



Nine Mile Creek Photo by: R. Wendel

Nine Mile Creek Watershed District 2019 Annual Report



Prepared and submitted by:
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2019 Nine Mile Creek Board of Managers/Officers

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

Grace Sheely, Secretary
14325 Grenier Road
Minnetonka, MN 55345
Appointing County: Hennepin
Term Expires: 9/29/2022
Resident of Minnetonka

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

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

Larry Olson
6808 Cornelia Drive
Edina, MN 55435
Appointing County: Hennepin
Term Expires: 9/29/2022
Resident of Edina

Steve Kloiber, *Former Manager*
6528 Scandia Road
Edina, MN 55439
Appointing County: Hennepin
Term Expired: 9/29/2019
Resident of Edina

2019 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 2019 CAC members were:

Roger Bildsten
6813 Brook Drive
Edina, MN 55439

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

Kim Herzog
5499 Butternut Circle
Minnetonka, MN 55343

Charlotte Lefebvre - **CAC Co-Chair**
6412 Aspen Road
Edina, MN 55436

Cal Johnson
12905 Jorissen Rd
Minnetonka, MN 55343

Jenifer Prince
13190 Beehive Court
Eden Prairie, MN 55346

Scott Jordan
10810 Upton Avenue South
Bloomington, MN 55348

Grace Sheely – **Board Liaison to CAC**
14325 Grenier Road
Minnetonka, MN 55345

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

Maressia Twele
PO Box 4209
Hopkins, MN 55343

Rich Koechlein
6412 Glacier Place
Edina, MN 55436

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

2019 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 2019 included:

Name	Organization
Kristin Asher	City of Richfield - Public Work Director
Ross Bintner	City of Edina – Engineering Services Manager
Steve Christopher	Board of Water and Soil Resources - Board Conservationist
Bryan Gruidl	City of Bloomington – Water Resources Director
Steve Gurney	City of Bloomington – Water Resources Engineer
Will Manchester	City of Minnetonka – City Engineer
Drew McGovern	Hennepin County – Water Resources Engineer
Patrick Martin	City of Richfield – Water Resources Specialist
Joe Mulchay	Metropolitan Council – Environmental Analyst
Sarah Schweiger	City of Minnetonka – Water Resources Engineer
Patrick Sejkora	City of Eden Prairie – 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
Representative	MPCA

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 and 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 2019 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
Megan Jester	Seasonal Intern			intern@ninemilecreek.org

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 2019 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
Rebecca Petersen <i>Redpath & Co</i>	Auditor	4810 White Bear Lake Pkwy, White Bear Lake, MN 55110	651.255.9339	rpetersen@redpathcpas.com
Krissi Tronnes <i>Bearence Management Group</i>	Insurance	2010 Centre Pointe Blvd Mendota Heights, MN 55120	651.379.7876	ktronnes@bearence.com

Introduction

Established in 1959, the Nine Mile Creek Watershed District was the state's second 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 comes from the fact that it is nine 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, the District is served by five Managers each serving 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 2019 permitting and enforcement program, and its 2019 goals and objectives. The Managers invite comments and suggestions concerning this report.

The 2019 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.



Nine Mile Creek Watershed District celebrated its 60th Anniversary in 2019

Highlights and Accomplishments of 2019

2019 was another busy and exciting year for the Nine Mile Creek Watershed District (District). Highlights for 2019 are listed below:

- Celebrated our 60th Anniversary
- Awarded the Environmental Leadership Award at the 2019 Annual Road Salt Symposium
- Welcomed a new Board Manager, Larry Olson

- Amended the Water Management Plan to include a project that will install five (5) stormwater BMPs on lands owned by nonprofits
- Worked with the City of Eden Prairie to amend the District's development agreement with the city for an addition to the District's office building to provide for additional office and storage needs
- Initiated the development of a District-wide aquatic invasive species (AIS) management strategy
- Undertook a District-wide groundwater surface water interaction study
- Participated in the county-wide and Lower Minnesota River subgroup on the watershed-based funding grant projects
- Continued working with our municipalities to address impacts of redevelopment on local and regional flood problem areas
- Delegated all permit approval authority to the Administrator with a few exceptions (e.g., variances, the District's own projects and if the project results in an increase of 2.5 acres of impervious surface area) to make the District's regulatory program more efficient for permit applicants and reduce staff time and streamline Board meetings
- Insourced permit inspection responsibility to staff member(s)
- Continued Nine Mile Creek Discovery Point Management & Site Restoration Planning
 - Including volunteer native planting and BMP maintenance events
- Continued UAA/Lake/Creek Studies
 - Completed the Lake Cornelia and Lake Edina Use Attainability Analysis (UAA) studies
 - Initiated the update of the Smetana Use Attainability Analysis (UAA) studies.
 - Held a community meeting on the Lake Cornelia and Lake Edina UAA to provided updates on the findings and initiation of selected in-lake and watershed projects
- Undertook carp management analysis on Cornelia and Normandale lakes and goldfish management analysis on Lake Cornelia
- 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, review of cost share grant applications, address issues with regional impacts, 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 implementation of its Education & Outreach Programming. Some highlights of the Education & Outreach program in 2019 include:
 - 60th Anniversary events, including:
 - Bike tour of the Edina Streambank Restoration project
 - Summer watershed tour of current and past projects
 - State of the Waters 60th anniversary celebration
 - Summer education series
 - Continued participation in community outreach events

- Continued education and outreach to youths and adults using adaptive tools such as showcase Watershed Sandbox that allows hands-on interaction to visualize watershed concepts including rainfall, flooding, slope and flow
 - Expanded our participation in the Adopt-A-Drain program to include Eden Prairie, Edina and Minnetonka, in addition to Bloomington
 - Hosted tours of the District's office and educational facility for numerous groups including other 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
 - Participated on an advisory committee for the creation of smart salt training and manuals for property owners
 - Partnered with the MPCA to create guidance for communities interested in developing a rebate program to reduce chloride from home water softeners as well as model ordinance for municipal officials in regulating the use of deicers
 - Distributed educational communications and materials such as the District's newsletter, brochures, trail map and educational coaster
 - Continued to update the District website with new information
 - Created new cost share project signs that render visible raingarden or other water quality projects while simultaneously educating the public on the availability of cost-share grants and the projects resulting in cleaner water resources
 - Held multiple community open house events in association with capital projects and the update of the Lake Cornelia and Lake Edina and Lake Smetana UAAs and Normandale Lake Water Quality Project.
 - Continued outreach for the Normandale Lake Improvement Project
- Capital Project Implementation
 - Completed the first two phases (lake drawdown and in-lake alum treatment) of the Normandale Lake Water Quality Improvement Project to control the lake's curly-leaf pondweed and address the large internal nutrient loading problem. Up-to-date information on the project can be found on the District's website at ninemilecreek.org/whats-happening/current-projects/normandale/
 - Held one lake alum treatment informational meeting at the Normandale Lake public access as the treatment was underway
 - Initiated the process and held a public hearing to order one of the projects (in-lake alum treatment) identified in the Lake Cornelia UAA. The project was ordered, bid, awarded and expected to be implemented in October of 2019, but due to cold water conditions, the in-lake alum treatment the project was postponed and is expected to be initiated was postponed until the spring/early-summer of 2020. Up-to-date information on the project can be found on the District's website at ninemilecreek.org/whats-happening/current-projects/lake-cornelia-project/

- Amended its Water Management Plan to include a project that will install five stormwater BMPs on lands owned by nonprofits. The projects are expected to be initiated in early-Spring 2020. Up-to-date information on the progress of the project can be found on the District's website at: ninemilecreek.org/nonprofits-grant.

Assessment of the 2019 Work Plan

In its 2018 Annual Report, the District identified several broad goals and objectives for 2019, including:

1. Implementation of District regulatory program and rules
2. Initiate the development of a District-wide aquatic invasive species (AIS) management strategy
3. Conduct a study of groundwater and surface water interaction throughout the watershed
4. Nine Mile Creek Discovery Point management and site restoration
5. Continue UAA/lake/creek studies
6. Watershed-based funding grant
7. Cost share grant program
8. Citizen volunteer monitoring
9. Citizen advisory committee
10. Technical advisory committee
11. Education and outreach program activities
12. Capital project implementation

In 2019, the District completed or made substantial progress toward these goals and objectives, as described below.

1. Implementation of Watershed District Regulatory Program & Rules

In 2019, the NMCWD continued to review projects and permit applications under the rules adopted in 2008 and amended in 2015 and 2018. Of the 147 permits issued in 2019, 29 triggered the District's stormwater rule and as a result, required stormwater management best management practices (BMPs). These BMP's are projected to reduce stormwater runoff volume by 210,776 cubic feet per year, and reduce phosphorus and suspended solid loading by 105 and 32,270 pounds per year respectively.

In 2017, the District initiated a new permit tracking program that has since been extended to include all permits issued from 2014 through 2019. During this time period, the District has issued 814 permits of which 281 triggered the District's stormwater rule and as a result, required stormwater management BMPs. Through this extended analysis these BMPs (from 2014-2019) were projected to reduce stormwater runoff volume by 1,128,620 cubic feet per year, and reduce phosphorus and suspended solid loading by 780 and 195,065 pounds respectively.

In addition to make the District's regulatory program more efficient internally and for permit applicants, the District managers passed Resolutions 19-03 delegating all permit approval authority to the Administrator except for a few exceptions (e.g., variances).

The District subjects projects to a preliminary review in sync with the municipal permitting requirements so that it can issue permits requiring watershed approval in an efficient and effective manner without undo delays so that it can issue permits simultaneously, or shortly after, municipal permits.

2. **Water Management Plan Amendment**

The District initiated a minor plan amendment incorporating the Non-Profit Stormwater BMP projects into the capital implementation section of its 5th Generation Water Management Plan in 2019. The Board of Water and Soil Resources approved the minor plan amendment in April 2019.

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

The District developed an Ecological Master Plan see for further information (ninemilecreek.org/wp-content/uploads/Discovery-Point-Ecological-Master-Plan_Updated-August-2019.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 phase was initiated in 2016 and completed in 2017. Maintenance continues in this area to manage buckthorn re-sprouts 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 neighborhood and 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 to provide an education opportunity for members of our watershed community.

In 2019, the District undertook maintenance activities on both phases of the project. These activities included replacement of dead trees and shrubs that were planted in both phases, buckthorn control, invasive plant and weed control, and specific maintenance of the stormwater BMPs (e.g. raingardens) on site.

4. **Use Attainability Analyses & Lake and Creek Studies**

In 2019, the District entered the sixteenth year of its Watershed Outlet Monitoring Program (WOMP). Since 2004, the Nine Mile Creek has been on the Minnesota Pollution Control Agency's (MPCA) "Impaired Water" lists for turbidity, chloride and fish community Index of Biotic Integrity (IBI). In response to the MPCA listings, the District undertook an enhanced monitoring program, which includes additional water quality monitoring at three WOMP stations on the creek, and ecological health monitoring of the creek (see Figures 1-1 and 1-2 in Appendix 1 – *Summary of 2019 Water Quality Monitoring Programs*). The District began working with the MPCA in 2007 to secure 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, which 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 2019. The District continues to work with the Minnesota Pollution Control Agency on the possible reclassification or delisting of the fish IBI impairment due to improved conditions.

The District, in partnership with the City of Edina, initiated an update to the Lake Cornelia and Lake Edina UAAs in 2018. The updated UAA evaluated current lake water quality conditions and management options to reduce nutrient loading (internally and externally) with the goal of working toward meeting lake water quality standards and reducing blue-green algal blooms. This study was completed in 2019 and the proposed projects (e.g., in-lake alum treatment, stormwater BMP at Rosland Park, fisheries management and in-lake aeration) were presented at a community stakeholder meeting. A summary of the study and proposed projects is available at: ninemilecreek.org/wp-content/uploads/Lake-Cornelia-and-Lake-Edina-Water-Quality-Study-Summary_2019.pdf.

The District, in partnership with the City of Eden Prairie, initiated an update to the Lake Smetana UAA in 2019 to evaluate current lake water quality conditions and evaluate management options to reduce nutrient loading (internally and externally) thereby working toward meeting lake water quality standards. As part of the update process, the District and City held a community kick off meeting to get feedback from Eden Prairie residents and nearby businesses.

The District continued to partner with the Metropolitan Council to monitor continuous precipitation, temperature, turbidity and conductivity at the Metropolitan Council WOMP station. The continuous monitoring began at this station in 2008 and continued in 2019.

In addition, the District continued to partner with the MPCA in 2019 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 2019 the District undertook a District-wide groundwater surface water interaction analysis to better understand the impacts of groundwater on lake, wetland and stream hydrology, and identify and map areas in the watershed for potential groundwater recharge as

well as limitations to recharge capacity. This included meeting with each of the District’s partner cities to share the findings and highlight areas within the city that have the highest potential for stormwater infiltration where the District would be willing to fund or partner on projects that go beyond compliance. The groundwater surface water interaction study is available at: ninemilecreek.org/wp-content/uploads/Groundwater-Surface-Water-Interaction-Study.pdf.

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 buffers, and habitat restoration. Grants are also available for projects that that will reduce chloride loading to receiving water bodies. Information on the District’s cost share program is available at: ninemilecreek.org/grants

In 2019, the District awarded 17 cost share grants totaling approximately \$164,000. The applicant type and number and types of projects that will be installed with the 2019 grant funds are listed in the table below.

2019 Cost Share Program	
Applicant Type	Projects Installed/To be Installed
6 Association	26 Raingardens
1 Business	5 Shoreline buffers
2 City	3 Native habitat restorations
8 Residential	1 Permeable paver patio
17 Total Grants	35 Total Projects



Raingarden installed at a condo association with a 2019 cost share grant

In 2019, the District worked with a designer to create new cost share signs for raingarden, shoreline buffer, and restoration projects. The signs will be made available to grantees in 2020 to

identify their projects. The signage is important for highlighting the location of District cost-share grant projects as well as education the public and individual neighborhoods about the projects benefits of improving the quality of downstream water resources by reducing runoff and nutrient loads.

The Cost Share Program is a successful way for the District to implement stormwater best management practice projects, shoreline buffers, 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 Volunteer Monitoring

The District partnered with the Metropolitan Council in 2019 to support the Citizen-Assisted Monitoring Program (CAMP) on five lakes in the District. 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.

The District partnered with Hennepin County in 2019 to support the River Watch program with two schools (Edina and the Richfield College Experience Program) to sample Nine Mile Creek. River Watch is a hands-on environmental education program for youth in Hennepin County. Teams of youth assess the health of local streams by identifying and quantifying the stream's macroinvertebrate community.

The District used volunteers on Bryant and Bush lakes in 2019 to monitor for zebra mussels through the Adopt-A-Dock program. The Adopt-A-Dock is a citizen science initiative where volunteers attach monitoring plates to the end of their docks which they check once a month for zebra mussels, and report observations to the watershed district. Volunteers identified zebra mussels in Bryant Lake, in small numbers; no zebra mussels have been found by Adopt-A-Dock volunteers in Bush Lake.

7. Citizen Advisory Committee

The CAC meets quarterly at the District office. Meeting dates and times are posted on the District's webpage and meetings are open to the public. In 2019, the CAC met four times. As part of their involvement, the CAC reviewed residential cost share grant applications. The CAC review, along with staff review, was used to make grant funding recommendations to the District's Board of Managers. The CAC also assisted District staff throughout the year in education and event planning, and outreach to stakeholders around the District.

8. Technical Advisory Committee

The District contacts TAC members as needed to solicit ideas on various topics. The District also holds TAC meetings. In 2019, the District's TAC met to discuss the findings of the District-wide stormwater volume reduction opportunity analysis. This is a study highlighting public parcels throughout the watershed that had the highest potential for stormwater infiltration where the District would be willing to fund or partner on projects that go beyond compliance.

The TAC also met to discuss watershed Atlas-14 modeling results and District and partner roles in regional and localized flooding.

In 2020, the TAC will likely meet to discuss high water levels of area lakes, regional flooding issues, participate in the development of the District's AIS management strategies, and discuss partnership possibilities on future public projects that go above and beyond regulatory requirements.

9. Education and Outreach Program Activities

The District's education and outreach program has continued to grow over the past year. In 2019, the District reached over 3,300 people through many events and programs in all 6 cities. 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 constituents with hands-on learning about ways to protect and enhance the District's water and natural resources. In 2019, the SES included recreational programs such as a bike tour of the creek and fishing at Bryant Lake. The SES also reached adult audiences, as we again partnered with local watershed districts and county organizations to provide three Sustainable Lawns workshops. Overall, the SES reached over 200 people, similar to attendance in 2018.

K-12 Education

District staff presented programs at ten schools around the watershed in 2019. Topics ranged from erosion studies with the watershed sandbox to water cycle lessons with fourth graders and creek water quality investigations. The District also partnered with Hennepin County Riverwatch to monitor creek health with two high schools. Staff also worked with an afterschool nature group to clean out stormdrains around their school. K-12 education initiatives reached over 800 students in 2019, an increase from 2018.

Trainings & Workshops

The District hosted and partnered three MPCA Smart Salting trainings in 2019. These workshops provide training for MNDOT, Hennepin County, and city and private plow drivers on smart salting practices. One specific variation of this training provides information and encourages understanding of the reasons for smart salting practices. It also provides support to property management staff and salt applicators/contractors in reducing salt use. The training leads to understanding the correct application of the salt and provides salt application certification. These trainings are promoted throughout the district in partnership with nearby watershed districts.

The District also partnered with the Riley Purgatory Bluff Creek Watershed District to host a Project WET (water education for teachers) training for teachers. The District has enrolled in Project WET since 2014. This training provides teachers and non-formal educators with water themed activities to use in their classrooms and education centers. By partnering with nearby watershed, the District can extend our resources and reduce costs and staff time.

Staff also presented information about District education programs at conferences, including the annual Minnesota Association of Watershed Districts conference held annually in December, the Water Resources Conference, and the 2019 Water Summit.

Discovery Point Programming

There are several education and outreach opportunities that engage the visitors understand the mission of the watershed district by exploring Discovery Point (the watershed district's offices and surrounding site) in 2019. These include nature exploration backpacks, a resource library, a little seed library, maps for discovering the District's water quality BMPs surrounding Discovery Point and information on raingardens. The District's building and surrounding site are also used to host events that provide necessary indoor and/or outdoor space to expand the reach of the watershed's goals for education to the surrounding community.

Community Events

District staff attended and participated in several community events hosted by cities and community groups in 2019. Overall, these events helped the District reach over 1,400 people. A few of these events included Richardson Nature Center's Climate Conversations event, the Cigna Earth Day Fair, and the Bloomington Public Works Open House. At the events, staff distributed information about District programs, water resources, chloride reduction, and our cost share grants. We also highlighted ongoing projects and volunteer opportunities such as Adopt-A-Drain. 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 and farmer's markets around the District, teaching about AIS prevention and lake ecosystems. Staff also used the watershed sandbox again this year at schools and community events.

Communications

The District has an electronic newsletter that is sent to interested residents and members of the public to keep them informed about District programs, projects and other news. The newsletter also features partner updates, pictures of special moments around the District, and meeting notices. The newsletter has over 1,200 subscribers. The District also actively uses the social media platforms Facebook, Instagram, and Nextdoor to engage with residents. The District website (ninemilecreek.org) is regularly kept up to date with current project information, meeting information, access to reports and records, blog posts, and clean water tips.

In 2019, the District printed 500 copies of the annual communication and mailed them to District residents and elected officials. The annual communication was also posted on the District's website and emailed to our e-newsletter subscribers.

Volunteer Program

Master Water Stewards

The District continued to participate in the Master Water Stewards program in 2019, with four stewards enrolled. The Stewards partner to install a stormwater best management practice project. Stewards completed one project, which was a raingarden at an Edina townhome

association. The second group has been involved with the Nonprofit Stormwater BMP project outreach initiatives and will continue to do so in 2020. 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 2019. 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, school groups, and residents all participated in affixing “no dumping” stickers to drains in the District.

Adopt-A-Drain

In 2019, the District expanded Adopt-A-Drain out watershed wide as part of the metro wide launch of the program by Clean Water MN. Adopt-A-Drain is a program where participants can find a stormdrain on the website adopt-a-drain.org and pledge to clean up the debris on and around the drain to keep it out of local waterbodies. The District financially partnered with the cities of Bloomington, Eden Prairie, Edina, and Minnetonka, along with Riley Purgatory Bluff Creek Watershed District on this program. There are 245 households in the watershed that are participating in the program with 433 adopted drains. In 2019, Nine Mile Creek participants cleaned more than 3,900 pounds of debris from their adopted drains.



Adopt a Drain participants

Grants

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 sites most amenable (due to size/infiltration/ and other criteria) for 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. During 2019, outreach continued with the partner organizations as BMP design plans were developed and reviewed by the sites. During this process, it was determined that it was only feasible to move forward with five of the project sites. Installation of the BMPs will occur in 2020. The grant work was completed in December 2019.



Concept plan developed as part of the Clean Water Fund grant

10. Capital Project Implementation

Normandale Lake Water Quality Improvement Project

Normandale Lake is a shallow, man-made lake in Bloomington. High phosphorus levels fuel algal growth, and an abundance of the invasive aquatic plant curly-leaf pondweed. This information led to a multi-faceted approach to improve the health of the lake.

The District accepted a petition from the City of Bloomington to develop a water quality improvement project to address the water quality problem and improve the health of the lake through the control of curly-leaf pondweed and internal phosphorus loading 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 to be implemented in a phased approach.

The District completed a drawdown of the lake from late-2018 through early 2019. The lake drawdown was initiated to reduce the amount of the invasive curly-leaf pondweed in the lake. Following the drawdown, an in-lake alum treatment was implemented in May of 2019 to further reduce phosphorus levels. Results from plant surveys and turion sampling conducted in 2019 show that the drawdown was effective in controlling curly-leaf pondweed.



Normandale Lake in-lake alum treatment – May 2019

In addition, the District conducted fish surveys on Normandale Lake in 2018 and 2019 to understand the native fish and carp population. Carp are an invasive, bottom-feeding fish that stir up sediments, which can contribute to the release of phosphorus into the water. The District is currently working on a carp management plan for the lake that to be implemented in 2020 or 2021. 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/.

Lake Cornelia and Lake Edina Water Quality Improvement Project

Lake Cornelia and Lake Edina are shallow lakes in Edina with poor water quality. The lakes are both immediately upstream of Normandale Lake and are both on the state’s impaired waters list for excess nutrients. Addressing water quality issues in the adjacent water bodies will not only improve the individual water quality of each lake, but is expected to enhance the effectiveness of the phosphorus reduction practices already implemented in Normandale lake.

The District conducted a study of the lakes in 2018-2019 to determine how to address the poor water quality and will implement projects in 2019-2020 to improve the health of the lakes. An in-lake alum treatment project for Lake Cornelia ordered, bid, awarded and expected to be implemented in October of 2019, but due to cold water conditions, the in-lake alum treatment was postponed until the spring/early-summer of 2020. This project, and other projects not yet fully developed, will work to control phosphorous in the lakes. Up-to-date information on the progress of the project can be found on the District’s website at: ninemilecreek.org/lake-cornelia-project

Non-Profit Stormwater BMP Project

The District received an Accelerated Implementation Grant in 2017 from the Board of Water and Soil Resources to target priority locations for stormwater best management practices

(BMPs) on lands owned by nonprofits. These locations were chosen because the sites have significant amounts of hard surfaces that contribute large volumes of polluted runoff to local lakes and creeks. Since 2017, the District has worked to identify suitable locations for stormwater management BMPs (e.g., suitable soils, larger parcels unique or visible locations, at willing partnership for implementation and maintenance of the installed practices), prioritize the locations, secure partnerships to install the BMPs, and design the projects. The District will go out to bid for projects at five locations in early January for installation of the BMPs in 2020. Up-to-date information on the progress of the project can be found on the District's website at: ninemilecreek.org/nonprofits-grant.

Projected 2020 Work Plan Highlights (*The District's 2020 workplan can be found in Appendix 5.*)

1. **Implementation of Watershed District Regulatory Program and Rules**

The District will continue implementing its rules and regulatory program in 2020.

2. **Complete the Development of a District-Wide AIS strategy**

The District will continue to develop and implement strategies to manage aquatic invasive species with partner cities and natural resources agencies in 2020.

3. **Conduct a Wetland Inventory of the District's Highest Quality Wetlands.**

In 2020, the District will prepare a wetland inventory that identifies high-value wetlands within the watershed, rare and high-quality wetland biological communities, and identify opportunities for restoration and/or protection District lakes, wetlands and stream hydrology, and water quality.

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

In 2020, 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 (as described in the Discovery Point Ecological Master Plan) and have volunteer events at the site to engage the community in the restoration. The District will continue to conduct education and outreach programming at the site.

5. **Continue UAA /Lake /Creek Studies**

In 2020, the District will continue to monitor Nine Mile Creek with the WOMP stations. The District will continue collect continuous precipitation, temperature, turbidity and conductivity data at its WOMP stations. The District will also continue its lake monitoring program, collecting data on Arrowhead Lake, North and South Cornelia lakes, Lake Edina, Holiday Lake, Indianhead Lake, Normandale Lake, Lake Rose and Wing Lake. The District will also continue its stream monitoring program, collecting water quality data and ecological data.

Additionally, the District plans to continue 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 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 2020. The District makes \$200,000 available to residents, associations, non-profits, businesses, and local governments in the District for this grant program.

8. **Citizen Volunteer Monitoring**

In 2020, the District will continue to support citizen monitoring through the Metropolitan Council's Citizen-Assisted Monitoring Program (CAMP), where trained volunteers collect water quality samples from District lakes enrolled in the program. In addition, the District will support the River Watch (a hands-on environmental education program for youth in Hennepin County. Teams of youth assess the health of local streams by identifying and quantifying the stream's biological community) and Adopt-A-Dock (a citizen science initiative in which lakeshore residents monitor for zebra mussels) programs.

9. **Citizen Advisory Committee**

The Nine Mile Creek Watershed District will continue to support the role of the Citizen Advisory Committee (CAC). In 2020, new members will be recruited to fill vacant seats. The CAC will assist with education and outreach planning and events, volunteering at education events, reviewing residential cost share grant applications, and assisting with photo selection for 2021 District photo calendar (a biennial calendar that is distributed through city partners to showcase the watershed in pictures and provide educational tips on water quality to the general public).

10. **Technical Advisory Committee**

In 2020, 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 Program Activities**

In 2020, the District will continue to host workshops, programs, and trainings to meet the goals of the District's 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. The District will publish its 2020 Annual Communication in its 2021 Photo Calendar and through its electronic newsletter.

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, groundwater, AIS, and other topics related to the mission of the District and guided by the District's Water Management Plan.

The District will continue to collaborate with the Citizen Advisory Committee to plan education and volunteer events. We will host the Popup Education Cart at popular locations around the District during the summer to engage residents in AIS education and other education topics. The District will continue to partner with cities to have displays at community events, including using the watershed sandbox, and give presentations for groups upon request. The District will also plan to incorporate more art into its educational offerings.

Programming at Discovery Point will continue, including hosting educational events at the facility. We will also look for opportunities to offer volunteer programs at the facility.

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 Programs

The District will work with its Master Water Stewards to finish the current 2019/2020 cohort. We will also work to help previous years of Master Water Stewards finish their capstone projects. The District will continue to implement volunteer programs and events such as Adopt-a-Drain, stormdrain marking, and a creek clean-up event.

12. Capital Project Implementation

Normandale Lake Water Quality Improvement Project

As a continuance of the Normandale Lake Water Quality Project, in 2020, the District will conduct an herbicide treatment of the lake (to ensure that the remaining pockets of the invasive plant does reach problematic levels) and continue to assess the lake's carp population to form an effective management strategy.

Lake Cornelia and Lake Edina

To address water quality issues in Lake Cornelia and Lake Edina, the District will start to implement projects identified in the recently completed UAA study for the lakes in 2020. The first project, an in-lake alum treatment in Lake Cornelia will take place in the spring of 2020. In addition, the District will initiate the process to implement a stormwater BMP in Rosland Park to reduce nutrient loading from the surrounding watershed to Lake Cornelia and continue to investigate management strategies to control the lake's carp and goldfish populations.

Non-Profit Stormwater BMP Project

In 2020, the District will implement the Non-Profit Stormwater BMP project.

SE Anderson Lake Water Quality Project

In 2020, the District will determine the need to implement recommendations from the SE Anderson Lake UAA (e.g., in-lake alum treatment and curly-leaf pondweed management and start the process of implementing the chosen project(s) if deemed necessary.

Stormwater Facilities Fund (SFF) Projects

In 2020, the District will continue to look to find opportunities to use SFF dollars to replace lost stormwater management requirements (volume retention and water quality) from applicants not fully meeting District stormwater requirements.

Regional Flood Study Projects

In 2020, the District will continue to work with cities (and other partners) to identify and study regional stormwater management needs/issues and implement solutions.

Permitting Activity

1. Summary of Permits Issued

In 2019, the NMCWD continued to review projects and permit applications under the rules adopted in 2008 and amended in 2015 and 2018. Of the 147 permits issued in 2019, 29 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 210,776 cubic feet per year, and reduce phosphorus and suspended solid loading by 105 and 32,270 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 2019. During this time period, the District has issued 814 permits of which 281 triggered the District's stormwater rule and as a result, required stormwater management BMPs are projected to reduce stormwater runoff volume by 1,128,620 cubic feet per year, and reduce phosphorus and suspended solid loading by 780 and 195,065 pounds respectively.

In addition to making the District's regulatory program more efficient for staff and permit applicants, the District managers passed Resolution 19-03 delegating all permit approval authority to the Administrator except for a few exceptions (e.g., variances).

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 Permit Coordinator 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 2019, no enforcement actions were necessary.

Summary of 2019 Water Quality Monitoring Programs

The District continued to implement its routine water quality monitoring program in 2019. 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 seven lakes (Arrowhead, Bush, Indianhead, Mirror, Normandale, Wing and Rose). The lakes within the District are monitored on a rotating basis. A summary of the 2019 water quality monitoring can be found in the Appendix.

2019 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 2019 (as well as activities that are to be undertaken in 2020), 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 2019. 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 2019, there is one for 2020.

The tracked results for activities/implementation items identified in the 10-year Plan for 2019 are 40 green cells, 11 yellow cells and 1 red cell for the 52 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. Currently, the cities of Bloomington, Eden Prairie, Edina, Hopkins, Minnetonka, and Richfield have approved local water plans.

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 the 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. A copy of the District's 2019 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 2019 Audited Financial Report can be found in the Appendix.

2020 Annual Budget

The District adopted its 2020 Annual Budget in September 2019. The 2020 Budget can be found in the Appendix.

Appendix

- 1. Summary of 2019 Monitoring Programs**
- 2. 2019 Plan Implementation/Action Item Tracking**
- 3. 2019 Annual Financial Audit**
- 4. 2020 Approved Annual Budget**
- 5. 2020 Workplan**
- 6. 2019 Annual Communication**