

NINE MILE CREEK IN 2021

2021 Annual Communication of the
Nine Mile Creek Watershed District



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2021 ANNUAL COMMUNICATION

NINE MILE CREEK WATERSHED DISTRICT

NINE MILE CREEK DISCOVERY POINT

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Cover background picture by Ryan Gottsleben
Cover waterdrop inset picture by Aldo Abelleira, 2021 Photo Contest Winner

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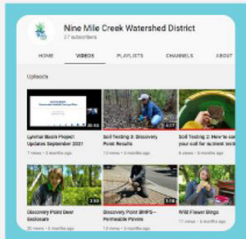
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*Morning Snow, Photo by Ryan Gottsleben,
2021 Photo Contest winner*

2021 AT A GLANCE

[See the full infographic here](#)



Educational Programing

36 education programs were offered by staff this year including MPCA Smart Salting classes, Water Cycle Presentations, and a Seed Propagation class. We jumped into the world of hybrid learning by offering programs virtually and in person. We have also broadened access to our education program through our YouTube channel. This year we uploaded 36 different videos on a variety of topics.

Capital Improvement Projects

3 big improvement projects progressed this year at Normandale, Cornelia, and Discovery Point. Pictured: stormwater filtration BMP installed at Rosland Park, Lake Cornelia.



Lakes Monitored

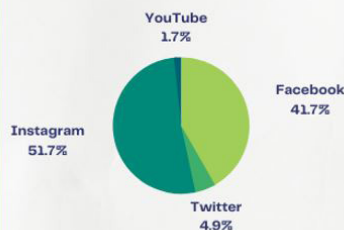
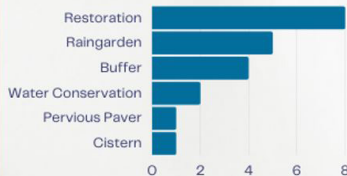
District Engineers monitored 8 of our lakes this year—Northwest Anderson, Southeast Anderson, Southwest Anderson, North Cornelia, South Cornelia, Edina, Mirror, and Normandale.

CAMP (Citizen Assisted Monitoring Program) volunteers assisted with sampling 3 additional lakes—Penn, Bush, and Minnetoga



Cost Share Grants Awarded

21 cost share grants were awarded in 2021 (types include Restoration, Raingarden, Buffer, Water Conservation, Pervious Paver, and Cistern). 5 grants were awarded to our cities, 2 to businesses, and 14 to residents.



Social Media Reach

We have 1,581 followers across our social media platforms. An additional 1,440 people subscribe to our e-newsletter.



Drains Adopted

There were 399 participants from our watershed in the Adopt-a-Drain program, 70 of whom just joined this year! 120 drains were adopted in 2021, bringing our total to 705 drains across the watershed. Thanks to our volunteers who cleaned their drains, 5,760 lbs. of debris were kept out of our lakes and creek this year.

Permits Issued

The District has processed 175 permits to guide local construction, a record number. Our permit regulations ensure new construction and reconstruction includes stormwater BMPs to prevent erosion and pollution into our local waterbodies.

FROM THE ADMINISTRATOR



Dear Friends,

As the District looks forward to continued protection and enhancement of our water and natural resources in 2022, we would like to thank our volunteers, partners and community members for all of the help and support you provided in 2021.

As detailed in this Annual Communication, 2021 was a very busy year, even with continued COVID-19 restrictions. While our board meetings continue to be held virtually, our offices opened in mid-summer with mask requirements in common areas. Many of our education and outreach events are slowly migrating back to being held in-person or in hybrid format. For more information on District office and program COVID-19 protocols, please visit our website, ninemilecreek.org.

RANDY

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 [water management plan](#) 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. Meetings may be held online at the discretion of the Board President due to the ongoing pandemic. Updated information is available on the District's website, ninemilecreek.org.

MANAGERS

Bob Cutshall (bcutshall@ninemilecreek.org), President / Term Ends: 9/2024
Grace Butler (gbutler@ninemilecreek.org), Vice President / Term Ends: 9/2022
Larry Olson (lolson@ninemilecreek.org), Treasurer / Term Ends: 9/2022
Erin Hunker (ehunker@ninemilecreek.org), Secretary / Term Ends: 9/2023
Peggy Kvam (pkvam@ninemilecreek.org), Manager / Term Ends: 9/2023

STAFF

Randy Anhorn (952-835-2078) / Administrator
Brett Eidem (952-356-1999) / Natural Resources Project & Planning Manager
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
Elizabeth Boor / Permitting & Communications Intern

CONSULTANTS

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Engineering Advisor

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Engineering Advisor

Michael Welch
(612-344-1400)
Legal Advisor

DISTRICT PROJECTS

CARP AND GOLDFISH MANAGEMENT

Carp and goldfish are invasive fish that cause water quality problems. They stir up the lake bottom when they eat, which creates cloudy water and releases nutrients that fuel algae growth. They also uproot aquatic vegetation, destroying habitat for waterfowl and other aquatic species.

In 2021, the District worked with WSB, a consultant, to remove carp from Normandale Lake in Bloomington and goldfish from Lake Cornelia in Edina. To remove the invasive fish, nets were set out in the lakes and baited with corn. The corn teaches the fish to group in the area of the net, and the fish are then more easily captured as they are grouped up. In addition to removing the fish from the lakes, the District is also studying the population sizes and movement to learn how to most effectively control the populations of carp and goldfish. These fish removals are part of larger projects to improve the health of the lakes.

For more information visit: ninemilecreek.org/goldfish-go-away and ninemilecreek.org/normandale-lake-carp-harvest.

Goldfish captured as part of the study on Lake Cornelia



ROSLAND PARK STORMWATER FILTRATION PROJECT

The District is constructing a stormwater filtration project at Rosland Park, near Lake Cornelia in Edina. The project will reduce the amount of phosphorous entering Lake Cornelia from a 410-acre urban subwatershed (including Southdale Mall) that is first collected in Swimming Pool Pond before flowing to the lake. To reduce phosphorous, a pollutant that causes algae blooms, an above ground filtration system was constructed, with three different vaults inside. These vaults will each be filled with a different, innovative material that filters phosphorus out of the water from Swimming Pool Pond. After the water is filtered, the cleaner water is released into Lake Cornelia. We will test each of the filtration materials to see which works best to remove phosphorous from the water.

In addition, during drier periods when water does not flow out of Swimming Pool Pond to the filtration vault, a pump will take water from Lake Cornelia to the filtration system. The filtration materials will remove phosphorus from the lake water before the water is released back to the lake.

The District would like to acknowledge these entities for grants received for the goldfish study as well as the Rosland Park Stormwater Filtration Project:

Minnesota Board of Water and Soil Resources through the [Clean Water, Land and Legacy Amendment](#), and Hennepin County through their [Aquatic Invasive Species Prevention](#) and [Opportunity Grant](#) programs.



Inside the stormwater vault



DISCOVERY POINT HABITAT RESTORATION

This year the District finished the final phase of habitat restoration work at its office site, Discovery Point, which initially began in 2017. The District conducted the work in three phases, and the final phase focused on removing the last portion of buckthorn on our 5-acre site. In this phase, the District partnered with the City of Eden Prairie to also remove buckthorn from adjacent city-owned land.

Buckthorn is an invasive plant that creates a dense thicket in forests. It shades out native plants and has little value to wildlife. MNL, the contractor for the restoration work, used a forestry mower for most of the buckthorn removal on the District's and City's property. After the buckthorn was removed, MNL planted a native seed mix, shrubs, and trees. In addition, MNL conducted a prescribed burn in an earlier phase of the restoration to prepare an area that was in low-mow fescue for native prairie seeding.



In addition to the District's restoration work, volunteers have spent several years removing buckthorn and invasive weeds along the city trail leading into Cardinal Creek Conservation area, adjacent to our property. They have also planted native seed and plugs along the trail. The City of Eden Prairie is also continuing the work along areas of the trail through a cost share grant from the District. Thank you to all the volunteers and Eden Prairie for doing this important work! Learn more about the District's restoration, including viewing the ecological master plan for Discovery Point at: ninemilecreek.org/discovery-point-restoration.

PROJECT MAINTENANCE

To keep past District projects functioning, 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.



Edina Streambank Stabilization Project

— Now that the Edina Streambank Stabilization project is done, the City of Edina is taking the lead on maintenance activities, such as noxious weed control, and the District is contributing financially to the upkeep.



Nonprofit Projects — For the six raingardens that were installed at nonprofit sites in 2020, the District is taking the lead on maintenance for the first two years, while the raingardens get established. In fall 2022, the District will provide hands-on maintenance training and assistance to the organizations, as they undertake maintenance of the raingarden at their site. Staff made a short, [three-minute video](#) on maintaining a raingarden using one of the nonprofit raingardens this summer, which you can watch on our YouTube channel.



Normandale Lake Water Quality Improvement Project

— In-lake projects, like the Normandale Lake drawdown that was done to control the invasive aquatic plant curly-leaf pondweed, can also require follow-up. In this case, herbicide treatments are needed to target the curly-leaf pondweed that remained in the lake following the drawdown. The District uses plant surveys to annually assess the need for an herbicide treatment. Current plans include up to five years of treatment (which would be through 2024), after which the effectiveness and long-term sustainability of the curly-leaf pondweed management strategy will be re-evaluated.

GRANTS

COST SHARE GRANTS

In 2021, the District awarded 21 cost share grants totaling over \$220,000 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. New this year, the District began offering groundwater conservation grants to cities for projects that focus on reducing groundwater use. For more information on available grants visit: ninemilecreek.org/grants.

CHLORIDE REDUCTION GRANTS

In addition to the District's chloride reduction grants, through the Lower Minnesota Collaborative, businesses, non-profits, and government entities can also apply for a chloride reduction grant for tools and practices which reduce chloride use, directly or indirectly. Some examples include pavement temperature sensors that allow for more effective chloride application or outfitting currently owned trucks with new segmented plow blades to reduce chemical removal of snow and ice. Learn more about these grants at: rpbcd.org/grants/chloride-reduction-grant.

LAKE AND CREEK MONITORING

The District conducted its annual lake and creek monitoring in 2021. The lake and creek monitoring program collects water quality data from waterbodies across the watershed. In 2021, the District monitored eight lakes: Southeast Anderson, Southwest Anderson, Northwest Anderson, North Cornelia, South Cornelia, Edina, Mirror, and Normandale lakes. 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.

Our monitoring reports are available at: ninemilecreek.org/lake-creek-monitoring.



ADDITIONAL MONITORING

In addition to the District's routine monitoring program, the District also performs targeted monitoring of lakes, creeks, and stormwater to assess pollutant sources, analyze site-specific questions and measure success of District management activities. Examples of targeted monitoring in 2021 included:

- winter dissolved oxygen (DO) measurements and goldfish surveys on Lake Cornelia
- curly-leaf pondweed turion surveys, DO measurements, filamentous algae monitoring, weekly photos, and carp surveys at Normandale Lake

In addition, the District monitored water quality upstream and downstream from Braemar Golf Course and conducted additional assessments at Lake Nancy and Lake Otto in Edina.

REGULATORY & PERMITTING

The District's rules are the cornerstone of the regulatory program, protecting lake and creek water quality, floodplains, wetlands, and more. The District processed 175 permits in 2021, a record number. A new permit application was received by the District on over 70 percent of all business days. Prior to 2021, the historical high had been 147 permits.

Despite this, the regulatory program continued to be busy with special projects. This year, we began taking credit card payments, went through a rule change to simplify regulations, created 25 guidance documents to distribute to permittees as needed, and started using new software for permit tracking and inspections.

PLANNING

DISTRICT HIRES NATURAL RESOURCES PROJECT & PLANNING MANAGER

Brett Eidem was hired as Nine Mile Creek's Natural Resources Project and Planning Manager in the fall of 2021. Brett works to protect and enhance water and natural resources within the watershed. He does this through watershed planning to inform areas of focus and by working with partner organizations to collaboratively implement projects to achieve greater water and natural resource benefits. Brett graduated from North Dakota State University with a B.L.A. (Landscape Architecture) and a B.S. in Environmental Design. Brett has more than 10 years' experience in water resource management, including working in permitting and grant programs at Minnehaha Creek Watershed District, and more recently in project management and watershed planning at the Mississippi Watershed Management Organization. The District is glad to welcome Brett to the team!



HIGH QUALITY WETLANDS SCOPING & PRIORITIZATION STUDY



In 2021, the District issued a report on high-quality wetland restoration and protection opportunities in the Nine Mile Creek watershed. The District performed field assessments of numerous high-quality wetlands with unique features or rare native wetland community types and identified strategies to protect these wetlands, which is the District's long term goal. The District is now working with SRF and Applied Ecological Services (a consultant team) to further refine strategies for protecting four high-quality wetlands selected through the 2021 report and the feasibility of implementing projects at these wetlands.

Read the Wetland Restoration & Protection Opportunity Identification Report: ninemilecreek.org/wetland-report.

PHASE 2 OF THE ATLAS-14 FLOOD RISK AND RESILIENCY ASSESSMENT PROJECT

The District has a long history (going back to the 1960s) of flood planning and floodplain management and wants to continue its leadership in this area. The District's [Water Management Plan](#) identifies several goals related to reducing risk to public safety and structures from flooding. Other goals include working with cities to address increased flood potential from [Atlas 14 rainfall frequency estimates](#) and understanding and addressing the potential for increased flood risk due to climate change. Phase 2 of the Atlas 14 Flood Risk and Resiliency project expanded evaluation of flood potential for large rainfall events as a surrogate for climate change analysis. Phase 2 of the project also updated a previous model using more recent data, mapping of probable flood areas to identify potentially impacted structures and roadways, and high-level estimates of potential flood damage costs. Phase 3 will begin in 2022, which will include defining the District's role in addressing flooding and identifying flood mitigation opportunities, as well as exploring ways to improve flood resiliency along the creek. Finally, Phase 3 will also include developing ways to communicate flood risk information to the community.

LAKE STUDIES

The District conducts lake management studies to understand the health of the lakes within the watershed and to identify potential water quality improvement projects. These projects are designed to improve lake health and may be completed both in the lake, as well as on the land in the lake's watershed. In 2021, the District conducted lake management studies on Arrowhead Lake and Indianhead Lake in Edina and Lake Holiday, Wing Lake, and Lake Rose in Minnetonka. Barr Engineering, the District's engineering firm, is due to have draft reports complete in early 2022. When the reports are ready, the District will hold community meetings to discuss proposed management activities for the lakes and next steps. This is part of continued outreach to the community, which has also included lake user surveys and previous community meetings. Visit our [Current Projects](#) page to learn more.

AQUATIC INVASIVE SPECIES (AIS) RAPID RESPONSE PLAN

As part of developing the District's AIS management strategy, the District created an AIS Rapid Response Plan for several lakes, in partnership with local cities, state and local agencies, universities, and other local groups. Having a rapid response plan in place for individual lakes gives the District and partners an ability to react quickly to an early AIS infestation. With roles and step-by-step processes already identified, the goal is for early AIS infestations to be dealt with quickly, before the population is established.



Brittle naiad, Photo by RPBCWD

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 foster stewardship behaviors in all those who live, work, and recreate in the District. In 2021, the District presented or partnered on 53 events around the watershed. These programs reached over 1,200 people of all ages. New programs included Friday Fireplace Reads (a livestream reading of environmental non-fiction books) and a hybrid class on native seed propagation. Staff also presented programs and field trips for ten schools and attended numerous community events, teaching about water pollution, native plants, and raingarden maintenance.

NORMANDALE HILLS RAINGARDEN SPOTLIGHT

One interesting partnership is with Normandale Hills Elementary School in Bloomington. The result of a two-year planning process, a raingarden was planted by students at the school, with the help of adult volunteers and staff. Students also painted stepping stones which are on display in the garden basin. District staff will continue to work with teachers, students, and volunteers to maintain the raingarden and use it in classroom lessons throughout the coming years.

NEW STORY MAP

We've added another story map to our collection: a projects story map! This story map explains the purposes and environmental benefits behind each of the projects completed since the formation of the District in 1959. There are many interactive components and videos in the story map to help bring our historical projects to life. View it here: ninemilecreek.org/new-story-map-projects/.



5th graders planting the raingarden

VOLUNTEER PROGRAMS

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

We also hosted a garlic mustard removal event at the Cardinal Creek Conservation Area trail near Discovery Point. This area had been previously cleared of buckthorn and seeded by volunteers with native plants.

SALT WATCH

We participated for the second year in the Winter Salt Watch program. Our volunteers sample snowmelt running down their street to measure its approximate chloride level. This will help 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.

UPCOMING IN 2022

NINE MILE CREEK SOUTH FORK STABILIZATION PROJECT

The South Fork of Nine Mile Creek, from Lake Smetana to Normandale Lake, is listed as an impaired water by the Minnesota Pollution Control Agency for biotic impairment (for fish and benthic macroinvertebrates). This means that the creek is not considered healthy for fish and macroinvertebrates. A benthic macroinvertebrate is an animal without a backbone that lives at the bottom of a creek or lake. It is large enough to see without a microscope. A common cause of this impairment is too much sediment.

In 2021, the District conducted a creek assessment of 3.3 miles of the South Fork of Nine Mile Creek in Minnetonka, Eden Prairie, Edina and Bloomington to identify bank erosion and other areas of concern. In 2022, the District will use this assessment to determine where restoration and stabilization of the creek channel and banks is needed. Then the District will complete a feasibility study and engineering report of proposed restoration methods for these sections, which will be used to order a project. Implementing a project to stabilize the creek channel and restore eroding banks will reduce sediment and nutrients and will improve fish and macroinvertebrate habitat. Actual work along the creek will likely take place in 2023-2024, after approval by the District Board of Managers.

LYNMAR BASIN STORMWATER PROJECT

Lake Edina is listed as impaired by the Minnesota Pollution Control Agency for excess nutrients. Excess nutrients can fuel algae blooms in our lakes. To reduce nutrient loading to Lake Edina and to reduce the frequency of localized flooding, the District is partnering with the City of Edina to provide stormwater improvements at Bristol & Mavelle Park. The proposed project will convert a grassy area in the city-owned park into a raingarden. The raingarden will soak in stormwater, reducing the amount of stormwater and nutrients reaching Lake Edina. The raingarden will also help reduce localized flooding and improve habitat for pollinators through more diverse plantings. It is anticipated that construction will begin on this project in late 2022. For more information, visit: ninemilecreek.org/bristol-mavelle-lynmar-park.

PHOTO CALENDAR CONTEST OPENS IN 2022

Do you have great pictures of Nine Mile Creek? How about pictures from local lakes and parks within the watershed district? Submit them to our 2022 Photo Contest! You can submit photos up to the end of September 2022. So if you don't have any pictures, you still have plenty of time to snap a winning shot! We are especially looking for winter pictures and scenes of outdoor recreation.

Winning photographs will be chosen by the District's Citizen Advisory Committee and staff. These photographs will be published in the 2023 Photo Calendar, and available throughout the watershed.

Learn more at: ninemilecreek.org/photo-contest.



A person photographs Lone Lake fall colors

LIKE, FOLLOW, & SUBSCRIBE

If you would like to volunteer with us, sign up for our volunteer e-newsletter at ninemilecreek.org, or scan the QR codes on the included bookmark to go directly to the initiative that interests you!

Follow us on social media to see what we're up to! Join 1,582 people who follow us on Facebook, YouTube, Instagram, and now also on Twitter!

