips to local lakes and parks.

SALT WATCH

The District is in our fourth year of participation in the Salt Watch program. Our volunteers sample snow melt running down their street to measure its approximate chloride level. This helps pinpoint areas that need more salt reduction education in our watershed. This is a program of the Izaak Walton League of America, and we are grateful to partner with them. Find out more, and join the program at: ninemilecreek.org/saltwatch.

PLANNING

LAKE STUDIES

The District conducts lake studies to evaluate current water quality in lakes and to identify protection and improvement strategies for those lakes. A water quality study was completed for Mirror Lake (Edina) in 2023. Studies were also done on Birch Island Lake (Eden Prairie) and Penn Lake (Bloomington), which the District will finalize in early 2024. Following the completion of lake studies, the District conducts feasibility and engineering reports. The feasibility reports evaluate design options and quantify cost-benefits (when practical) to provide additional information for the District's board of managers to make decisions about proceeding to full project implementation. For more information about our lake studies, visit: ninemilecreek.org/current-studies.

FRAMEWORK ASSESSMENT FOR PROJECTS

The Board of Managers approved a scope of work in November 2023 for Barr Engineering to develop a project assessment framework. The District will use this framework to formalize the process used to monitor and assess the effectiveness of lake management projects and to assist in characterizing lake management status following project implementation. Beyond aiding in management decisions, the framework will lay out clear expectations regarding lake management goals and will lay out the pathways for implementation of adaptive lake management.

ATLAS-14 FLOOD RISK AND RESILIENCY PROJECT

The District is finalizing its multi-year Watershed Wide Flood Risk and Resiliency Study. In phase one, Barr Engineering completed updates to the District's XP-SWMM model so the best available information could be

used to identify flood-prone areas through modeling. In phase two, a watershed-wide flood risk/vulnerability assessment was completed to help the watershed, its communities, and other partners gain a better understanding of flood risks throughout the watershed under current precipitation estimates and future climate change projections. Phase three, which Barr Engineering will complete by the end of 2023, included identification and prioritization of potential flood mitigation projects along the creek, along with evaluating flood reduction benefits, potential impacts, estimated project costs, and evaluation of cost/benefits.

WHAT IS XP-SWMM?
A computer model that simulates rainfall-runoff processes in urban watersheds. The models include the transport of runoff through pipes and channels.

Following the completion of phase three, the next steps are to develop a communication tool to share the flood risk information that was developed as part of this project, along with further evaluating the feasibility of select flood risk reduction projects. Learn more at: ninemilecreek.org/atlas-14-flood-study.

LAKE AND CREEK MONITORING

The District conducted its annual lake and creek monitoring in 2023. The lake and creek monitoring program collects water quality data from water bodies across the watershed. In 2023, the District monitored six lakes: Bush, North Cornelia, South Cornelia, Edina, Minnetoga, and Normandale. Points along the creek in the north fork, south fork, and main stem were also monitored. 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 water quality improvement projects.

The District also does other types of monitoring and data collection to help inform management decisions. In 2023, the District took sediment cores in Bryant Lake and Normandale Lake. Sediment cores are tubes of mud extracted from a lake bottom that give a history of the lake over time. The District will use the sediment cores to help determine if lake bottom sediments are releasing nutrients, a potential water quality concern. Results from the cores will help determine if future management actions are needed. The District also conducted fish surveys on Lake Rose and Lake Otto.

Find our monitoring reports at: ninemilecreek.org/lake-creek-monitoring.



DISTRICT PROJECTS

CARP AND GOLDFISH MANAGEMENT

Carp and goldfish are invasive 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 vegetation, destroying habitat for waterfowl and aquatic communities. The District has been managing carp populations in Normandale Lake since 2020 and goldfish in Lake Cornelia since 2021. These management efforts continued in 2023, which included removal of the invasive fish from the lakes. The fish were weighed and measured, and the total number were recorded in an effort to understand the impact removal efforts have on the carp and goldfish populations.

Carp are measured and weighed as they are removed from the lake

Goldfish are being found more frequently in District lakes and are thought to be the result of the release of pet goldfish. There are significant ecological and financial impacts from the release of these fish into Minnesota lakes and ponds. If you have unwanted aquarium fish or plants, never dump them in a lake, creek, or pond. Learn about re-homing your pets at: https://habitattitude/finding-new-home-pet

LYNMAR BASIN

In May 2023, the District finished the installation of Lynmar Basin at Bristol Boulevard and Mavelle Drive in Edina. This project converted an underutilized dry pond into a 1.5-acre stormwater retention basin. On average, the basin will receive and infiltrate about 29 acre-feet of stormwater each year, which is an estimated 325,000 gallons in a .4" inch rain event. That is enough water to fill about 50 school buses!

The original dry pond was excavated by about 1 foot, increasing the amount of flood water storage that the area can hold. Now, the basin collects stormwater from the surrounding properties and roads, and allows the water to soak into the soil rather than flow directly into Lake Edina.

The project added over 60 species of native grasses, flowers, trees, and shrubs, transforming an open lawn into a habitat for wildlife. Stepping stones span the basin to encourage people to immerse themselves in nature and enjoy the unique plants there.

PROJECT MAINTENANCE

To keep past District projects functioning effectively, maintenance is necessary. Because the District does not own the land that it installs projects on (except for its office property), the landowner typically takes on maintenance once the project is complete. However, in some cases, the District will perform maintenance to maintain the efficacy of past projects.

Lynmar Basin after rain

Maintaining streambank restorations — The District completed a streambank restoration project on Nine Mile Creek in Hopkins in 2013. The initial creek stabilization project included boulder placement and bio-engineering techniques such as rootwads and live stakes. Since that time, erosion has occurred along a previously stabilized section of the creek in Valley Park. In 2023, the District contracted out



maintenance work to re-stabilize the eroded section, in partnership with the City of Hopkins. This included removal of the rootwads and installation of stone toe protection of the bank, with vegetated reinforced side slopes (VRSS).

UPCOMING IN 2024

SOUTH FORK STREAMBANK STABILIZATION PROJECT

The District will start work on the South Fork Streambank Stabilization project in 2024 to restore the creek's eroding banks. The South Fork of Nine Mile Creek, from Lake Smetana in Eden Prairie to Normandale Lake in Bloomington, is listed as impaired by the Minnesota Pollution Control Agency for biotic impairment. This means that the creek is considered unhealthy for fish and other aquatic life.

The reconstructed side slopes will use bioengineering techniques such as brush bundles and vegetated reinforced side slopes (VRSS). The project will also install a series of rock riffles—strategically placed rocks to increase instream habitat. This improved stream design will limit erosion, increase flood storage, and improve habitat for fish and other aquatic life. We will also remove invasive buckthorn in the surrounding forest. Forest work is expected to begin this winter, and instream work mid-summer 2024. The District will work with the cities on long-term maintenance. Learn more at: ninemilecreek.org/southfork.

LAKE MANAGEMENT

The District is undertaking several lake management projects in 2024, following the completion of water quality and feasibility studies on the lakes. The lake management projects include:

Lake Holiday (Minnetonka)

- Aluminum and iron treatment to reduce nutrient levels in the lake
- Installation of an aeration system to improve lake oxygen levels
- · Herbicide treatment of curly-leaf pondweed, an invasive plant
- Enhanced street sweeping to capture nutrients and debris before they enter the lake

Wing Lake (Minnetonka)

- Aluminum and iron treatment to reduce nutrient levels in the lake
- Enhanced street sweeping to capture nutrients and debris before they enter the lake

Lake Rose (Minnetonka)

- · Alum treatment to reduce nutrient levels in the lake
- Enhanced street sweeping to capture nutrients and debris before they enter the lake

Arrowhead and Indianhead Lakes (Edina)

- Aluminum and iron treatment to reduce nutrient levels in the lake
- Upgrade of aeration systems to improve lake oxygen levels
- Enhanced street sweeping to capture nutrients and debris before they enter the lake

WHITED FEN RESTORATION

District staff are working with landowners on a wetland restoration plan surrounding the Whited Fen in Minnetonka. Whited Fen was identified as one of the District's most unique, high-quality wetlands during a watershed wide wetland assessment completed in 2022. The nine-acre wetland is home to several unique wetland plants and is prime habitat for birds and other animals.

Many invasive species are encroaching on Whited Fen including buckthorn, cattail, and purple loosestrife. The District, with cooperation from the City of Minnetonka and private landowners, plans to remove the invasive species and install a buffer of native plants surrounding the fen in 2024. For more information, visit: ninemilecreek.org/whited-fen.



UPCOMING CONT.

PHOTO CALENDAR CONTEST OPENS IN 2024

Do you have great pictures of Nine Mile Creek, lakes, or parks in the District? Submit them to our 2024 Photo Contest! You can submit photos up to the end of September 2024, so you still have plenty of time to snap a winning shot! We are especially looking for winter and recreation pictures.

The District's Citizen Advisory Committee and staff will choose winning photos, which the District will publish in a 2025 photo calendar. You can pick up a free calendar in late 2024 from select locations around the watershed!

Learn more at: <u>ninemilecreek.org/photo-contest.</u>



Spring fishing by Vicki Hurwitz, 2022 Photo Contest Winner

REGULATORY & PERMITTING

The District's rules are the cornerstone of the regulatory program, protecting lake and creek water quality, floodplains, wetlands, and more. We have processed 152 permits and have performed 1,075 inspections as of December 19, 2023. This year, the District launched an online application portal and is changing the linear projects rule to better align with MS4 requirements. Learn more at: ninemilecreek.org/permits.

MANAGING THE WATERSHED

Five managers, appointed by Hennepin County Commissioners to three-year terms, direct the activities of the Nine Mile Creek Watershed District. The Board of Managers works with state agencies, Hennepin County and the cities within the District to implement the goals and policies of the approved <u>water management plan</u> set forth in state law. Watershed district activities are funded through property tax levies. The Nine Mile Creek Watershed District Board of Managers meets the third Wednesday of each month at 7:00 PM at the District's office. Updated information is available on the District's website, ninemilecreek.org.

MANAGERS

Bob Cutshall: <u>bcutshall@ninemilecreek.org</u>

President / Term Ends: 9/2024

Larry Olson: lolson@ninemilecreek.org
Vice President / Term Ends: 9/2025
Peggy Kvam: pkvam@ninemilecreek.org

Treasurer / Term Ends: 9/2026

Grace Butler: gbutler@ninemilecreek.org

Secretary / Term Ends: 9/2025

Chris-Ann Lauria: clauria@ninemilecreek.org

Manager / Term Ends: 9/2026

Erin Hunker, Manager / Term Ended: 9/2023

LIKE, FOLLOW, & SUBSCRIBE

If you would like to volunteer with us, hear about programs, or stay up to date on project timelines, sign up for our e-newsletter at ninemilecreek.org.

Follow us on social media to see what we're up to! Join over 2,000 people who follow us on Facebook, Instagram, YouTube, and LinkedIn!

CONSULTANTS

Janna Kieffer 952-832-2600 Engineering Advisor, Barr Engineering

Bob Obermeyer
Engineering Advisor, Barr Engineering

Michael Welch 612-344-1400 Legal Advisor, Smith Partners







