

Nine Mile Creek Watershed District 2011 Annual Report

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2011 Nine Mile Creek Board of Managers/Officers

LuAnn Tolliver, President 14801 Wychewood Road Minnetonka, MN 55345 (952) 938-6749 Appointing County: Hennepin Term Expires: 09/29/12 Resident of Minnetonka

Corrine D. Lynch, Vice-President 7400 Metro Blvd, Suite 450 Edina, MN 55439 (952) 893-6730 Appointing County: Hennepin Term Expires: 9/29/14 Resident of Eden Prairie

Steve Kloiber, Secretary 6528 Scandia Road Edina, MN 55439 Appointing County: Hennepin Term Expires: 9/29/13 Resident of Edina Geoffrey Nash, Treasurer 6920 Hillcrest Lane Edina, MN 55435 (651) 266-7273 Appointing County: Hennepin Term Expires: 9/29/13 Resident of Edina

Jodi Peterson 9508 Russell Avenue South Bloomington, MN 55431 (952) 881-3051 Appointing County: Hennepin Term Expires: 9/29/2014 Resident of Bloomington Appointed in September 2011

Bob Kojetin 5016 William Avenue Edina, MN 55436 Resident of Edina Retired in September, 2011

Citizen Advisory Committee Members

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Margaret Johnson 8301 Creekside Circle #650 Bloomington, MN 55437

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Technical Advisory Committee Members

Scott Anderson	City of Bloomington Water Resources Engineer	1700 West 98 th Street Bloomington, MN 55431 952-563-4867
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Wayne Houle	City of Edina Director of Public Works	4801 West 50 th Street Edina, MN 55424 952-826-0443
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John Bradford	City of Hopkins City Engineer	1010 South 1 st Street Hopkins, MN 55434 952-548-6356
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Nick Teideken	MN Department of Transportation	Metro District Water Resources Engineer 1500 W. County Rd B-2 Roseville, MN 55113
Brad Wozney	Board of Water & Soil Resources	520 Lafayette Road St. Paul, MN 55155

Employees and Consultants

The Nine Mile Creek Watershed District (District) employs two full-time employees. The District hired a 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/outreach coordinator to develop and implement the District's education/outreach programs. 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.

District Administrator:

Kevin Bigalke Nine Mile Creek Watershed District 7710 Computer Ave., Suite 135 Edina, MN 55435 kbigalke@ninemilecreek.org (952) 835-2078

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Introduction

Established in 1959, the Nine Mile Creek Watershed District was the state's first urban watershed district. Despite its name, Nine Mile Creek's main branch actually travels 15.5 miles from its headwaters to its confluence with the Minnesota River. The Creek's name came from the fact that it is nine (9) miles from Fort Snelling following an early cart path that is now Old Shakopee Road. The Creek winds 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, each of the District's five Managers serve three-year terms.

Consistent with its statutory and regulatory obligations under Minn. Stat. § 103D.351 and Minnesota Rules § 8410.0150, the Board of Managers has prepared this Annual Report of the Nine Mile Creek Watershed District's financial status, its yearly activities and projects, its 2011 permitting and enforcement, and its 2012 goals and objectives. The Managers invite comments and suggestions concerning this report. The 2011 Annual Report is available on the Nine Mile Creek Watershed District website – <u>www.ninemilecree.org</u>. Copies are also available by contacting Kevin Bigalke, District Administrator, Nine Mile Creek Watershed District, 7710 Computer Avenue, Suite 135, Edina, MN 55435, (952) 835-2078.

Highlights and Accomplishments of 2011

2011 was another very busy and successful year for the Nine Mile Creek Watershed District (District).

The District started a review of the implementation plan outlined in its Water Management Plan adopted in 2007. The District also began a review of its rules adopted by the Board of Managers in 2008.

The District hosted the third year of the Rain Barrel Art Event in May. Through this program, the District sells rain barrels at a reduced rate and holds a workshop on how to use the rain barrels. The program provides paint to residents so that they can decorate their rain barrels. In the months of June, July, and August, the District hosted its Summer Education Series. The District hosted its annual fall tour for the residents of the Nine Mile Creek Watershed in September 2011. The annual fall tour highlighted the District's partnership efforts and projects implemented through the District's Cost-Share Grant Program.

In December 2011, the District was awarded the Watershed District Program of the Year by the Minnesota Association of Watershed Districts (MAWD) for the second year in a row. The award recognized the District's Road Salt Reduction through Education Program.

The District also closed on the Kaerwer property donation. The 5.3 acre property and house will become the District's office and the Nine Mile Creek Water Resource Center. The property is located in the City of Eden Prairie.

2011 highlights include:

- Awarded MAWD Program of the Year for the Road Salt Reduction through Education Program
- Continued the volunteer Citizen-assisted Lake Monitoring Program (CAMP), working with the Metropolitan Council
- Continued with the implementation of the Eden Prairie Lakes Water Quality Improvement Project
- Continued Implementation of the Hopkins Streambank Stabilization and Habitat Restoration Project
- Continued cost-share grant program
- Closed on the Kaerwer property donation to be used as the Nine Mile Creek Water Resource Center

Assessment of the 2011Work Plan

In its 2010 Report, the District identified several broad goals and objectives for 2011, including:

- 1. Continue Implementation of District Regulatory Program and Rules
- 2. Implementation Plan Review
- 3. Nine Mile Creek Water Resource Center Planning
- 4. Continue UAA/Lake/Creek Studies
- 5. BMP Cost-Share Grant Program
- 6. Citizen Assisted Lake Monitoring Programs (CAMP)
- 7. Citizen Advisory Committee

- 8. Technical Advisory Committee
- 9. Education and Outreach Activities
- 10. Capital Project Implementation

In 2011, the District completed or made substantial progress toward all of these goals and objectives, as described below.

1. <u>Continued Implementation of Watershed District Rules & Permit Program</u>

In March 2008, the Nine Mile Creek Watershed adopted new District rules. The rules have been well received and the District has not had any significant issues implementing the new rules. In 2011, the NMCWD continued to review projects and permit applications under the rules adopted in 2008. The NMCWD reviewed and approved 74 permit applications in 2011.

In 2011, the NMCWD began a review of its rules. In addition to the Board and staff review of the rules, the District hosted a Technical Advisory Committee meeting to review the rules and proposed changes. The results of the review were a few technical "housekeeping" amendments to the rules. The District finalized and adopted the amendments in the spring of 2012.

2. Implementation Plan Review

In 2011, the District conducted a review of the implementation plan of its Water Management Plan. Staff identified programs that could be combined and a few new programs or projects that should be included in the implementation plan. The District will amend the implementation plan in 2012.

3. <u>Nine Mile Creek Water Resource Center Planning</u>

In February 2011, the District closed on the Kaerwer property donation. The donation included 5.3 acres of land and a home. The District Board and staff conducted a vision process to identify potential programs and how the donation may be used. The home will be renovated to become the District's office and the Nine Mile Creek Water Resource Center.

4. Use Attainability Analyses & Lake and Creek studies

In 2011, the District entered the eighth (?) year of its Watershed Outlet Monitoring Program. In conjunction with this monitoring, the District continued to work with the MPCA to determine the appropriate standards for assessing and classifying the creek's impairment, and to identify best practices for improving the water quality in the creek and achieving "unimpaired" status. Since 2004, the Nine Mile Creek has been on the Minnesota Pollution Control Agency's "Impaired Water" lists for turbidity, chloride and fish community Index of Biotic Integrity (IBI). In response to this listing, the District undertook an enhanced monitoring program, which includes additional water quality monitoring at three Watershed Outlet Monitoring Program (WOMP) stations on the creek, and ecological health monitoring of the Creek. The District began working with the MPCA in 2007 to get funding for 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 in 2009. In 2010, the Chloride TMDL Report was approved by the MPCA and the Environmental Protection Agency. The District began development of an Implementation Plan and began implementation and education efforts to reduce chlorides in 2011.

The District partnered with the Metropolitan Council to establish continuous turbidity monitoring at the Metropolitan Council WOMP station. Continuous turbidity monitoring began at this station in 2008 and continued in 2011. The additional data collected resulted in the delisting of the Nine Mile Creek turbidity impairment by the MPCA.

5. 2011 Cost-Share Grant Program

In 2011, the District solicited applications and awarded 19 cost-share grant projects totaling \$149,577. The cost-share grant program has been highly successful, with grant applications increasing each for the four years of the program. The District firmly believes that the Cost-Share Grant Program provides education and awareness of the District's goals and is an effective way to get projects on the ground.

6. <u>Citizen-Assisted Lake Monitoring Program (CAMP)</u>

In 2011, the District continued to partner with the Metropolitan Council to support Citizen-assisted Lake Monitoring efforts on 5 lakes in the District. The lakes included in the citizen monitoring program were: Minnetoga Lake & Wing Lake in Minnetonka, and Normandale Lake, Lower Penn Lake & Bush Lake in Bloomington.

7. Continued Support of the Citizen Advisory Committee

In 2011, the District worked with its Citizen Advisory Committee (CAC) to continue implementing the CAC Workplan developed in January 2007. The CAC participated in the Earth Day Clean-Up, CAMP and directing the District in its education and outreach programs.

Staff also worked with the CAC to organize and host the 5th Annual Summer Education Series. See the section on the Summer Education Series for details.

8. <u>Technical Advisory Committee</u>

In 2011, the District used the Technical Advisory Committee to review the rule amendments proposed by the District.

9. <u>Education and Outreach Program Activities</u>

Rain Barrel Art Events

The District hosted its third Rain Barrel Art Event in 2011 in the City of Hopkins. The event resulted in over 40 rain barrels being sold and decorated. The District worked with REI to provide a mini Rain Barrel Art class at their store in Bloomington. This resulted in 15 rain barrels sold and decorated.

Summer Education Series

The District hosted its fifth year of the Summer Education Series (SES). The SES is designed to provide District residents with hands-on learning opportunities about the resources of the District and learn about ways to protect and enhance the District's water and natural resources. In 2011, the SES included seminars on building a bat house, learning about Braemar Golf Course's many amenities from wildlife sanctuary to being a floodplain in action, and discovering the many elements of nature journaling.

CAC Education Seminars

In 2011, the Citizen Advisory Committee had 3 business meetings and 8 education seminars. The education seminars hosted in 2011 included meeting a raingarden designer,

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winter maintenance best management practices, and a groundwater/surface water interaction seminar.

NEMO Program Participation

The District continued to be a charter member of Northland NEMO in 2011. The District partnered with Northland NEMO, the Minnehaha Creek Watershed District, and the City of Edina to host a NEMO workshop. The workshop was held at Edina Public Works and focused on rain gardens. The District also partnered with Northland NEMO, Minnehaha Creek Watershed District and the City of Minnetonka on a NEMO presentation to the City of Minnetonka Planning Commission.

Earth Day Clean Up/Adopt-A-Highway

The District hosted its annual Earth Day Clean-Up Event at Bredesen Park in Edina. A dozen volunteer participated in the clean up event resulting in over 12 bags of garbage being filled.

Trainings/Workshops

The District hosted 5 Winter Road Maintenance workshops targeted at public road authorities in 2011. We provided training for 140 MNDOT, 10 Carver County, and over 100 Hennepin County plow drivers. The District partnered with Mississippi Watershed Management Organization, Minnehaha Creek Watershed District, Carver County, and the Freshwater Society and participated in the 319 MPCA grant to fund these training classes at no charge to the attendees. The Winter Road Maintenance workshops address approaches that will result in reduced chloride loading to Nine Mile Creek.

The District also hosted one Winter Parking Lot and Sidewalk Maintenance workshop and one Turf Management workshop. The workshops targeted commercial snow removal businesses, school districts, and park maintenance staff.

In June 2011, the District hosted a Digital Photography Bridge to Nature Workshop with the Minnesota Department of Natural Resources and the City of Eden Prairie targeting teachers in the District. The Digital Photography Bridge to Nature Workshop is aimed to provide teachers with a digital tool to bring nature into the classroom. Twelve teachers were certified.

In the Fall of 2011, the District began training the teachers from Poplar Bridge Elementary School in Bloomington, MN in the Project WET (Water Education for Teachers) curriculum. Completion of the training will be in January 2012. At the end of the training, 30 teachers will have been certified.

Blue Thumb Program Participation

In 2011, the Nine Mile Creek Watershed District continued to be partner of the Blue Thumb Program developed by the Rice Creek Watershed District. To be a partner, the District committed to 30 hours of public education and outreach activities pertaining to Blue Thumb Program goals. The District contributed over 40 hours toward the Blue Thumb Program through the District's education and outreach programs.

Environmental Fairs

In 2011, the Nine Mile Creek Watershed District staff and managers attended and participated in Environmental Fairs hosted by the Cities of Eden Prairie and Minnetonka and CIGNA. The District had its display at the fairs and distributed information about the District, our water quality monitoring efforts, the new District rules, and the District's cost-share grant

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program. The fairs provided an opportunity for the District to meet with residents of the District and discuss their concerns about the water quality and overall health of the Watershed.

Presentations to other organizations

As part of its education and outreach program in 2011, District staff gave presentations to interested groups and organizations. Presentations topics included the District's efforts to improve and protect the water resources of the Nine Mile Creek Watershed and alternative landscaping options to protect water quality. Presentations were also given to students at Bloomington and Edina schools.

10. <u>Continued Implementation of the Eden Prairie Lakes Water Quality Improvement</u> Project

The City of Eden Prairie petitioned the District for the Eden Prairie Lakes Water Quality Improvement Project. The purpose of the project is to address Curlyleaf Pondweed and internal phosphorus loading in Northwest and Southwest Anderson Lakes, to improve water quality and restore the water level in Birch Island Lake, and to address phosphorus loading in Bryant Lake. The District Board of Managers ordered the project at a public hearing on December 13, 2006. The Nine Mile Creek Watershed District Board of Managers ordered the project to commence in September 2007.

Implementation of the project was officially started in December 2007. Most of the Eden Prairie Lakes Water Quality Improvement Project was implemented in 2008. The tile system designed to restore the lake level in Birch Island Lake was completed in

February 2008. The restoration of the water level of Birch Island Lake was slowed due to

drought conditions throughout the summer of 2009. The water levels have continued to rebound with snowmelt runoff and precipitation.

In the fall of 2008 an alum treatment was completed on Bryant Lake. Water clarity of Bryant Lake improved from 1 meter to over 6 meters in the weeks following the alum treatment. In 2011, water quality and water clarity monitoring continued to track the success of the alum treatment. Water clarity continued to show improvement compared to pre-treatment conditions.

The drawdown on Northwest Anderson Lake and Southwest Anderson Lake was started in August 2008. The drawdown was completed in November 2008. The restoration of the water levels in the lakes post-drawdown was significantly slowed due to drought conditions throughout the summer of 2009 and 2010. Following a wet fall of 2009, Northwest Anderson Lake and Southwest Anderson Lake were about half full. In the spring of 2011 Southwest Anderson and Northwest Anderson Lakes had reached their pre-drawdown lake levels. The District and Three Rivers Park District monitored the vegetation in lakes in 2011. Vegetation monitoring was done to determine the presence or absence of curly leaf pondweed. Monitoring activities in 2011 showed a dramatic reduction of Curly Leaf Pondweed in Northwest and Southwest Anderson Lakes. Along with the reduction of Curly Leaf Pondweed was an increase in the abundance of native aquatic plants. Monitoring results showed the presence of 34 native aquatic plant species in Northwest Anderson Lake. Water quality improved in Northwest Anderson Lake, while water quality monitoring showed a decrease in water quality in Southwest Anderson Lake. The decline of water quality in Southwest Anderson Lake is attributed to the shallow nature of the lake, the rich organic nature of the lake substrate and the lack of aquatic vegetation. It is anticipated that water quality will improve as aquatic vegetation re-establishes and water level continue to return to pre-drawdown levels. It was determined through vegetation monitoring that

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the areas of both lakes that were not completely drained still had curly leaf pondweed, although at reduced abundance and density. These areas were again chemically treated with Endothal-K in May 2011.

11. Capital Project Implementation

Implementation of the Hopkins Streambank and Habitat Restoration Project

In May 2006, the City of Hopkins petitioned the District for a streambank and habitat restoration project for Nine Mile Creek. The District accepted the petition and authorized the feasibility study for the project. The District is sharing the design responsibilities with the City of Hopkins. The District has entered into a cooperative agreement with the City of Hopkins defining the roles and responsibilities of each party. The District and City of Hopkins worked throughout 2007 and 2008 on the designs and feasibility of the project. In December 2008, the District Board of Managers ordered the Hopkins Streambank and Habitat Restoration Project to proceed.

In November 2009, the Hopkins Streambank and Habitat Restoration Project began. The replacement of the 5th Street Culvert was completed in 2010.

In addition to the 5th Street Culvert replacement, only one segment of Nine Mile Creek streambanks was able to be restored. This segment was from 11th Avenue to 7th Street. The rest of the streambank restoration work has been delayed due to the discovery of contaminated soils in the streambanks. After further analysis, the District and the City of Hopkins developed a remediation plan to complete the project. Construction of the project commenced in the winter of 2011 and will be completed in the early 2012. The District and the City of Hopkins received two grants from the Hennepin County Environmental Resource Fund to assist with the

monitoring and remediation of the contamination. The District and the City of Hopkins received a \$60,000 grant from the Hennepin County Environmental Resource Fund to assist with the Phase II Environmental Assessment. The District also received a \$304,000 grant from Hennepin County Environmental Resource Fund to assist with the remediation of the contamination. In addition to the remediation grants, the District received a grant the Board of Water and Soil Resources and from Hennepin County to assist with the implementation of the stream and habitat restoration components of the project. The two grants totaled \$261,000.

Southeast Anderson Lake Water Quality Improvement Project

In March 2008, the City of Bloomington petitioned the District for a water quality improvement project on Southeast Anderson Lake. The project is to address curly leaf pondweed and internal phosphorus loading. In 2008, the project was designed and ordered to proceed. The project design was to treat curly leaf pondweed with Endothal-K for 4-5 successive years. Treatments were completed in May 2009 and 2010. The project continued in 2011 with a third treatment of Endothal-K. Water quality and vegetation monitoring continued in 2011. Monitoring activities showed reduced abundance and density of Curly Leaf Pondweed, increased diversity of native aquatic plants and improved water quality. A fourth treatment will occur in the spring of 2012.

Normandale Lake Water Quality Improvement Project

The District accepted a petition from the City of Bloomington to develop a water quality improvement project to address curly leaf pondweed and internal phosphorus loading in Normandale Lake and to identify watershed best management practices to reduce nutrient

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loading into the lake. The District started the feasibility/engineers report in 2009 and submitted options for the project to the U.S. Army Corps of Engineers for their preliminary review. Water quality monitoring in 2009 revealed an improvement in water quality. The District delayed implementation of the project to conduct addition water quality monitoring in 2010 and 2011. The District will continue to work on the engineers report for the Normandale Lake project in 2012.

Edina Creek Restoration Project and Nine Mile Creek Regional Trail

The District worked with the City of Edina and the Three Rivers Park District throughout 2011 on the Edina Creek Restoration Project and the Nine Mile Creek Regional Trail. District staff provided technical assistance regarding the District's rules regarding the construction of the Nine Mile Creek Regional Trail.

The District started a field assessment of the condition of Nine Mile Creek through Edina. The information collected will be used to develop recommendations for channel restoration work and will be incorporated into an Engineer's Report for the project.

Projected 2012 Work Plan

Continue Implementation of Watershed District Regulatory Program and Rules

The District will continue implementing its rules and regulatory program in 2012. The District will adopt the proposed rules amendments in the spring of 2012.

Implementation Plan Review

The District will finalize its review of the activities implemented to date and the future project and activities identified in the Implementation Plan of the District's 2007 Water Management Plan. The District will evaluate the effectiveness and success of the project completed. The District will determined if the future projects and activities identified in the District's plan are still relevant and still a priority.

Nine Mile Creek Water Resource Center Planning

In 2009, the District was contacted by an individual interested in donating her home and 5.3 acre property adjacent to the Cardinal Creek Conservation Area and wetland complex to the District for use as the District office and Nine Mile Creek Water Resource Center. The District received approval for the project in 2010 from the City of Eden Prairie. In early 2011, the District closed on the property. The District has begun a visioning and planning process for the future use of the property as the Nine Mile Creek Water Resource Center. The District will also solicit proposals from architectural design firms to determine the extent of renovations needed to make the home into the District's office and Nine Mile Creek Water Resource Center.

Continue UAA /Lake /Creek Studies

In 2012, the District will continue to monitor Nine Mile Creek with the WOMP stations. The District will continue use of the continuous turbidity monitoring transducers at each of its WOMP stations. The District will also continue its lake monitoring program, collecting data on Northwest Anderson Lake, Southwest Anderson Lake, Southeast Anderson Lake, Mirror Lake, and Lake Edina.

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

BMP Cost-Share Grant Program

The District will solicit applications for the third year of its BMP Cost-Share Grant Program in 2012. The District will also conduct an analysis of the past three years of projects to determine the success and effectiveness of the program.

Citizen Assisted Lake Monitoring Program (CAMP)

In 2012, the District will continue to support citizen monitoring through the Metropolitan Council's Citizen Assisted lake Monitoring Program (CAMP). Trained volunteer monitoring teams will collect water quality samples from Lower Penn Lake, Bush Lake and Normandale Lake in Bloomington, Lake Minnetoga and Wing Lake in Minnetonka, and Bryant Lake in Eden Prairie.

Continued Support of CAC

The Nine Mile Creek Watershed District has had an active Citizen Advisory Committee (CAC). The District worked with the CAC in 2007 to develop a CAC work plan that will continue to guide its activities in 2012. The CAC will assist with numerous education and outreach events including the Summer Education Series and CAC seminars and workshops.

In 2012, the District will be reorganizing the CAC and seeking new CAC members.

Technical Advisory Committee

The District will continue working with the Technical Advisory Committee to begin the development of the chloride TMDL implementation plan.

Education and Outreach Activities

In 2012, the District will be partnering with Cigna to host an Earth Day Fair and Earth Day Clean Up Event. The District will again collaborate with its CAC to host the Summer Education Series.

The District will participate in local community and environmental fairs. In 2012, the District will participate in the City of Bloomington's Everything Green Fair and the City of Minnetonka's Native Plant Market, and CIGNA environmental fair.

The District will also seek opportunities to partner with local schools to implement storm drain marking projects and give presentations of the water resources and water quality of the Nine Mile Creek Watershed District.

The District will be hosting Winter Maintenance workshops targeted at snow plow drivers and private parking lot snow removal companies aimed at reducing the amount of road salt applied in the District. This is to address the chloride TMDL. The District is working with the cities in the District to implement an education program on winter maintenance for the general public. The District will also be developing a training module targeting School Districts with training sessions being implemented that year.

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

District Website

In 2012, the District will continue to utilize its website for public information, education and outreach. The District plans to continue to add its water quality data and fact sheets on the water resources of the District to the website. The District will also post project reports, updates, and project photos on the District website.

Blue Thumb

In December 2008, the District became a Blue Thumb program partner. In 2012, the District will continue to work with the Blue Thumb program to provide education and outreach programs to the citizens of the Nine Mile Creek Watershed District. Many of the programs described above are being used as Blue Thumb education programs.

<u>NEMO (Non-Point source Education for Municipal Officials)</u>

The Nine Mile Creek Watershed District is a charter sponsor for the NEMO program. In 2012, the District will continue to identify and host workshops for city officials and staff. Workshops will focus on how to address water quality and water quantity challenges during redevelopment.

2012 Photo Contest and 2013 Calendar Production

In 2012, the Nine Mile Creek Watershed District will hold its sixth (6th) photo contest to collect photos for the 2013 Calendar. The District holds the photo contest January through September. Photos submitted during the photo contest will be selected to be used in the 2013 Nine Mile Creek Watershed District Calendar and Annual Communication.

Capital Project Implementation

Complete Implementation of the Eden Prairie Lakes Water Quality Improvement Project

Substantial progress on the Eden Prairie Lakes Water Quality Improvement Project was made in 2008, 2009, and 2010. In 2012, the District will complete a fourth Endothal-K treatment on Northwest and Southwest Anderson Lakes and continue collecting water quality and vegetation data as the lakes continue to refill following the drawdown. Elements of the project that remain to be completed are the restoration of the Cardinal Creek wetland area.

Implementation of the Hopkins Streambank & Habitat Restoration Project

In May 2006, the District accepted a petition by the City of Hopkins for a streambank and habitat restoration project for Nine Mile Creek. The District ordered the project to proceed and

entered into a cooperative agreement with the City of Hopkins for the implementation of the project in 2008. Implementation of the project was started in 2011. In 2012, the District will work with the City of Hopkins to complete the implementation of the project. The project has been split into two phases. Phase A includes the upstream portion of the project that included mainly streambank stabilization. Phase B includes the downstream portion of the project that incorporates significant bioengineering and remeandering of Nine Mile Creek. The project had delayed due to contamination that was discovered in the project area. The District will implement the remediation plans developed to address the contamination and construct the stream restoration project. It is anticipated that construction on Phase A and Phase B will begin in the fall/winter of 2011/2012. Phase A of the project will be completed in the spring of 2012.

The channel remeandering and bank restoration components of the Phase B will also be completed in the spring of 2012. The connection of the new channel, backfilling of the existing channel and final site restoration will be completed in the winter of 2012/2013.

Normandale Lake Water Quality Improvement Project

The District accepted a petition from the City of Bloomington to develop a water quality improvement project to address curly leaf pondweed and internal phosphorus loading in Normandale Lake and to identify watershed best management practices to reduce nutrient loading into the lake. In 2009, water quality monitoring results indicated an improvement in water quality. The District will continue to work with the City of Bloomington to determine the best approach to deal with the curly leaf pondweed and water quality issues in 2012.

Southeast Anderson Lake Project

The District accepted a petition from the City of Bloomington for a water quality project on Southeast Anderson Lake in March 2008. The District will continue to implement the multiyear project in the spring of 2012 with the fourth year of curly leaf pondweed treatment with Endothal-K. The District will also continue water quality and aquatic vegetation monitoring Southeast Anderson Lake to determine the effectiveness of the project.

Edina Creek Restoration Project

The District will finish field survey work to determine the condition of Nine Mile Creek through Edina. This information will be used to design the creek stabilization and restoration components of this project and develop an Engineer's Report for the project.

Permitting Activity

Summary of Permits and Variances Issued

In 2008, the Nine Mile Creek Watershed District adopted and began implementing new rules. The Board of Managers, with the assistance from the District Engineer and District Administrator, reviews permit applications and imposes various conditions for approval as appropriate. In 2011, the District reviewed and granted 74 grading and land alteration permits. The District issued permits in the following cities: Bloomington – 31; Edina – 26; Eden Prairie – 8; Hopkins – 3; Minnetonka – 6; DNR Work in Waters Permits - 5. The District granted two variances in 2011.

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

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In 1997, the MNDR issued a general permit allowing the District to regulate certain aspects of work in public waters, which streamlines and expedites the permitting process for applicants who undertake certain specified activities. In 2011, the District reviewed and approved five (5) Minnesota Department of Natural Resources' Work in Protected Waters permits.

Enforcement Activity

The District's engineer regularly inspects permitted work to ensure compliance with permit conditions. If violations are found, the District attorney typically will notify permittees and seek voluntary abatement or correction before resorting to formal legal action. In 2011, no enforcement actions were necessary.

Summary of 2010 Water Quality Monitoring Program

The 2011 Nine Mile Creek Watershed District water quality monitoring program included monitoring Nine Mile Creek and five lakes (Arrowhead Lake, Indianhead Lake, Southeast Anderson Lake, Southwest Anderson Lake, and Northwest Anderson Lake).

Nine Mile Creek Monitoring

One of the primary purposes of the Nine Mile Creek Watershed District is to protect and enhance the ecology of Nine Mile Creek– improving Nine Mile Creek as a place for fish and aquatic life to live. The stream's management goals are based upon the fish assemblage living in the stream and the physical and the ecosystem components required for the survival of this fish assemblage/aquatic life use. The 2011 fish data indicate Nine Mile Creek is currently supporting the fish community that it has the capacity to support per the stream's flow, water quality, and habitat characteristics. The data further indicate the current fish community is similar to or better than the stream's long-term fish community and that Nine Mile Creek has consistently attained the stream's attainable ecological use. The data indicate the stream has remained stable and confirms that the ecological use designations for Nine Mile Creek are appropriate.

Water quality and biological data collected from Nine Mile Creek in 2011 indicate the stream's water quality remained stable and most values were within the range of historical values. Values outside of the historical range include a record high discharge in March and a record high temperature value in August at the downstream Main Stem location (ECU-7C). The high August temperature value easily met MPCA criteria and was not problematic. 2011 Nine Mile Creek water quality generally met MPCA criteria. Overall, 93 percent of 2011 values were within MPCA criteria. Main Stem locations met MPCA criteria most frequently (97 to 98 percent) followed by South Fork (92 to 97 percent). The North Fork locations met MPCA criteria least frequently, ranging from 84 percent to 91 percent.

The specific conductance criterion was exceeded more frequently than other MPCA criteria in 2011. North Fork locations noted the highest exceedance rate with 88 percent followed by South Fork with 25 percent. The Main Stem exceedance rate was lowest with 4 percent.

Other MPCA criteria were generally met. Temperature and pH criteria were met 100 percent of the time. The turbidity criterion was met 96 percent of the time. The dissolved oxygen criterion was met 85 percent of the time.

Fish collected from Nine Mile Creek in 2011 were assessed to determine whether the stream met the MPCA biological standard. In Minnesota, biological impairment for fish in the Minnesota River Basin is defined as failing to meet the Minnesota River Assessment Project (MRAP) Index of Biotic Integrity (IBI) impairment threshold score of 30 or greater out of a

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possible score of 60. Only streams with a watershed area of at least 5 square miles are obligated to meet the IBI impairment threshold. In 2011, 50 percent of Nine Mile locations met the MPCA biological standard. Locations not meeting the standard include both North Fork locations and the upstream Main Stem location, ECU-7A. These three locations observed a score of 29 in 2011, which is just slightly less than the State standard of 30. The South Fork location (ECU-5A) and both downstream Main Stem locations (ECU-7B and ECU-7C) had IBI scores greater than 30 in 2011 and met the biological standard (Figure ES-1).

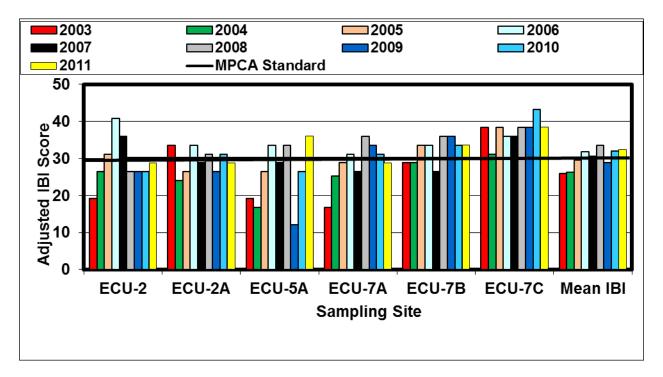


Figure ES-1 2003-2011 Nine Mile Creek Fish IBI Scores

Hilsenhoff's Biotic Index (HBI) and the Invertebrate Community Index (ICI) were used to assess invertebrates collected from Nine Mile Creek in 2011 to determine whether changes in stream oxygen levels and/or stream water quality have occurred. 2011 HBI and ICI values were generally similar to past values, indicating stream oxygen levels and water quality have remained stable. The data indicate that despite urbanization impacts, water quality data collected from Nine Mile Creek during 1968 through 2011 have remained relatively stable over time, although fluctuations have been observed. Urbanization impacts upon the stream result in an average fish and macro-invertebrate community tolerant of adverse conditions. Monitoring will continue at the annual monitoring stations to maintain this long-term record of water quality and biota in Nine Mile Creek.

Nine Mile Lake Monitoring

Water quality data from Southwest Anderson Lake, Northwest Anderson Lake, and Southeast Anderson Lake were summarized in separate reports:

- 2011 Northwest Anderson Lake Aquatic Plant Management
- 2011 Southwest Anderson Lake Aquatic Plant Management
- 2011 Southeast Anderson Lake Aquatic Plant Management

Data summaries for Arrowhead Lake and Indianhead Lake follow.

Arrowhead Lake

In 2011, the lake's average summer total phosphorus and chlorophyll a concentrations were 52 μ g/L and 23 μ g/L, respectively. The lake's average summer Secchi disc transparency was 1.2 meters. The average summer total phosphorus concentration and Secchi disc transparency met the Minnesota State Water Quality Standards for shallow lakes which are ≤ 60 μ g/L and \geq 1meter, respectively. The chlorophyll a concentration did not meet the Minnesota State Water Quality Standard for shallow lakes which is $\leq 20 \mu$ g/L. Because the lake must fail to attain at least two of the three standards to be impaired, the lake was not impaired in 2011.

Indianhead Lake

In 2011, the lake's average summer total phosphorus and chlorophyll a concentrations were 53µg/L and 25 µg/L, respectively. The lake's average summer Secchi disc transparency was 1.3 meters. The average summer total phosphorus concentration and Secchi disc transparency met the Minnesota State Water Quality Standards for shallow lakes which are ≤ 60 µg/L and \geq 1meter, respectively. The chlorophyll a concentration did not meet the Minnesota State Water Quality Standard for shallow lakes which is ≤ 20 µg/L. Because the lake must fail to attain at least two of the three standards to be impaired, the lake was not impaired in 2011.

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, 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 September 2011. The District selected Cavanaugh and Associates as its accountant, Barr Engineering as its engineer and Smith Partners, PLLP as its legal counsel in October 2011. The District selected HLB Tautges Redpath to conduct the

District's annual financial audit. New proposals for engineering, legal, and other professional services will be solicited in September 2013.

Fund Balances for Specific Program Elements.

The District's fund balances and financial status are included in the District's annual audit. The annual audit is included as an appendix to this report.

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, it uses the state wetland bank administered by the Minnesota Board of Water and Soil Resources.

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, the current CAC members, contact and public meeting information, and information concerning its role in watershed planning. In 2011, the District produced the 2012 Nine Mile Creek Year at a Glance Calendar and 2011 Annual Communication. Copies of the written communications are included in the Appendix.

Annual Audited Financial Report and Audit Report

The District's audited annual financial report was prepared by HLB Tautges Redpath, 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 2011 Audited Financial Report may be found in the appendix to this Annual Report.

2012 Annual Budget

The District adopted its 2012 Annual Budget in September 2011. The 2012 Budget may be found in the appendix to this Annual Report.

Appendix

- 1. 2011 Annual Financial Audit
- 2. 2012 Approved Annual Budget
- 3. Copy of 2011 Annual Communication