

Morning Snow Photo by: R. Gottsleben

Nine Mile Creek Watershed District 2020 Annual Report



Prepared and submitted by: Nine Mile Creek Watershed District Nine Mile Creek Discovery Point 12800 Gerard Drive Eden Prairie, MN 55346 (952) 835-2078

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2020 Nine Mile Creek Board of Managers/Officers

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

Erin Hunker, Secretary 306 Dearborn Court Edina, MN 55343 Appointing County: Hennepin Term Expires: 9/29/2023 Resident of Edina

Larry Olson, Treasurer 6808 Cornelia Drive Edina, MN 55435 Appointing County: Hennepin Term Expires: 9/29/2022 Resident of Edina Grace Butler, Vice President 14325 Grenier Road Minnetonka, MN 55345 Appointing County: Hennepin Term Expires: 9/29/2022 Resident of Minnetonka

Peggy Kvam 6334 Coteau Trail Eden Prairie, MN 55344 Appointing County: Hennepin Term Expires: 9/29/2023 Resident of Eden Prairie

Jodi Peterson, *Former Manager* 9508 Russell Avenue South Bloomington, MN 55431 Appointing County: Hennepin Term Expired: 9/29/2020 Resident of Bloomington

2020 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 2020 CAC members were:

Roger Bildsten 6813 Brook Drive Edina, MN 55439

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

Kim Herzog 5499 Butternut Circle Minnetonka, MN 55343

Scott Jordan 10810 Upton Avenue South Bloomington, MN 55348

Ember Kapitan 12838 Gerard Dr Eden Prairie, MN 55346

Rich Koechlein 6412 Glacier Place Edina, MN 55436

Tim Ronhovde 7287 Gerard Dr Eden Prairie, MN 55346 Charlotte Lefebvre – **CAC Chair** 6412 Aspen Road Edina, MN 55436

Joshua Lynn 8710 Logan Avenue South Bloomington, MN 55431

Beth Miller - **Secretary** 4408 Crawford Road Minnetonka, MN 55343

Bob Prince 13190 Beehive Court Eden Prairie, MN 55346

Jonathan Scoll 6920 Valley View Road Edina, MN 55439

Stephen Sinykin 8211 Norman Creek Tr Bloomington, MN 55437

2020 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		
Drew McGovern	Hennepin County – Water Resources Engineer		
Patrick Martin	City of Richfield – Water Resources Specialist		
Joe Mulchay	Metropolitan Council – Environmental Analyst		
Phil Olson	City of Minnetonka – City Engineer		
Sarah Schweiger	City of Minnetonka – Water Resources Engineer		
Patrick Sejkora	City of Eden Prairie – Water Resources Engineer		
Jason Spiegel/Lucas	MNDNR – Area Hydrologist		
Youngsma			
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 – Manager of Water Resources		
Jessica Wilson	City of Edina – Water Resources Coordinator		
Jordan Donatell	MPCA – Watershed 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 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 2020 included:

Staff	Position	Address	Telephone	Email
Randy	District		952.835.2078	ranhorn@ninemilecreek.org
Anhorn	Administrator			
Erica	Program and		952.358.2276	esniegowski@ninemilecreek.org
Sniegowski	Project			-
	Manager			
Gael Zembal	Education and	Discovery Point	952.204.9691	gzembal@ninemilecreek.org
	Outreach	12800 Gerard Dr.		
	Coordinator	Eden Prairie, MN		
		55346		
Lauren Foley	Permit and		952.204.9690	lfoley@ninemilecreek.org
	Water			
	Resources			
	Coordinator			
Megan Jester	Seasonal			intern@ninemilecreek.org
_	Intern			
Lizzy Boor	MN]	952.356.1999	eboor@ninemilecreek.org
-	GreenCorps			

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 2020 included:

Consultant	Services	Address	Telephone	Email
Bob Obermeyer	Engineer	4300 MarketPointe Dr.	952.832.2857	bobermeyer@barr.org
Barr Engineering		Suite 200		
		Mpls, MN 55435		
Janna Kieffer	Engineer	4300 MarketPointe Dr.	952.832.2785	jkieffer@barr.org
Barr Engineering		Suite 200		
		Mpls, MN 55435		
Louise Heffernan	Engineer	4300 MarketPointe Dr.	952.832.2850	lheffernan@barr.com
Barr Engineering		Suite 200		
		Mpls, MN 55435		
Louis Smith	Attorney	400 2 nd Ave. S.	612.344.1400	smith@smithpartners.com
Smith		Suite 1200		
Partners, PLLP		Mpls, MN 55401		
Michael Welch	Attorney	400 2 nd Ave. S.	612.344.1400	welch@smithpartners.com
Smith		Suite 1200		
Partners, PLLP		Mpls, MN 55401		
Dan Cavanaugh	Accountant	5353 Wayzata Blvd	952.697.4522	dan@jmscfuturity.com
JMSC Futurity		Suite 205		
		St. Louis Park, MN		
		55401		
Rebecca Petersen	Auditor	4810 White Bear Lake	651.255.9339	rpetersen@redpathcpas.com
Redpath & Co		Pkwy, White Bear Lake,		
		MN 55110		
Krissi Tronnes	Insurance	2010 Centre Pointe Blvd	651.379.7876	ktronnes@bearence.com
Bearence		Mendota Heights, MN		
Management Group		55120		

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 though 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.



The Nine Mile Creek Watershed District

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 2020 permitting and enforcement program, and its 2020 goals and objectives. The Managers invite comments and suggestions concerning this report.

The 2020 Annual Report is available on the Nine Mile Creek Watershed District website – <u>ninemilecreek.org</u>. 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 2020

2020 was another busy, albeit trying year for the Nine Mile Creek Watershed District (District). Much of the District's normal operations in 2020 had to adapt following the challenges of the Coronavirus pandemic (COVID-19) on our everyday work and had to find new and innovative ways to meet our project and program goals and objectives. The District is following the guidance of the <u>Minnesota Department of Health</u> and the Center for Disease Control to slow the spread of the COVID-19 and help protect the health and safety of its staff, partners and the community, resulting in the District's office have been closed to the public for the majority of the year. Staff are working remotely and are available via phone and email. In addition, board meetings and workshops, staff and committee meetings and education events have all been held virtually. In following with numerous Governor Executive Orders, the District prepared and adopted a COVID-19 Preparedness Plan and identified certain areas of the District's work that fell within one or more "critical sector" categories described by Minnesota

Governor Tim Walz' Emergency Executive Order 20-33 and associated guidance. As such, the District Board of Managers directed that this critical sector work must be conducted with the minimum possible number of workers necessary for safe and effective completion of the work, and in a manner that conforms to Minnesota Occupational Safety and Health Standards and the Minnesota Department of Health and the federal Centers for Disease Control guidelines related to COVID-19, including standards for social distancing and hygiene.

Highlights for 2020 are listed below:

- Welcomed a new Board Manager, Peggy Kvam
- Hosted a MN GreenCorps member
- Completed an addition to the District's office building to provide for additional office and storage needs
- Continued to develop a District-wide aquatic invasive species (AIS) management strategy
- Undertook a District-wide inventory of high-quality wetlands to identify protection and enhancement needs and opportunities as well as identify areas for flood storage.
- Worked with the District's cities to update the District-wide XP-SWMM hydrologic and hydraulic model that will be used to complete an Atlas-14 flood risk/vulnerability and resiliency assessment to identify opportunities to optimize flood storage with the creek system.
- Participated in the county-wide and Lower Minnesota River subgroup on the watershedbased funding grant projects
- Continued working with our municipalities to address impacts of redevelopment on local and regional flood problem areas
- Continue to look for ways to make the District's regulatory program more efficient for permit applicants and reduce staff time and streamline Board meetings
- In an effort to increase program efficiencies, upgraded the Districts permit and cost share grant database and inspection software to MS4Front
- Developed a water resources info sharing web map to provide up-to-date lake and groundwater level information, lake water quality information and lake fact sheets providing additional information on individual District lakes
- Worked with the City of Edina to help develop lake level management plans for Arrowhead and Indianhead lakes (both land-locked lakes)
- Worked with the City of Edina to provide District Stormwater Facility Fund funds to go above and beyond District stormwater regulatory requirements for the City's cold storage site at Braemar Golf Course
- Continued Nine Mile Creek Discovery Point Management & Site Restoration Planning
 - Including volunteer native planting and BMP maintenance events along the Cardinal Creek trail
- Continued UAA/Lake/Creek Studies
 - Completed the Lake Smetana Use Attainability Analysis (UAA) study
 - Held a community meeting on the Lake Smetana's UAA to provided updates on the findings and initiation of selected in-lake and watershed projects
- Continued carp and goldfish management analysis on Cornelia and Normandale lakes (including some limited carp removal on Normandale Lake)

- 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 2020 include:
 - Converting programming to virtual and socially-distanced formats due to the COVID-19 pandemic
 - Art in nature webinars conducted as part of the Summer Education Series
 - Annual State of the Waters event
 - Promoted partner webinars and videos
 - Continued participation in the Adopt-A-Drain program
 - Ongoing focus on chloride reduction efforts
 - Hosted MPCA Smart Salting trainings
 - Updated salt reduction educational materials
 - Created a Winter Salt Watch Program in partnership with the Izaak Walton League of America
 - Participated in the Road Salt Symposium advisory committee
 - Participated in the Hennepin County Chloride Initiative Committee and the fertilizer advisory committee that is working to develop a tool to assess and reduce impacts from chloride in fertilizer
 - Distributed educational communications and materials such as the District's newsletter, brochures, and photo calendars
 - Created lake fact sheets, a Jr Watershed Explorer Handbook, and more
 - Continued to update the District website with new information
 - Created new cost share project signs to identify projects while also educating the public on the availability of cost share grants and the benefits of the projects
 - Continued outreach for the Normandale Lake Improvement Project including updating project information on the District's website and the development of updated project signs to be installed around Normandale lake in 2021.
 - Outreach on the Lake Cornelia and Lake Edina projects
- Capital Project Implementation
 - Following the completion of the first two phases (lake drawdown and in-lake alum treatment) of the *Normandale Lake Water Quality Improvement Project* in 2019 to control the lake's curly-leaf pondweed and address the large internal nutrient loading problem, the District completed a partial lake herbicide treatment for curly-leaf pondweed in the spring of 2020 and has continued carp management analysis on Normandale Lake to determine best next step

management strategies (including some limited carp removal on Normandale Lake).

- Up-to-date information on the project can be found on the District's website at <u>ninemilecreek.org/whats-happening/current-projects/normandale/</u>
- Initiated the implementation of identified projects in the *Lake Cornelia and Lake Edina* UAA including
 - Partnering with the City of Edina on spot herbicide treatments on Lake Cornelia to control curly-leaf pondweed
 - Completed an in-lake alum treatment in Lake Cornelia
 - Held one lake alum treatment informational meeting at Rosland Park on Lake Cornelia in Edina.
 - Ordered the Rosland Park Stormwater BMP Filtration Project
 - Subsequently, the District received a \$96,248 grant from Hennepin County and a \$750,000 BWSR Clean Water Fund grant to construct the Rosland Park Stormwater BMP Filtration Project.
 - Continued the carp/goldfish analysis within the Lake Cornelia system to identify nurseys and management options.
 - The District has also started having conversations with the City of Edina on the potential for a large infiltration basin in the city-owned Lynmar Park (a subwatershed to Lake Edina).
 - Up-to-date information on the project can be found on the District's website at <u>ninemilecreek.org/whats-happening/current-projects/lakecornelia-project/</u>
- Completed the *Non-Profit Stormwater BMP Project* which installed six stormwater BMPs at five sites owned by nonprofits.
 - Up-to-date information on this project can be found on the District's website at: <u>ninemilecreek.org/nonprofits-grant.</u>

Assessment of the 2020 Work Plan

In its 2019 Annual Report, the District identified several broad goals and objectives for 2020, including:

- 1. Implementation of District regulatory program and rules.
- 2. Continue the development of a District-wide aquatic invasive species (AIS) management strategy
- 3. Conduct a wetland inventory of the District's highest quality wetlands
- 4. Nine Mile Creek Discovery Point management and site restoration
- 5. Continue UAA/lake/creek studies
- 6. BWSR Watershed-Based Implementation 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
- 13. Other

In 2020, the District completed or made substantial progress toward these goals and objectives, as described below.

1. Implementation of Watershed District Regulatory Program & Rules

In an effort to increase the efficiency of the District's permitting program, the District initiated the development and implementation of a comprehensive permit and cost-share inspection/tracking software package (MS4Front) in 2020. While the original MS4Front software, focused on MS4 permittees to help them track compliance needs, staff worked with a consultant to tailor the software package to meet the needs of the District to streamline the data management and reporting of the permit, cost-share grant and operations and maintenance programs. Implementation of the software has increased the efficiencies of our permit and cost-share grant programs through the customization of auto-generated reporting and correspondence forms, development of mobile inspection apps, tracking permit and BMP inspection and maintenance activities with automatic notifications, and combining fully-integrated mapping functionality with various GIS layers.

The District issued 134 permits issued in 2020. The resulting stormwater volume, phosphorus and total suspended solids loading reductions as a result of permitted projects meeting District stormwater requirements are detailed later in this report in the *Permitting Activity - Summary of Permits Issued* section.

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). In 2021, the managers will review the delegated authority and to determine if it is working or if changes need to be made.

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 o that it can issue permits simultaneously, or shortly after, municipal permits.

2. <u>Continue the development of a District-wide aquatic invasive species (AIS)</u> <u>management strategy</u>

As part of developing District-wide AIS management strategies in 2020, The District Board of Managers developed:

- A table of levels of involvement the managers thought the District should have in various AIS management activities (when to lead, partner, or have no role.)
- A lake prioritization schematic to determine which lakes would be involved in various activities
- Flowcharts to guide the District's decision-making process in determining what the District's role should be in prevention, identification (e.g., early detection), rapid response, monitoring/inventories and overall management for the various prioritization classifications.

The next step will be working with partner cities and natural resources agencies to develop a rapid response plan in 2021.

3. Conduct a wetland inventory of the District's highest quality wetlands

In 2020, the District completed a wetland inventory that identified 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

The District developed an Ecological Master Plan (available at <u>ninemilecreek.org/wp-content/uploads/Discovery-Point-Ecolological-Master-Plan_Updated-August-2019.pdf</u>) 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 and 2 of the restoration took place from 2016-2018 and included invasive buckthorn and tree removal, replanting trees, shrubs, native plugs, low mow fescues and reseeding of a native prairie. These efforts included volunteer buckthorn busts and native planting events to engage the wider neighborhood and community in the restoration efforts and to provide learning opportunities about buckthorn removal and native restoration.

In 2020, the District undertook maintenance activities on both phases of the project. These activities included replacement of dead trees and shrubs, buckthorn control, invasive plant and weed control, and specific maintenance of the stormwater BMPs (e.g. raingardens) on site. Also in 2020, the District planned for Phase 3, the final phase of restoration onsite, and went out for quotes for the work. The District will undertake the restoration work for Phase 3 in 2021.

5. Use Attainability Analyses & Lake and Creek Studies

In 2020, the District entered the seventeenth year of participating in the Metropolitan Council's Watershed Outlet Monitoring Program (WOMP) (the District also monitor continuous precipitation, temperature, turbidity and conductivity at the WOMP station). The continuous monitoring began at this station in 2008 and continued in 2020.

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 2020 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 2020. 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.

Because a primary use of Nine Mile Creek is ecological – a place for fish and aquatic life to live – a focus of the Nine Mile Creek monitoring program is evaluation of the stream's fish and aquatic life community as well as the ecosystem components essential for the survival of fish and aquatic life. In 2021 the continued Nine Mile Creek monitoring program will include includes:

- Annual monitoring of the fish community during summer.
- Annual macroinvertebrate monitoring during October.
- Annual habitat monitoring during summer (i.e., stream substrate type, depth of fine sediment, percent embeddedness, and length of eroded streambank).
- March through October monthly measurements of specific conductance, dissolved oxygen, pH, temperature, turbidity, and flow.

The District's 10 creek monitoring locations are shown below (four on the north fork, three on the south fork and three on the main stem).

As part of the District's lake monitoring program, the District monitored nine lakes in 2020, 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, in partnership with the City of Eden Prairie, began updating the Lake Smetana UAA in 2019. The updated UAA was completed in 2020 and evaluated current lake water quality conditions and evaluated the need to implement management options to reduce nutrient loading (internally and externally) thereby working toward meeting lake water quality standards.

Water quality in Lake Smetana has improved in the past decade and the lake currently meets water quality and ecological health goals (past upstream projects such as a wetland restoration project and an in-lake alum treatment in Bryant Lake have greatly improve the lake's water quality.) As such, it was determined no drastic projects were needed and future management efforts should be focused on protecting lake water quality (including upstream Bryant Lake), monitoring for changes, and improving water quality and ecosystem health as partnership opportunities arise through reducing pollutant loading from stormwater runoff.

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 and once the UAA was completed, held another community stakeholder meeting to present the results of the study. A summary of the study and proposed projects is available at: <u>ninemilecreek.org/wp-content/uploads/NMC_SmetanaRptSumFINAL_100820.pdf</u>

In addition, the District continued to partner with the MPCA in 2020 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 2020 the District started the process of updating its watershed-wide XP-SWMM model to determine flood risk/vulnerability and assess flood risk reduction opportunities. The District worked with the City of Edina on the development of lake level management (pumping) plans for two land-locked lakes (Arrowhead and Indianhead lakes) experiencing extremely high water levels.

6. BWSR Watershed-Based Implementation Funding Grant

As part of BWSR's fiscal year 2018-2019 Watershed-Based Implementation Funding (WBIF) grant program, the District has been working 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. The mission of the Lower Minnesota Collaborative is to protect, manage, and restore the water resources in its boundaries.

In 2020, the Lower Minnesota River Collaborative launched the Chloride Reduction Grant Program. The Chloride Reduction Grant program offers financial support and resources for businesses and local government units for tools and practices which reduce, directly or indirectly, chloride usage by that organization. Some examples include pavement temperature sensors that would allow for more effective chloride application or outfitting currently owned trucks with new segmented plow blades to reduce chemical removal of snow and ice.

In addition, in 2020 the District initiated work with a new group, the Lower Minnesota River North Group, to determine activities (projects, programs and assessments) to fund, draft a projects list and develop criteria to select which of the requests from the partners to fund.

7. 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, groundwater conservation, chloride reduction and habitat restoration. Grants are also available for projects that that will reduce chloride loading to receiving water bodies. Information on the cost share program is available at: <u>ninemilecreek.org/grants</u>

In 2020, the District awarded 18 cost share grants totaling approximately \$150,000. With these funds, 22 raingarden/infiltration stormwater management best management practices (BMPs), 10 habitat restorations, and three shoreline buffers will be installed by grantees. The Cost Share Program is



2020 Grant Types

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.



2020 Cost Share Grant Projects

8. Citizen Volunteer Monitoring

The District partnered with the Metropolitan Council in 2020 to support the Citizen-Assisted Monitoring Program (CAMP) on five lakes in the District. Volunteers with interest in the health of local water bodies collect water quality data on several District lakes bi-weekly from May through October. The beginning of monitoring season was delayed by the pandemic. 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 used volunteers on Bryant and Bush lakes in 2020 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 moderate numbers; no zebra mussels have been found by Adopt-A-Dock volunteers in Bush Lake.

9. 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 2020, the CAC met six times. As part of their involvement, the CAC assisted in selecting photos for the 2021 Photo Calendar. CAC members also 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.

In addition, the District provided funding for three CAC members to attend the 2020 Salt Symposium, and for four members to attend the Water Resources Conference and MAWD Annual Conference.

10. Technical Advisory Committee

The District contacts TAC members as needed to solicit ideas on various topics. The District also holds TAC meetings. In 2020, the District's held two TAC meetings (one joint TAC meeting with Riley Purgatory Bluff Creek Watershed District). One meeting was to present findings From a District-wide groundwater and surface water interaction study and high lake levels and the potential for springtime flooding. The Joint TAC meeting focused on floodplain vulnerability evaluation to identify flood-risk areas.

In 2021, the TAC will likely meet to discuss the District's AIS management strategies, harmful algal blooms, flood risk/vulnerability and resiliency assessment and discuss partnership possibilities on future public projects that go above and beyond regulatory requirements.

11. Education and Outreach Program Activities

In 2020, the District reached over 1,000 people through virtual events and programs. 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 instruction and practice in outdoor skills. In 2020, this series was converted to virtual webinars and pre-recorded videos. These included a photography and a writing webinar, both of which helped meet our goal of including more art in programming. We once again partnered with local watershed districts and county organizations to provide a virtual Sustainable Lawns workshop. Viewership from these webinars and from other educational videos was over 600 views.

K-12 Education

District staff presented programs at three schools around the watershed in 2020. School presentations were disrupted by the pandemic and necessary shifts in educational models by local schools. Topics ranged from erosion studies with the watershed sandbox (pre-COVID) to lessons about water quality and watershed with fourth graders. K-12 education initiatives reached about 100 students in 2020.

Trainings & Workshops

The District hosted three MPCA Smart Salting trainings in 2020. These workshops provide training for MNDOT, Hennepin County, and city and private plow drivers on smart salting practices. These trainings lead to a better understanding about the correct application of 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 City of Bloomington and Oak Grove Presbyterian Church to host a series of raingarden maintenance classes. These classes give people hands-on practice in maintaining a raingarden.

Discovery Point Programming

There are several education and outreach opportunities that continued to engage people despite the pandemic. People were encouraged to walk the grounds and read the informational signs about the BMPs on our property. We also maintained the Little Seed Library and provided assistance to volunteer projects on the surrounding city land.

Community Events

District staff were unable to attend community events for most of 2020, due to the pandemic. Before the pandemic became widespread, staff, volunteers, and partners



2020 Raingarden Maintenance Class

attended the Bloomington Home Improvement Fair, the EcoFaith Gathering, Minnetonka Kids Fest, and Leap into Climate Action event. These events helped us, and our partners, reach over 600 people.

In anticipation of returning to community events, the District purchased a Blue Thumb Roots Puller, which shows the lengths of roots of native plants, highlighting their benefits for water infiltration.

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 had over 1,300 subscribers at the end of 2020. 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 2020, the District printed 2,000 copies of the annual communication and photo calendar. The annual communication was also posted on the District's website and emailed to our e-newsletter subscribers. Calendars were mailed to District residents and elected officials and distributed to libraries and city halls around the District for members of the public.

Staff updated various brochures throughout the year as well. These included the creation of new lake fact sheets, as well as updating our winter maintenance brochures. Our MN

GreenCorps member also developed a Junior Watershed Explorer Booklet designed to help children grades 3-12 learn about the watershed.

Volunteer Program

Minnesota Water Stewards

The District continued to participate in the Minnesota Water Stewards (MWS) program in 2020, with three stewards enrolled. The Stewards partner to install a project designed to protect our water resources. Stewards completed a raingarden and native habitat installations for their capstone projects. Stewards have also assisted in outreach programs and monitoring studies around the District.

We will be pausing our participation in the MWS program in 2021 to evaluate how the program is meeting District goals and to work with the stewards currently in the program.

Volunteer Programs

The District hosted a socially distanced Adopt a Drain event in Hopkins to encourage people to get outside at the beginning of the pandemic and clear stormdrains of debris in 2020. District staff also assisted volunteers on the restoration of the Cardinal Creek Conservation Area trail near Discovery Point.

Our MN GreenCorps member developed a Winter Salt Watch volunteer program in partnership with the Izaak Walton League of America. Volunteers, through the District's



Salt Watch Kit materials

program, will test street runoff for chloride. These measurements will help District staff create a targeted outreach program in chloride hotspots.

Adopt-A-Drain

In 2020, the District continued to participate in the Adopt-a-Drain program. Adopt-A-Drain is a program where participants can find a stormdrain on the website <u>adopt-a-drain.org</u> 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 341 households in the watershed that are participating in the program with 615 adopted drains. In 2020, Nine Mile Creek participants cleaned more than 7,000 pounds of debris from their adopted drains.

Grants

Clean Water Fund Grant and Hennepin County Opportunity 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. The grant work was completed in December 2019.

The District received a Hennepin County Opportunity Grant in 2020 to help with the installation costs of the raingardens. The six raingardens were installed in 2020. Drain tile was installed in some of the raingardens due to potential for poor infiltration capacity at the sites. Monitoring during the summer of 2020 indicated that the raingardens were infiltrating well with the drain tile capped. Due to this, the drain tile remains capped in all the raingardens. The District will continue to monitor the sites for BMP performance. The sites primarily capture parking lot runoff, with one location capturing runoff from a county road. Prior to raingarden installation, this runoff flowed untreated to nearby waterbodies, including Nine Mile Creek. The raingardens now capture and infiltrate this polluted runoff, reducing the volume of water and the amount of phosphorus and sediment reaching local water resources. MIDS was used to calculate total pollutant removal that the raingardens achieved. The estimated total benefit is 660 pounds of total suspended solids and 3.6 pounds of total



Raingarden Basin During Construction, 2020

phosphorus captured by the six raingardens annually. In addition, the raingardens will infiltrate 4.5 acre-feet of water a year.

12. 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, along with an abundance of the invasive aquatic plant curly-leaf pondweed.

The District accepted a petition in 2007 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 (completed late-2018 through early-2019), (2) an in-lake alum treatment (completed May 2019), (3) herbicide treatment (first treatment completed May 2020), (4) aquatic macrophyte harvesting, (5) oxygenation system to be implemented in a phased approach. In addition, the District has been conducting fishery management studies to understand the native fish and carp population and management alternatives.

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

The District is currently working with Carp Solutions to determine the best long-term methods for carp management in Normandale Lake. Carp are an invasive species of fish that cause water quality problems due to their bottom feeding behavior. They stir up lake bottom sediments, which reduces water clarity and releases phosphorus. They also uproot aquatic plants, destroying habitat for waterfowl and aquatic communities. A 2018 fish survey indicated that carp were at a level in Normandale Lake where management of the population is recommended for water quality purposes. As part of this work, box netting occurred in the lake in 2020. A box net lays flat on the bottom of the lake, while carp are trained to gather in the area with cracked corn. The carp are selectively removed when they are gathered at the site and the sides of the net are raised. Using this method, approximately 5,000 carp were removed from Normandale Lake. In addition, a fish survey was done in the fall.

Up-to-date information on the progress of the project can be found on the District's website at: <u>ninemilecreek.org/whats-happening/current-projects/normandale/</u>.

Lake Cornelia and Lake Edina Water Quality Improvement Project

Lake Cornelia and Lake Edina are shallow lakes in Edina with poor water quality (both lakes do not meet state water quality standards for shallow lakes and are listed on the State's impaired waters list for excess nutrients [phosphorus]). 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.

A 2019 water quality study for the lakes identified in-lake and watershed management alternatives to address nutrient loading to the lakes. As such, the Nine Mile Creek Watershed District Board of Manager's have ordered two projects to date to Lake Cornelia's poor water quality (reducing nutrient loading to Lake Cornelia will also reduce loading to downstream Lake Edina); one of two in-lake alum treatments for Lake Cornelia to address internal loading (a second treatment is anticipated in five years) and the implementation of a stormwater best management practice (BMP) located in the City of Edina owned Rosland Park (adjacent to Lake Cornelia). The Rosland Park Stormwater Filtration BMP is an aboveground filtration system that will remove phosphorus from stormwater flows and improve water quality in Lake Cornelia. The District has received a Hennepin County Opportunity Grant and a BWSR Clean Water Fund grant to partially fund the project.

In addition, the District has been conducting fishery management studies to understand the native fish and goldfish population and management alternatives and has received a Hennepin County aquatic invasive species (AIS) grant to partially fund the study. As part of emphasizing ting the lake's goldfish problem, the issue and study was highlighted in a Minnesota Bound video story to be aired on KARE 11 and the District has posted information on the impacts of releasing goldfish (or any aquarium fish or plant) into the natural environment on its website, newsletter and social media.

The in-lake alum treatment for Lake Cornelia took place in May 2020 and the initial design work for the Rosland Park stormwater filtration BMP in currently underway with going out for bid and construction anticipated to occur in 2021. In addition, the District is working with the City of Edina on the possibility of constructing a larger stormwater bioretention BMP in the city-owned Lynmar Park to address stormwater runoff and associated nutrient loads to Lake Edina. Up-to-date information on the progress of the project can be found on the District's website at: <u>ninemilecreek.org/lake-cornelia-project</u>

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



Filming for Minnesota Bound, 2020



Raingarden Installed in Bloomington, 2020

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.

In 2020, the District installed six raingardens at five sites as part of the nonprofit stormwater BMP project. The raingardens were designed to soak in stormwater and reduce pollution reaching Nine Mile Creek and local lakes. A Hennepin County Opportunity Grant offset District funds for the construction of the six raingardens. In 2021, the District will conduct the first of two years of required maintenance on non-profit stormwater BMP projects. Up-to-date information on the progress of the project can be found on the District's website at: ninemilecreek.org/nonprofits-grant.

13. Other

Repair Maintenance

The District and City of Bloomington initially undertook a creek restoration project in the lower valley area of the mainstem of Nine Mile Creek (roughly between 102nd Street West in Bloomington and the Minnesota River in the 1990's. As part of the project the District and the City entered into a maintenance agreement n 1993 to address the long-term maintenance of the project. As part of the agreement, the District and the City jointly conduct an annual inspection of the project area to identify areas that may need repair maintenance to maintain the integrity of the project. As part of this process the District and the City have partnered on a few repair maintenance projects over the years with the last being in 2015.

Annual inspections in the summer of 2019 identified a site where due to high water conditions, erosion of the creek bank was encroaching on the steep valley wall. To address the problem area the District and City completed a repair maintenance project in 2020 using bioengineering techniques to repair and stabilize the eroded area.

Discovery Point Building Addition

To provide needed office and storage space at the District's office (Discovery Point) to improve staff efficiencies in meeting the goals and objectives of the District's Water Management Plan, the District completed a 500 square foot addition to its office building in 2020.

Projected 2021 Work Plan Highlights (*The District's 2021 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 2021 as well as evaluate the need to review and potential housekeeping update to the District's rules.

2. <u>Complete the Development of a District-Wide AIS strategy</u>

The District will continue to work with city and natural resources agency partners in 2021, to develop and implement strategies (most specifically a AIS Rapid Response Plan for its Priority 1 lakes) to manage aquatic invasive species.

3. Manage the District's Highest Quality Wetlands

Following the completion of the District's current assessment of high-quality wetlands throughout its watershed, in 2021 work will begin on the development of restoration and/or protection plans for the identified high-quality wetland areas, sensitive habitats and plant species.

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

In 2021, 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. In addition, the District will implement the third and final phase of the planned restoration (as described in the Discovery Point Ecological Master Plan) and hope to have volunteer events at the site to engage the community in the restoration and continue to conduct education and outreach programming at the site (COVID-19 Pandemic dependent).

5. Continue UAA /Lake /Creek Studies

In 2021, the District will continue implementing its lake and stream monitoring programs collecting water quality data and ecological/biological data and undertake UAA updates for Arrowhead and Indianhead lakes in Edina and Holiday, Wing and Ros lakes in Minnetonka.

In addition, in preparation of a creek restoration/stabilization project on the south fork of Nine Mile Creek (slated for 2022-2024), the District will be conducting an assessment of the south fork in 2021to identify areas of erosion and/or areas where more natural re-meanders can be implemented.

6. BWSR Watershed-Based Implementation Funding Grant

In 2021 the District will continue use the fiscal year 2020-2019 WBIF, through working in collaboration with other Hennepin County entities on county-wide chloride initiatives and the Lower Minnesota Collaborative in implementing its Chloride Reduction Grant Program.

As part of the BWSR fiscal year 2020-2021 WBIF program, the District will continue to work with the newly formed Lower Minnesota River North Group to continue identify projects, assessments and education opportunities to fund throughout its hydrologic boundaries.

7. Cost Share Grant Program

The District will solicit applications for the thirteenth year of its Cost Share Grant Program in 2021. The District makes \$300,000 available to residents, associations, non-profits, businesses, and local governments in the District for this grant program to improve water quality or increase capacity to store water, preserve or protect and restore native plant and wildlife communities with the emphasis on lakes, rivers and wetlands, and protect and conserve groundwater quality and quantity.

8. Citizen Volunteer Monitoring

In 2021, 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 program when it is safe to do so (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 2021, new members will be recruited to fill vacant seats. The CAC will assist with education and outreach planning and events, volunteering at education events and reviewing residential cost share grant applications.

10. Technical Advisory Committee

In 2021, the District will continue to work with the Technical Advisory Committee as it assesses flood risk/vulnerability and risk reduction opportunities, climate resiliency and groundwater conservation throughout the watershed 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 2021, the District will continue to host workshops, programs, and trainings to meet the goals of the District's Water Management Plan. These programs will be virtual, as well as in person, depending on guidance regarding the COVID-19 pandemic in 2021.

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 2021 Annual Communication which will be distributed in person and through the 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 conservation, chloride reduction, 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. Staff will use resources to provide a safe and inclusive learning environment for participants. The District will also plan to incorporate more art into its educational offerings.

Programming at Discovery Point will resume when it is safe to do so; until then, the grounds will remain open for walking and nature exploration.

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 continue to implement volunteer programs and events such as CAMP lake monitoring, Adopt-A-Dock, Adopt-A-Drain, stormdrain marking, and other volunteer events as feasible.

12. Capital Project Implementation

Normandale Lake Water Quality Improvement Project

As a continuance of the Normandale Lake Water Quality Project, in 2021, the District will conduct a partial lake herbicide treatment of the lake (to ensure that the remaining pockets of the invasive plant does not reach problematic levels) and continue to assess the lake's carp population to form an effective management strategy, and implement management recommendations, as is feasible. In addition, the District will continue lake water quality and plant monitoring to evaluate effectiveness of implemented projects as part of its adaptive management approach.

The District will host a community meeting to present water quality data and updated project information.

Lake Cornelia and Lake Edina

In 2021, the District plans to undertake ordered projects identified in the Lake Cornelia and Lake Edina water quality feasibility study including, herbicide treatment for curly-leaf pondweed management, construction of the Rosland Park stormwater filtration BMP. In addition, the District will continue it assessment of fisheries management options [aka carp/goldfish control) and start design work for the Lynmar Park infiltration retrofit project. The District will also continue lake WQ monitoring to evaluate effectiveness of implemented projects as part of its adaptive management approach.

Non-Profit Stormwater BMP Project

In 2021, the District will conduct the first of two years of required maintenance on nonprofit stormwater BMP projects, along with installing interpretive signs at the project locations.

South Fork of Nine Mile Creek Restoration/Stabilization Project

In 2021, the District will conduct walk through of south fork of Nine Mile Creek to identify areas for restoration and stabilization to be undertaken in 2022-2024

SE Anderson Lake Water Quality Project

In 2021, the District will undertake required pre-herbicide treatment needs to obtain DNR permit for curly-leaf pondweed herbicide treatment in 2022.

Stormwater Facilities Fund (SFF) Projects

In 2021, 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 and close-out City of Edina Braemar cold storage SFF above and beyond project.

Regional Flood Study Projects

In 2021, 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 2020, the NMCWD continued to review projects and permit applications under the rules adopted in 2008 and amended in 2015 and 2018. Of the 134 permits issued in 2020, 23 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 147,594 cubic feet per year and reduce phosphorus and suspended solid loading by 106 and 330,373 pounds per year respectively. Of the 134 permits issued, four (4) were variances (two (2) to the District's wetland buffer rule and one (1) each for floodplain fill and floodplain freeboard).

In 2017, the District initiated a new permit tracking program that has since been extended to include all permits issued from 2014 through 2020. During this time period, the District has issued 948 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 2014-2020) were projected to reduce stormwater runoff volume by 1,287,662 cubic feet per year, and reduce phosphorus and suspended solid loading by 903 and 231,815 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 2020, no enforcement actions were necessary.

Summary of 2020 Water Quality Monitoring Programs

The District continued to implement its routine water quality monitoring program in 2020. 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 fork, north fork and

main stem of Nine Mile Creek (similar to past years) and nine lakes (Arrowhead, Cornelia (North and South), Edina, Holiday, Indianhead, Normandale, Rose and Wing). The lakes within the District are monitored on a rotating basis. A summary of the 2020 water quality monitoring can be found in the Appendix.

2020 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 2020 (as well as activities that are to be undertaken in 2021), 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 2020. 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 2020, there is one for 2021.

The tracked results for activities/implementation items identified in the 10-year Plan for 2020 are 44 green cells, 7 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 2020. 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 2020 regular board meeting. The District selected Redpath and Company Ltd, to conduct the District's annual financial audit.

In addition, the District sought qualifications from engineering firms interested in being a part of the District's engineering pool to provide engineering and project-design services for specific types of projects. As a result, the District selected Asakura Robinson, Barr Engineering, Houston Engineering Inc., ISG Engineering, SRF Consulting Group, Stantec Consulting Services, Inc., Wenck Associates, Inc., as part of it engineering pool.

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. In 2020, the District combined its 2020 Annual Communication report with the development of its 2021 photo calendar that provided a general overview of the watershed and some of its programs. This was mailed to out to watershed residents and made available at public libraries and open city halls. In addition, the 2020 Annual Communication was posted on our website and emailed out through our electronic newsletter. 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 2020 Audited Financial Report can be found in the Appendix.

2021 Annual Budget

The District adopted its 2021 Annual Budget in September 2020. The 2021 Budget can be found in the Appendix.

Appendix

- 1. Summary of 2020 Monitoring Programs
- 2. 2020 Plan Implementation/Action Item Tracking
- 3. 2020 Annual Financial Audit
- 4. 2021 Approved Annual Budget
- 5. 2021 Workplan
- 6. 2020 Annual Communication