



Nine Mile Creek Photo by: R. Gottsleben

Nine Mile Creek Watershed District 2018 Annual Report



Prepared and submitted by:
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2018 Nine Mile Creek Board of Managers/Officers

Steve Kloiber, President
6528 Scandia Road
Edina, MN 55439
Appointing County: Hennepin
Term Expires: 9/29/2019
Resident of Edina

Grace Sheely – Secretary
14325 Grenier Road
Minnetonka, MN 55345
Appointing County: Hennepin
Term Expired: 9/29/2019
Resident of Minnetonka

Erin Hunker, Manager
306 Dearborn Court
Edina, MN 55343
Appointing County: Hennepin
Term Expires: 9/29/2020
Resident of Edina

Jodi Peterson, Vice-President
9508 Russell Avenue South
Bloomington, MN 55431
Appointing County: Hennepin
Term Expires: 9/29/2020
Resident of Bloomington

Robert Cutshall, Treasurer
7130 Gerard Drive
Eden Prairie, MN 55346
Appointing County: Hennepin
Term Expires: 9/29/2021
Resident of Eden Prairie

Maressia Twele, *Former Manager*
PO Box 4209
Hopkins, MN 55343
Appointing County: Hennepin
Term Expired: 9/29/2018
Resident of Minnetonka

2018 Citizen Advisory Committee Members

The Citizen Advisory Committee (CAC) is a volunteer advisory committee of community members that is annually appointed by the board of managers. The CAC provides recommendations to the board to aid decision making, communicate concerns from the public and help educate the community. The 2018 CAC members were:

Roger Bildsten - **CAC Co-Chair**
6813 Brook Drive
Edina, MN 55439

Bob Prince - **CAC Co-Chair**
13190 Beehive Court
Eden Prairie, MN 55346

John Helland
5720 McGuire Road
Edina, MN 55439

Jenifer Prince
13190 Beehive Court
Eden Prairie, MN 55346

Cal Johnson
12905 Jorissen Rd
Minnetonka, MN 55343

Craig Trenary
9629 Upton Avenue
Bloomington, MN 55431

Scott Jordan
10810 Upton Avenue South
Bloomington, MN 55348

Maressia Twele - **Board Liaison to CAC**
PO Box 4209
Hopkins, MN 55343

Ember Kapitan – **Recorder**
12838 Gerard Dr
Eden Prairie, MN 55346

Roger Willette
9901 Penn Ave S #219
Bloomington, MN 55431

Charlotte Lefebvre
6412 Aspen Road
Edina, MN 55436

2018 Technical Advisory Committee

Representatives from each of the District's cities, Hennepin County, Metropolitan Council and state agencies make up the District's Technical Advisory Committee (TAC). The TAC aids with the development of the District's watershed management and capital improvement plans, rules and specific projects, as well as support the CAC. Members of the TAC in 2018 included:

Name	Organization
Kristin Asher	City of Richfield - Public Work Director
Ross Bintner	City of Edina - Water Resources Engineer
Steve Christopher	Board of Water and Soil Resources - Board Conservationist
Tom Dietrich	City of Minnetonka – Water Resources Engineer
Jim Gates	City of Bloomington – Director of Public Works
Bryan Gruidl	City of Bloomington – Water resources Director
Will Manchester	City of Minnetonka – City Engineer
Dave Modrow	City of Eden Prairie – Water Resources Engineer
Drew McGovern	Hennepin County – Water resources Engineer
Joe Mulchay	Metropolitan Council – Environmental Analyst
Jeff Pearson	City of Richfield – City Engineer
Sarah Schweiger	City of Minnetonka – Water Resources Engineer
Jason Spiegel	MNDNR – Area Hydrologist
Nate Stanley	City of Hopkins – City Engineer
Leslie Stovring	City of Eden Prairie – Environmental Coordinator
Nick Tiedeken	MNDOT – Water Resources Engineer
Brian Vlach	Three Rivers Park District
Jessica Wilson	City of Edina – Water Resources Coordinator
Chris Zadak	MPCA – TMDL Project Manager

Employees and Consultants

The Nine Mile Creek Watershed District (District) employs four full-time employees. The District hired its first full-time administrator in 2005. The administrator oversees daily operations of the District and represents the District on numerous state-wide committees. In 2009, the District hired a full-time education and outreach coordinator to develop and implement the District's education/outreach programs. In 2016, the District hired a full-time education and outreach specialist to assist with the implementation of the District's education and outreach programs. In 2018, the District hired a permit and water resources coordinator to oversee District regulatory program and support the implementation of the District's water resources management programs and projects

Due to expanding workloads to meet goals and objectives of the District's Water Management Plan, job descriptions and tasks have evolved over time. District staff in 2018 included:

Staff	Position	Address	Telephone	Email
Randy Anhorn	District Administrator	Discovery Point 12800 Gerard Dr. Eden Prairie, MN 55346	952.835.2078	ranhorn@ninemilecreek.org
Erica Sniegowski	Program and Project Manager		952.358.2276	esniegowski@ninemilecreek.org
Gael Zembal	Education and Outreach Coordinator		952.204.9691	gzembal@ninemilecreek.org
Lauren Foley	Permit and Water Resources Coordinator		952.204.9690	lfoley@ninemilecreek.org
Nick Atherton	Seasonal Intern			

In addition, the District retains the services of an engineering consultant, a legal advisor, and an accountant to assist with District activities. The District contracts with another accounting firm to perform its annual financial audit. The major consultants in 2018 included:

Consultant	Services	Address	Telephone	Email
Bob Obermeyer <i>Barr Engineering</i>	Engineer	4300 MarketPointe Dr. Suite 200 Mpls, MN 55435	952.832.2857	bobermeyer@barr.org
Janna Kieffer <i>Barr Engineering</i>	Engineer	4300 MarketPointe Dr. Suite 200 Mpls, MN 55435	952.832.2785	jkieffer@barr.org
Louis Smith <i>Smith Partners, PLLP</i>	Attorney	400 2 nd Ave. S. Suite 1200 Mpls, MN 55401	612.344.1400	smith@smithpartners.com
Michael Welch <i>Smith Partners, PLLP</i>	Attorney	400 2 nd Ave. S. Suite 1200 Mpls, MN 55401	612.344.1400	smith@smithpartners.com
Dan Cavanaugh <i>JMSC Futurity</i>	Accountant	5353 Wayzata Blvd Suite 205 St. Louis Park, MN 55401	952.697.4522	dan@jmscfuturity.com
Jackie Kotilinek <i>Redpath & Co</i>	Auditor	4810 White Bear Lake Pkwy, White Bear Lake, MN 55110	651.255.9339	jkotilinek@redpathcpas.com
Tracy Haile <i>Bearence Management Group</i>	Insurance	2010 Centre Pointe Blvd Mendota Heights, MN 55120	651.379.7876	thaile@bearence.com

Introduction

Established in 1959, the Nine Mile Creek Watershed District was the state's first urban watershed district. Despite its name, Nine Mile Creek's main branch travels 15.5 miles from its headwaters to its confluence with the Minnesota River. The Creek's name came from the fact that it is nine (9) miles from Fort Snelling following an early cart path that is now Old Shakopee Road. The Creek winds through the southwestern suburbs of the Twin Cities, with a 50-square mile watershed consisting of a largely developed urban landscape, and encompassing portions of Bloomington, Edina, Minnetonka, Eden Prairie, Hopkins, and Richfield. Appointed by the Hennepin County Commissioners, each of the District's five (5) Managers serve three-year terms.

Consistent with its statutory and regulatory obligations under Minn. Stat. § 103D.351 and Minnesota Rules § 8410.0150, the Board of Managers has prepared this Annual Report of the Nine Mile Creek Watershed District's financial status, its yearly activities and projects, its 2018 permitting and enforcement program, and its 2019 goals and objectives. The Managers invite comments and suggestions concerning this report. The 2018 Annual Report is available on the Nine Mile Creek Watershed District website – ninemilecreek.org. Copies are also available by contacting Randy Anhorn, District Administrator, Nine Mile Creek Watershed District, Nine Mile Creek Discovery Point, 12800 Gerard Drive, Eden Prairie, MN 55346, (952) 835-2078.

Highlights and Accomplishments of 2018

2018 was another busy and exciting year for the Nine Mile Creek Watershed District (District). Highlights for 2018 include:

- Welcomed a new Board Manager, Robert Cutshall
- Worked with the City of Eden Prairie to amend the District's development agreement with the city raising the limit of full-time employees the District could house at its offices from three (3) to five (5).
- Hired a Permit and Water Resources Coordinator, the District's fourth full-time employee
- Implementation of the District's Regulatory Program and Rules
 - Completed the process of reviewing, updating and adopting the District's revised rules.
- Completed two regional flood area studies to help member cities understand impacts to future redevelopment
 - Pentagon Park/Border Basin Area in the cities of Bloomington and Edina
 - Chamberlain-Cherokee Area in the City of Eden Prairie
- Continued Nine Mile Creek Discovery Point Management & Site Restoration Planning
 - Initiated phase two of the three phase project
- Continued UAA/Lake/Creek Studies
 - Initiated the update of the Lake Cornelia and Lake Edina Use Attainability Analysis (UAA) studies.
 - Held two (2) community meetings to provide updates on the findings of the studies and next steps.
- Continued to implement the District's Cost Share Grant Program
- Continued to implement the Citizen-Assisted Monitoring Program (CAMP)
- Advisory Committees

- The District continues to use its TAC and CAC to provide assistance with the development of the District's watershed management and capital improvement plans, rules and specific projects, as well as provide recommendations to the board to aid decision making, communicate concerns from the public and help educate the community
- The District continued the growth and implementation of its Education & Outreach Programming. Some highlights of the Education & Outreach program in 2018 include:
 - Annual State of the Water Event
 - Summer education series that included new art components
 - Continued participation in community outreach events
 - Introduction of the District's new exhibit- the watershed sandbox
 - Continued partnering with the City of Bloomington on Adopt-A Drain
 - Hosted tours of the District's office and educational facility for numerous groups including watershed districts, Master Water Stewards, city groups and others
 - Ongoing focus on chloride reduction efforts
 - Hosted MPCA Smart Salting trainings
 - Hosted Salt Solutions workshops to educate places of worship and non-profits to use salt wisely
 - Distribution of educational communications and materials such as the Districts newsletter, brochures, website and signage associated with capital projects.
 - Held multiple community open house events in association with capital projects and the update of the Lake Cornelia and Lake Edina UAA
 - Outreach for the Normandale Lake Improvement Project
- Capital Project Implementation
 - Completed both phases of the Edina Nine Mile Creek Restoration/Stabilization Project to stabilize streambanks and enhance the overall health of Nine Mile Creek at numerous project locations along 3.5 miles of stream from Hwy 169 to Hwy 100. Information on the project can be found on the District's website at ninemilecreek.org/whats-happening/current-projects/edina-streambank/.
 - Initiated the first phase (lake drawdown) of the Normandale Lake Water Quality Improvement Project to control the population of the aquatic invasive plant species, curly-leaf pondweed, in the lake. Up-to-date information on the project can be found on the District's website at ninemilecreek.org/whats-happening/current-projects/normandale/
 - Held two (2) community meetings to get feedback from residents and to update them on the anticipated Normandale Lake project(s) and timeline, along with the public hearing.
 - Completed the second phase of the restoration of the Discovery Point grounds, which continued to remove buckthorn and increase plant diversity on the property. The project seeks to create healthy habitat, reduce soil erosion, and increase climate resilience through the replanting of more desirable, disease and climate change resistant species of shrubs, trees, and native plants. Up-to-date information on the progress of the project can be found on the District website at ninemilecreek.org/whats-happening/current-projects/discovery-point-restoration/

Assessment of the 2018 Work Plan

In its 2017 Annual Report, the District identified several broad goals and objectives for 2018, including:

1. Implementation of District Regulatory Program and Rules
2. Water Management Plan Amendment
3. Nine Mile Creek Discovery Point Management and Site Restoration
4. Continue UAA/Lake/Creek Studies
5. Cost Share Grant Program
6. Citizen Assisted Lake Monitoring Programs (CAMP)
7. Citizen Advisory Committee
8. Technical Advisory Committee
9. Education and Outreach Program Activities
10. Capital Project Implementation

In 2018, the District completed or made substantial progress toward these goals and objectives, as described below.

1. Implementation of Watershed District Regulatory Program & Rules

In March 2008, the Nine Mile Creek Watershed adopted new District rules and amended them in August 2015. The rules have been well received and the District has not had any significant issues implementing the rules. In 2018, the NMCWD continued to review projects and permit applications under the rules adopted in 2008 and amended in 2015 and 2018. Of the 143 permits issued in 2018, 56 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 186,813 cubic feet per year, and reduce phosphorus and suspended solid loading by 300 and 93,581 pounds per year respectively.

In 2017, the District initiated a new permit tracking program, that has since been propagated with all issued District's from 2014 through 2018. During this time period, the District has issued 667 permits of which 252 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 913,944 cubic feet per year, and reduce phosphorus and suspended solid loading by 671 and 161,633 pounds per year respectively.

As mentioned above, the District first adopted rules in March 2008 and then amended them in August 2015. In 2017, the District undertook a rule review and revision process that resulted in the revised rules being adopted on May 21, 2018 and amended them into the District's Fifth Generation Water Management Plan (2017-2027).

Highlights from the revised rules in 2018 include:

- Expanded the District stormwater management rule for single family home watershed wide, while changing to a tiered trigger to attempted to require permits from those with the most potential to increase loading to receiving water resources

- Provided a provision to allow regional stormwater management plans to look at identified areas holistically as opposed to parcel by parcel
- Acknowledged the difficulty or harmfulness of infiltration on restricted sites (e.g., contaminated and/or D type soils)
- Required chloride management plans for non-single-family home permits that trigger the stormwater management rule.

2. Water Management Plan Amendment

The District initiated minor plan amendment incorporating its revised rules into its 5th Generation Water Management Plan in 2018. The Board of Water and Soil Resources approved the minor plan amendment in April 2018.

3. Nine Mile Creek Discovery Point Management and Site Restoration Planning

The District developed an Ecological Master Plan (ninemilecreek.org/wp-content/uploads/Discovery-Point-Ecological-Master-Plan_2016.pdf) to guide its landscape restoration project on the 5.3 acre Discovery Point property. Components of the landscape restoration master plan include management of invasive species, habitat restoration, and ongoing management of the stormwater management features (including four rain gardens, permeable paver parking lot, a reinforced turf overflow parking area, permeable paver sidewalk, and a cistern). The overall goals of the Discovery Point 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 is for the District to create an ecologically diverse site that is a public amenity with improved access to the landscape for educational and recreational opportunities.

Phase 1 of the restoration included invasive buckthorn and tree removal, along with replanting half the Phase 1 area in a fescue mix and half the area in a high diversity native seed mix). This was initiated in 2016 and completed in 2017. Maintenance continues in this area to manage buckthorn resprouts and other invasive species and to ensure that the native plantings and fescue thrive. There were also volunteer buckthorn busts during this time to engage the wider community in the restoration efforts and to provide learning opportunities about buckthorn removal and native restoration.

Phase 2 of the restoration plan was initiated in the late fall of 2017 (which included buckthorn and tree removal) and was completed 2018. The replanting in this phase including tree and shrub planting and seeding of prairie and woodland areas. A volunteer planting also occurred in 2018 to add native plugs to the Phase 1 restoration, to promote diversity in the plant population and provide an education opportunity for members of our watershed community.

To date, Phase 1 and Phase 2 has included the removal of 2.6 acres of buckthorn and disease prone, invasive or dead trees (e.g., ash and elm). Over 260 more desirable and/or disease and climate change resistant species of shrubs and trees have been replanted on the site to date, along with the seeding of native plant species that will create a more diverse, healthy ecosystem.

4. Use Attainability Analyses & Lake and Creek Studies

In 2018, the District entered the fifteenth year of its Watershed Outlet Monitoring Program (WOMP). Since 2004, the Nine Mile Creek has been on the Minnesota Pollution Control Agency's "Impaired Water" lists for turbidity, chloride and fish community Index of Biotic Integrity (IBI). In response to this listing, the District undertook an enhanced monitoring program, which includes additional water quality monitoring at three (3) WOMP stations on the creek, and ecological health monitoring of the Creek (see Figure 1-1 in Appendix 1 – *Summary of 2018 Water Quality Monitoring Programs*). The District began working with the MPCA in 2007 to get funding for Total Maximum Daily Load (TMDL) studies for chlorides and fish IBI. The District initiated the TMDL studies for chlorides and fish IBI in 2008 and continued to develop the TMDL Reports for these impairments were finalized in 2009. In 2010, the Chloride TMDL Report was approved by the MPCA and the Environmental Protection Agency. The District continued its implementation and education efforts to reduce chlorides in 2018. The District is working with the Minnesota Pollution Control Agency on the possible reclassification or delisting of the fish IBI impairment.

The District, in partnership with the City of Edina, initiated an update to the Lake Cornelia and Lake Edina UAAs to evaluate current lake water quality conditions and evaluate management options to reduce nutrient loading (internally and externally) to work toward the lakes' meeting water quality standards and reduce blue-green algal blooms. As part of the update process, the District and City held two community meetings to get feedback from Edina residents and to update them on the initial finding of the studies. In addition to the water quality monitoring of the lakes and contributing watersheds, the District conducted a fish survey on Lake Cornelia and connected stormwater ponds, and partnered with the city and University of Minnesota to analyze the potential of internal loading in the lake and from the stormwater ponds (through sediment core samples and targeted monitoring) and looked at the potential for prioritized street sweeping to reduce nutrient and suspended solid loads to the lake.

The District continued to partner with the Metropolitan Council to monitor continuous turbidity at the Metropolitan Council WOMP station. Continuous turbidity monitoring began at this station in 2008 and continued in 2018.

In addition, the District continued to partner with the MPCA in 2018 on the Lower Minnesota River Watershed Restoration and Protection Strategy (WRAPS) and Riley Purgatory Bluff Creek and Nine Mile Creek Watersheds TMDL (including nutrient impaired lakes and *E. coli* in streams).

Also, in 2018 the District completed the reports on the two (2) localized and regional draining and flooding studies undertaken with its partner cities (the Pentagon Park/Border Basin area within the cities of Bloomington and Edina, and Cherokee/Chamberlain area in the City of Eden Prairie) to better understand issues within each area. The District is currently discussing future partnership possibilities to address the problems in the Pentagon Park/Border Basin areas.

5. Cost Share Grant Program

The District continues to offer cost share grant funds to residents, townhome and lake associations, and commercial, governmental and non-profit entities to implement projects such

as raingardens, shoreline restorations and innovative practices to improve water quality, reduce chloride loads to receiving water resources, and preserve and protect native plant and wildlife habitats. Information on the District's cost-share grant program can be found at:

ninemilecreek.org/get-involved/grants/

In 2018, the District solicited applications and awarded 21 cost share grants totaling \$152,000. Awarded grants by applicant type:

- 14 Residential
- 2 Association
- 1 Nonprofit
- 2 Business
- 2 City

Two (2) of the grants were specifically to reduce chloride loads to receiving water bodies. These grants included one for segmented plow blades and another for an anti-icing system.



Residential raingarden in Bloomington installed with a 2018 cost share grant

The Cost Share Program is a successful way for the District to implement stormwater runoff reduction projects, shoreline stabilization, and habitat restoration projects throughout the watershed. The program also provides awareness of the District's mission and goals of protecting and restoring our water resources.

6. Citizen-Assisted Monitoring Program (CAMP)

The District partnered with the Metropolitan Council in 2018 to support the Citizen-Assisted Monitoring Program on five (5) lakes in the District. Dedicated volunteers with a strong interest in the health of local water bodies collect water quality data on several District lakes bi-weekly from April through October. The lakes included in the citizen monitoring program were: Lake Minnetoga and Wing Lake in Minnetonka, Lower Penn Lake and Bush Lake in Bloomington, and Hawkes Lake in Edina.

7. Citizen Advisory Committee

In 2018, the CAC met four times and assisted the District in its biennial photo contest for its picture calendar. As part of their involvement, the CAC reviewed submitted photos and selected those to be included in the calendar. In addition, the CAC reviewed residential Cost Share grants. The CAC review, along with staff review, was used to make grant funding recommendations to the Nine Mile Creek Watershed District Board of Managers. The CAC meets quarterly at Nine Mile Creek Discovery Point (the District office). Meeting dates and times are posted on the District's webpage and meetings are open to the public.

8. **Technical Advisory Committee**

While the District continually contacts various TAC members to solicit ideas on various topics, the complete TAC did not meet in 2018. TAC. The District anticipates the need for a couple TAC meetings in 2019 to discuss aquatic invasive species strategies and possibilities to partner to go above and beyond regulatory requirements on future public projects.

9. **Education and Outreach Program Activities**

The District's education and outreach program has continued to grow over the past year. In 2018, the District reached over 4,000 people, nearly 200 more people than last year. The noteworthy endeavors of the District's education & outreach program are highlighted below.

Education

Summer Education Series

The District's Summer Education Series (SES) is designed to encourage adults and children to explore the natural resources in the District and provide residents with hands-on learning about ways to protect and enhance the District's water and natural resources. In 2018, the SES included programs with art components: Ojibwa Block Prints and Tiny Boatmaking. We also hosted a fishing clinic on Bryant Lake. Overall, the SES reached 166 people.

K-12 Education

District staff presented programs at seven schools around the watershed in 2018. Topics ranged from planting native flowers with kindergartners to water cycle lessons with fourth graders and topography investigations using the new watershed sandbox with fifth graders. The District also partnered with Hennepin County Riverwatch to monitor creek health with two high schools. Staff also gave a creek study program to a local Girl Scout troop. Over 700 students were reached in 2018.



Tiny Boatmaking, a Summer Education Series event

Trainings & Workshops

The District hosted three Winter Parking Lot and Sidewalk Maintenance workshops in 2018. These workshops provide training for MNDOT, Hennepin County, and city and private plow drivers on smart salting practices. These practices will result in reduced chloride application, while still allowing for public safety. The District also co-sponsored two Level 2 Winter Maintenance trainings. The training allows winter maintenance supervisors to review their past, present and future winter maintenance practices and generate a report from the data, allowing them to look for ways to reduce chloride use at an organizational level. The District partnered with Riley Purgatory Bluff Creek, Minnehaha Creek, and Lower Minnesota River

Watershed Districts, as well as the Richfield Bloomington Water Management Organization and the Cities of Edina and Bloomington to promote their winter maintenance trainings.

We also partnered with local watershed districts and county organizations to provide two new workshops this year, Sustainable and Low-Mow Turf alternatives, and Salt Solutions (for non-profits and places of worship).

In 2018, District staff gave presentations to multiple groups, organizations, and schools. Presentation topics included the District's efforts to improve and protect water resources and alternative landscaping options to protect water quality, among others.

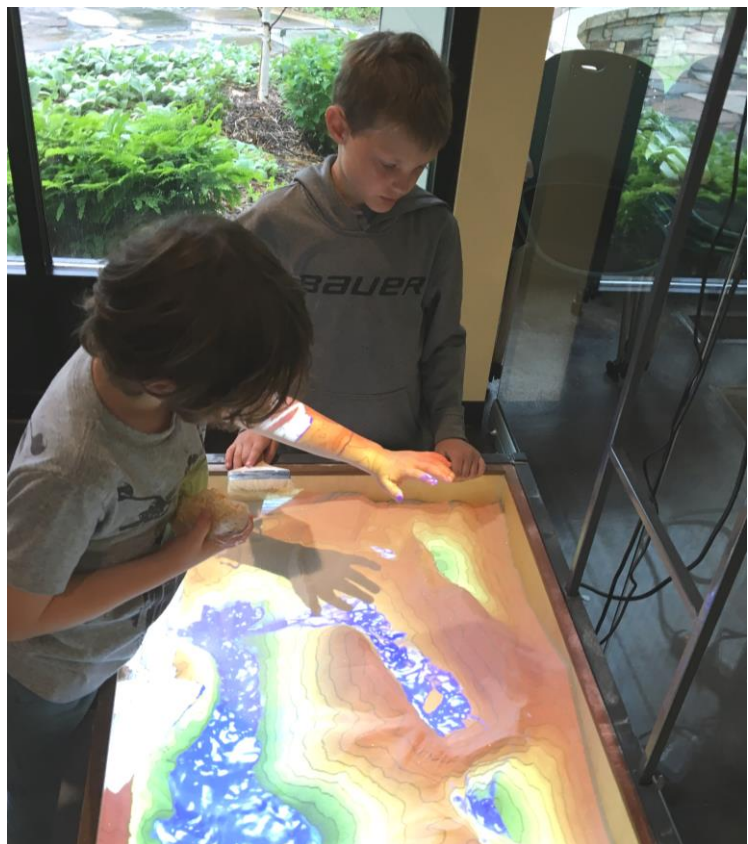
Discovery Point Programming

There were many outreach opportunities at Discovery Point in 2018. Visitors checked out the nature exploration backpacks, and there were many stop-in visitors. The District put on several education programs, including a volunteer planting, multiple building tours, and a Nature Journaling class. We also hosted professional workshops and various meetings.

Community Events

District staff attended and participated in several community events hosted by cities in 2018. In 2018, the District reached over 1,600 people with its education and outreach activities at these events. At the events, staff distributed information about District events, water resources, chloride reduction, and our cost share program. The events provided an opportunity for the District to meet with residents of the District and discuss their questions and concerns.

The Popup Education Cart visited select parks in Bloomington this year, teaching about Aquatic Invasive Species prevention. The watershed sandbox was a new display used at community events and school to educate about watersheds. The sandbox uses virtual reality to show topography changes and water flow in real time on the sand below. It was built by local artists in partnership with the Riley Purgatory Bluff Creek Watershed District.



Kids explore the watershed sandbox, the District's newest exhibit

Communications

The District used its electronic newsletter as a main form of communication in 2018 to keep residents and the public informed about District projects and events. The newsletter also featured natural resources information about the District and provided snapshots of special moments around the District. The number of people subscribed to the newsletter grew in 2018, breaking the 1,000 subscriber mark. The District also used the social media platforms Facebook, Instagram, and Nextdoor to engage with residents. The District continued to use its website to communicate information. The site has tips for clean water, program information and event registration, along with water quality data, and access to reports and records.

A 2019 Photo Calendar was released in conjunction with the District's 2018 Annual Communication. The District printed 3,000 copies of the calendar/annual communication and distributed them throughout the watershed, along with mailing approximately 400 copies to District residents and elected officials. The annual communication was also posted on the District's website and included in the electronic newsletter.

The District updated and installed several interpretive signs in 2018, including new panels for the Hopkins streambank restoration at Valley Park, a new sign for the stormwater features at Harrison Park in Bloomington, a new headwaters sign at the North Fork of Nine Mile Creek in Hopkins, and a sign for a cost share restoration project in Minnetonka.



Two of three new signs for the streambank restoration project at Valley Park in Hopkins

Volunteer Program

Master Water Stewards

The District continued to participate in the Master Water Stewards program in 2018, with five stewards enrolled. The Stewards partner to install a stormwater best management practice. Stewards completed two capstone projects, a shoreline restoration and buckthorn removal with replanting in 2018. The District has recruited another four stewards to go through the training in 2018/2019. Stewards have also assisted in education and outreach programs around the District.

Volunteer Programs and Equipment Check Out

The District hosted two group volunteer events in 2018. Volunteers cleaned trash out of Nine Mile Creek in Hopkins and installed native plants at Discovery Point. The District also made equipment and educational materials available to the public to check out and use. Many residents made use of buckthorn removal equipment. The stormdrain stenciling kits also proved

popular: city groups, schoolchildren, and residents all contributed to marking drains in the District with “no dumping” stickers.

Adopt a Drain

The District continued to implement the Adopt a Drain program in Bloomington in 2018 in partnership with the City of Bloomington and Hamline’s Center for Global Environmental Education. Over 170 households are participating in this program, cleaning more than 290 drains of leaves, trash and other debris.



Grants

An Adopt a Stormdrain participant cleans up a stormdrain

Hennepin County Aquatic Invasive Species Prevention Grant

The District received, with the City of Edina, an Aquatic Invasive Species (AIS) Prevention Grant from Hennepin County to develop AIS teaching aids to use at public events and training. The grant resulted in the creation of 3D printed zebra mussel replicas. The grant work was finished in 2018.

Clean Water Fund Grant

The District received a grant from the Minnesota Board of Water and Soil Resources through the Clean Water, Land and Legacy Amendment in 2017. The grant, titled *Targeting Best Management Practices on Lands Owned by Nonprofits*, identified priority locations for best management practices (BMPs) in the watershed on nonprofit sites. After prioritizing the sites, the District conducted outreach to the nonprofits to identify partnership opportunities to plan and design stormwater management practices on their site. After completing 58 site visits in 2017 to nonprofits, 15 sites were prioritized as being good locations for best management practices (BMPs). Outreach began to these sites in 2017 and continued in 2018. Partnerships were developed with six sites to install BMPs. It is hoped that in 2019 and 2020, the BMPs will be installed.

10. Capital Project Implementation

Edina Creek Restoration Project

The District completed Phase 1 and Phase 2 of the Edina Nine Mile Creek Restoration/Stabilization Project from Hwy169 to Hwy 100. The project stabilized and restored streambanks at 15 different reach areas along a 3.5 mile stretch in Edina and enhance the overall health of the creek. The project realigned portions of the creek in its historical channel, restoring



its meander pattern and in-stream habitat by using bioengineering techniques. The techniques included root wads and biologs for streambank protection, vegetated reinforced soil stabilization for streambank stabilization, boulder rock vanes for grade control and in-stream flow control, and constructed riffles and pools for in-stream habitat.

The project has resulted in reduced nutrient and sediment loads, improved stream health, stabilized streambanks, improved habitat and the protection of property from erosion.

Before and during restoration – vegetative reinforced slope stabilization

Information on the project can be found on the District's website at: ninemilecreek.org/whats-happening/current-projects/edina-streambank/.

Normandale Lake Water Quality Improvement Project

The District accepted a petition from the City of Bloomington to develop a water quality improvement project to address improve the health of the lake through the control of curly-leaf pondweed and internal phosphorus loading in Normandale Lake and to identify watershed best management practices to reduce nutrient loading into the lake. The District started a feasibility report in 2009 and submitted options for the project to the U.S. Army Corps of Engineers (ACOE) for their preliminary review. Water quality monitoring in 2009 revealed an improvement in water quality. The District delayed implementation of the project to conduct additional water quality monitoring in 2010 and 2011.

In 2018, the Nine Mile Creek Watershed District Board of Manager's accepted the engineer's report for the Normandale Lake Water Quality Improvement Project and ordered the project. The report identified numerous lake management options as potential solutions to water quality and nuisance biota issues. These options included; (1) a lake drawdown, (2) an in-lake alum treatment, (3) herbicide treatment, (4) aquatic macrophyte harvesting, (5) oxygenation system. The treatments will target curly-leaf pondweed and phosphorus loading. In addition, the District completed a fish survey to determine the need for future management of in-lake carp populations. As a result, the District anticipates tagging carp in 2019 to better understand their movement for future population management. As part of the project update process, the District and City of Bloomington held two (2) community meetings to get feedback from residents and to update them on the anticipated project(s) and timeline, along with holding the public hearing for the project.



Normandale Lake during the drawdown – September 17, 2018

Following the District receiving the needed permits, the District initiated the first phase (lake drawdown) of the project. The lake drawdown was initiated during the fall of 2018, and the lake remained drawn down through February of 2019 to reduce invasive curly-leaf pondweed populations and internal phosphorus loading. The next phases of the project will occur in 2019 and 2020. The next phase will entail an in-lake alum treatment, which will occur in the spring of 2019. The need for carp control will also occur in 2019. This will reduce internal phosphorus loads. In 202 an herbicide application will occur to treat the remaining curly-leaf pondweed populations after the drawdown. Up-to-date information on the progress of the project can be found on the District's website at: ninemilecreek.org/whats-happening/current-projects/normandale/

Projected 2019 Work Plan

1. Implementation of Watershed District Regulatory Program and Rules

The District will continue implementing its rules and regulatory program in 2019.

2. Initiate the development of a District-wide AIS strategy

Develop and implement strategies to manage aquatic invasive species with partner cities and natural resources agencies

3. Conduct a study of groundwater and surface water interaction study.

To better understand the impacts of groundwater on District lakes, wetlands and stream hydrology, and water quality, the District will initiate a groundwater and surface water interaction study

4. Nine Mile Creek Discovery Point Management and Site Restoration Planning

In 2019, the District will continue to manage the first two phases of the Discovery Point landscape restoration, which includes management of invasive species, the habitat restoration, and ongoing management of the stormwater management features. The District will plan for the third phase of the restoration and have volunteer events at the site to engage the community in the restoration. The District will continue to develop education and outreach programming for the facility.

5. Continue UAA /Lake /Creek Studies

In 2019, the District will continue to monitor Nine Mile Creek with the WOMP stations. The District will continue use of the continuous turbidity monitoring transducers at each of its WOMP stations. The District will also continue its lake monitoring program, collecting data on Arrowhead Lake, Bush Lake, Indianhead Lake, Mirror Lake, Normandale Lake Rose Lake and Wing Lake.

The District will also continue its stream monitoring program collecting water quality data and ecological data.

Additionally, the District plans to complete the UAA updates for Lake Cornelia and Lake Edina and initiate the UAA update process for Lake Smetana and continues to participate in the Lower Minnesota River Watershed Restoration and Protection Strategy (WRAPS) and Riley Purgatory Bluff Creek and Nine Mile Creek Watersheds TMDL (including nutrient impaired lakes and *E. coli* in streams).

6. Watershed-Based Funding Grant

Work with in collaboration with other Hennepin County entities on county-wide chloride initiatives (utilizing 10% of the county's watershed-based funding grant allocation) and partnering watersheds in Hennepin County draining to the Minnesota River (Lower Minnesota River, Richfield-Bloomington and Riley Purgatory Creek) to collaboratively utilize combined watershed-based funding grant funds to reduce chloride loads to the Minnesota River.

7. **Cost Share Grant Program**

The District will solicit applications for the twelfth year of its Cost Share Grant Program in 2019. The District makes \$200,000 available to residents, associations, non-profits, businesses, and local governments in the District for this grant program with \$50,000 available for chloride reduction projects.

8. **Citizen-Assisted Monitoring Program (CAMP)**

In 2019, the District will continue to support citizen monitoring through the Metropolitan Council's Citizen-Assisted Monitoring Program (CAMP). Trained volunteer monitoring teams will collect water quality samples from District lakes enrolled in the program.

9. **Citizen Advisory Committee**

The Nine Mile Creek Watershed District will continue to support the role of the Citizen Advisory Committee (CAC). New members will be recruited to replace members that choose not to be re-appointed in 2019. The CAC will assist with education and outreach planning and events, reviewing residential Cost Share Grant applications, and taking a tour of cost share and District projects.

10. **Technical Advisory Committee**

In 2019, the District will continue to work with the Technical Advisory Committee as it develops its aquatic invasive species strategy and looks to identify public projects where the District could partner to go above and beyond regulatory requirements.

11. **Education and Outreach Events and Activities**

In 2019, the District will celebrate its 60th birthday and will continue to host workshops, programs, and trainings to meet the goals of our Water Management Plan.

Communication

The District will update and add information to its website. The District will continue using its electronic newsletter to communicate with the public, along with social media and press releases.

Education and Outreach

The District will offer opportunities to engage residents (adults, families, K12 students, and teachers) in learning about and connecting with District natural resources, stormwater management, habitat restoration, and other topics related to the mission of the District and guided by the District's Water Management Plan.

Planned events include collaborating with the Citizen Advisory Committee to plan the Summer Education Series, offering a homeowner's workshop series and hosting a District tour of completed projects. We also plan to host Popup Education events at popular locations around the District. These events will make use of the popup cart and the watershed sandbox. The District will continue to partner with cities to have displays at community events and give presentations for groups upon request.

The development of programming for Discovery Point will continue, including hosting educational events at the facility. We will also offer volunteer opportunities at the facility, including a planting event linked to the restoration efforts onsite.

The District will continue to incorporate educational aspects into Capital Improvement Projects. These efforts will include public information meetings, informational flyer or brochures and signage of new project sites describing project goals and activities.

The District will host workshops for winter maintenance professionals aimed at reducing the amount of chloride applied in the District. This is to address the chloride TMDL on Nine Mile Creek.

Volunteer Program

The District will once again participate in the Master Water Steward program and will recruit new residents to join the fifth cohort in 2019. The District will continue to offer volunteer programs and streamline the volunteer process. To date, the District has assisted 17 Master Water Stewards through the program.

12. Capital Project Implementation

Edina Nine Mile Creek Restoration Project

While both phases of the Edina Streambank/Restoration Project were completed in the fall of 2018, the restored and revegetated areas will be inspected in the spring of 2019 to ensure all work meets expectations. In addition, the District will continue finalize the recording of the necessary maintenance easements on private properties for both phases of the project.

Normandale Lake Water Quality Improvement Project

In 2019 the District will complete the lake drawdown to control curly-leaf pondweed and will allow the lake to refill in the spring. In addition, the District will undertake an in-lake alum treatment in 2019 to reduce the internal phosphorus load. The District will take steps to study carp populations, which will likely include tracking their movements resulting in future carp management.

Lake Cornelia and Lake Edina

In 2019 the District will complete the Lake Cornelia and Lake Edina UAA update and identify projects to reduce nutrient loads to both lakes. As a result, the District will look to implement identified project(s) in 2019 to reduce nutrient loading to the lakes in an effort for them to meet their water quality standards.

Permitting Activity

1. Summary of Permits Issued

In 2018, the NMCWD continued to review projects and permit applications under the rules adopted in 2008 and amended in 2015 and 2018. Of the 143 permits issued in 2018, 56 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 186,813 cubic feet per year, and reduce phosphorus and suspended solid loading by 300 and 93,581 pounds per year respectively.

In 2017, the District initiated a new permit tracking program that has since been propagated with all issued District's from 2014 through 2018. During this time period, the District has issued 667 permits of which 252 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 913,944 cubic feet per year, and reduce phosphorus and suspended solid loading by 671 and 161,633 pounds per year respectively.

The District subjects projects to a preliminary review so that it can issue permits simultaneously, or shortly after, municipal permits.

2. Enforcement Activity

The District's engineer regularly inspects permitted work to ensure compliance with permit conditions. If violations are found, the District attorney typically will notify permittees and seek voluntary abatement or correction before resorting to formal legal action. In 2018, no enforcement actions were necessary.

Summary of 2018 Water Quality Monitoring Programs

The District continued to implement its routine water quality monitoring program in 2018. As part of the program, the District continued the monitoring of stream water quality and ecological uses at historically established monitoring stations along the south branch, north branch and main stem of Nine Mile Creek (similar to past years) and six lakes (Cornelia, Edina, Glen, Lone, Minnetoga, and Shady Oak). The lakes within the District are monitored on a rotating basis. A summary of the 2017 water quality monitoring can be found in the Appendix.

2018 Plan Implementation/Action Item Tracking

In an effort to track the District's annual accomplishments against the program and project implementation action items shown in Table 6-1 and 6-2 of the District's 10-year Water Resources Management Plan (Plan), identified action items for that year are tracked as to their being; completed, ongoing, or which have not had much progress made on them.

The table shown in the Appendix highlights plan activities the District were to work on in 2018 (as well as activities that are to be undertaken in 2019), where the District is in completing that plan activity, and measurable outcomes for each.

The green cells indicate that the action items were completed in 2018. The yellow cells indicate those action items that were partially completed or are still in progress activity, and the red cell indicates that little or no progress was made on that activity. "NA" indicates that while the Plan did not show a plan activity for the implementation item in 2018, there is one for 2019.

The tracked results for activities/implementation items identified in the 10-year Plan for 2018 are 35 green cells, 8 yellow cells and 1 red cell for the 44 activities/implementation items identified in the Plan.

Status of Local Plan Adoption and Implementation

The District monitors the plans of watershed districts and water management organizations that affect the District's cities and that have been approved by the Board of Soil and Water Resources. The District also reviews and approves the Comprehensive Surface Water Management Plans of each of the cities in the District. In 2018, the District reviewed and conditionally approved the updated the Comprehensive Surface Water Management Plans for the cities of Bloomington, Edina, Hopkins, Minnetonka, and Richfield.

Biennial Solicitation of Interest Proposals

Under M.S.A. 103B.227, subd. 5, the District must issue a biennial solicitation for legal, technical, and other professional services. The District issued a formal solicitation for accounting, engineering, and legal services in early 2018. The District selected Cavanaugh and Associates as its accountant, Barr Engineering as its engineer and Smith Partners, PLLP as its legal counsel at its May 2018 regular board meeting. The District selected Redpath and Company Ltd, to conduct the District's annual financial audit. New proposals for engineering, legal, and other professional services will be solicited in 2020.

Fund Balances for Specific Program Elements

The District's fund balances and financial status are included in the District's annual audit. A copy of the annual audit is included in the Appendix.

Status of any Locally Adopted Wetland Banking Program

Because of the inherent limitations of a fully urbanized watershed, the District has not developed a wetland-banking program. Instead, to date, it uses the state wetland bank administered by the Minnesota Board of Water and Soil Resources. The District is, however participating in wetland restoration/bank creation process with Hennepin County Environment and Energy on a large wetland complex at the County Home School site in Minnetonka.

Annual Written Communication to the Public

As required by Minn. R. 8410.0100, subp.4, the District prepared and disseminated its annual communication to the public that identified the Board members, contact information, and public meeting information. In 2018, the District combined its 2018 Annual Communication report with the development of its 2019 photo calendar that provided a general overview of the watershed and some of its programs. A copy of the Annual Communication is included in the Appendix.

Annual Audited Financial Report and Audit Report

The District's audited annual financial report was prepared by Redpath and Company, Ltd., a certified public accounting firm. As required by Minn. R. 8410.0150, subp. 2, the Audited Financial Report includes classification and reporting of revenues and expenditures, a balance sheet, an analysis of changes in final balances, and all additional statements necessary for full financial disclosure. The 2018 Audited Financial Report can be found in the Appendix.

2019 Annual Budget

The District adopted its 2019 Annual Budget in September 2018. The 2019 Budget can be found in the Appendix.

Appendix

- 1. Summary of 2018 Monitoring Programs**
- 2. 2018 Plan Implementation/Action Item Tracking**
- 3. 2018 Annual Financial Audit**
- 4. 2019 Approved Annual Budget**
- 5. 2018 Annual Communication**