



**MINNEHAHA CREEK**  
WATERSHED DISTRICT  
QUALITY OF WATER, QUALITY OF LIFE

**Meeting:** Board of Managers  
**Meeting date:** 4/23/2020  
**Agenda Item #:** 7.2  
**Board Consent Item**

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**Title:** Authorization to Submit Annual Report to BWSR and DNR

**Resolution number:** 20-035

**Prepared by:** Name: Becky Christopher  
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**Recommended action:** Acceptance of the 2018 annual report and authorization to submit it to the Board of Water and Soil Resources and Department of Natural Resources

**Summary:**

The attached report has been prepared to satisfy the District's annual reporting requirement to the Board of Water and Soil Resources (BWSR) and Department of Natural Resources (DNR).

Minnesota Statutes Chapter 103D.351 requires watershed districts to file an annual report with BWSR and the DNR, and for metro watershed districts, the report must meet the requirements described in Minnesota Rules 8410.0150. The annual activity report includes information on Board members and staff, the previous and current years' work plans, biennial progress toward goals, water quality trends, communication activities, solicitation of consultant services, local plan adoption and implementation, and permits and violations. The annual activity report is due to BWSR and the DNR within 120 days of the end of each calendar year.

**Supporting documents (list attachments):**

Annual report



**RESOLUTION**

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**Resolution number:** 20-035

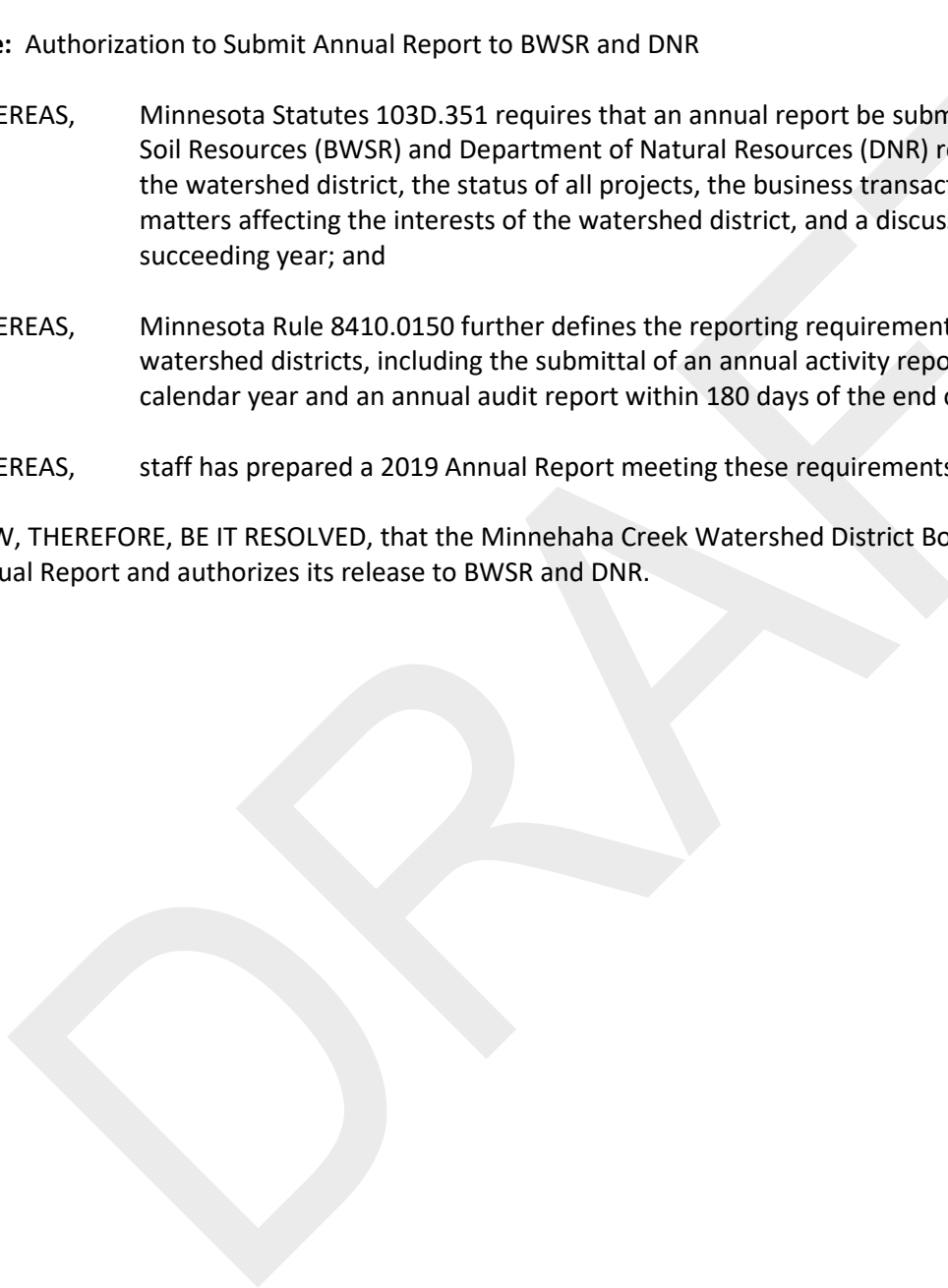
**Title:** Authorization to Submit Annual Report to BWSR and DNR

WHEREAS, Minnesota Statutes 103D.351 requires that an annual report be submitted to the Board of Water and Soil Resources (BWSR) and Department of Natural Resources (DNR) regarding the financial conditions of the watershed district, the status of all projects, the business transacted by the watershed district, other matters affecting the interests of the watershed district, and a discussion of the managers' plans for the succeeding year; and

WHEREAS, Minnesota Rule 8410.0150 further defines the reporting requirements and deadlines for metropolitan watershed districts, including the submittal of an annual activity report within 120 days of the end of the calendar year and an annual audit report within 180 days of the end of the District's fiscal year; and

WHEREAS, staff has prepared a 2019 Annual Report meeting these requirements;

NOW, THEREFORE, BE IT RESOLVED, that the Minnehaha Creek Watershed District Board of Managers accepts the 2019 Annual Report and authorizes its release to BWSR and DNR.



Resolution Number 20-035 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_. Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: 4/23/2020

\_\_\_\_\_  
Secretary Date: \_\_\_\_\_



# MINNEHAHA CREEK WATERSHED DISTRICT 2019 ANNUAL ACTIVITY REPORT



**MINNEHAHA CREEK**  
WATERSHED DISTRICT



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## Introduction

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This report has been prepared to satisfy the Minnehaha Creek Watershed District's (MCWD or District) annual reporting requirements set forth in Minnesota Statutes Chapter 103D.351, which requires watershed districts to file an annual report with the Board of Soil and Water Resources and the Department of Natural Resources. Metropolitan watershed districts are required to follow reporting requirements described in MR 8410.0150.

## Board Members

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Below is a list of the District's Board of Managers, including the designated officers and the county that appointed each member.

Manager	County	Contact Information
Sherry Davis White, President	Hennepin	<a href="mailto:swhite@minnehahacreek.org">swhite@minnehahacreek.org</a>
Bill Olson, Vice President	Carver	<a href="mailto:bolson@minnehahacreek.org">bolson@minnehahacreek.org</a>
Jessica Loftus, Treasurer	Hennepin	<a href="mailto:jloftus@minnehahacreek.org">jloftus@minnehahacreek.org</a>
Kurt Rogness, Secretary	Hennepin	<a href="mailto:krogness@minnehahacreek.org">krogness@minnehahacreek.org</a>
Richard Miller	Hennepin	<a href="mailto:rmiller@minnehahacreek.org">rmiller@minnehahacreek.org</a>
Eugene Maxwell	Hennepin	<a href="mailto:emaxwell@minnehahacreek.org">emaxwell@minnehahacreek.org</a>
Arun Hejmadi	Hennepin	<a href="mailto:ahejmadi@minnehahacreek.org">ahejmadi@minnehahacreek.org</a>

## Staff Contact Information

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The District currently employs 25 staff. The names, job titles, and contact information for all staff can be found on the District website at <https://www.minnehahacreek.org/about/staff>. The contact information for the District Administrator is provided below.

James Wisker, District Administrator  
Minnehaha Creek Watershed District  
15320 Minnetonka Blvd.  
Minnetonka, MN 55345  
Phone: 952-641-4509  
Email: [jwisker@minnehahacreek.org](mailto:jwisker@minnehahacreek.org)

## Assessment of 2019 Work Plans

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The majority of activities identified in the 2019 work plan were completed or were initiated and continue into 2020. A few capital projects were delayed and funds have been carried forward for implementation in 2020-2021. These include the Six Mile Marsh Prairie Restoration Trail, Meadowbrook Golf Course Ecological Restoration, and 325 Blake Road Restoration and Redevelopment. The MCWD completes its capital improvements in close coordination with its public and private partners, aligning plans and resources prior to advancing implementation. Due to the complexity of some of these efforts, capital improvements can span multiple years to plan and implement.

Expenditures for each of the District's programs and projects are included in the audit report. The District has been awarded Clean Water Fund grants for the 325 Blake Road project, and staff is in coordination with BWSR staff regarding the project schedule and request for a grant extension.

## 2020 Work Plans

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For 2020, the District prepared one comprehensive work plan encompassing activities in its two focal subwatersheds, Six Mile Creek-Halsted Bay and Minnehaha Creek, as well as its watershed-wide responsive programming. This document includes a summary of the District's 2020 budget and can be found on the District website at: <http://www.minnehahacreek.org/about/district-finances/budget>. It is also attached as Appendix A.

## Evaluation of Progress on Goals and Implementation Actions

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In January 2018, the District adopted its new [Watershed Management Plan](#). Section 3.7 of the Plan describes the District's framework for setting goals and evaluating progress through a sequential process that begins with strategic goals and long-range targets and leads to subwatershed and then project-specific targets, performance measurement, and evaluation.

Below is a summary of the available metrics for District implementation to date under the 2018-2027 Plan. The District is in the process of implementing an information technology update that will improve the District's ability to comprehensively track and report on progress toward its goals across all of its programs and projects.

### **325 Blake Road demolition and restoration planning**

- Removed industrial facility containing mercury and asbestos and recycled/salvaged over 65% of the materials:

<b>Material</b>	<b>Quantity</b>	<b>Salvage, Recycle, Dispose</b>
Ammonia (aqueous)	13,000 gallons	Recycle
Mercury	1 gallon	Recycle
Aluminum pipe	110 tons	Recycle
Steel (construction)	1,500 tons	Recycle
Equipment/mechanical	70 tons	Salvage
Pallet racking	25 tons	Salvage
Concrete/asphalt	25,000 tons	Recycle
Asbestos material	3,350 tons	Dispose

**Arden Park Stream Restoration and Stormwater Management**

- Stormwater management area: 88 acres
- Total phosphorus load reduction: 33 lbs/year
- TSS reduction: 18,000 lbs/year
- Volume reduction: 1.2 ac-ft storage
- Wetland restored: 6.7 acres
- Streambank restored: 2,154 lineal feet
- Upland restored: 17 acres
- Trails for public access: 7,000 feet

**Minnehaha Creek FEMA Flood Damage Repairs**

- 500 lineal feet of streambank repaired

**Wassermann West External Load Reduction (pond alum treatment)**

- First year monitoring indicates a total phosphorus reduction of 75 lbs/yr
  - Significantly exceeds pre-project estimated load reduction of 39 lbs/yr
- Second alum treatment to occur in 2021

**East Auburn Stormwater Enhancement Project**

- Total phosphorus load reduction of 25 lbs/yr

**Six Mile Creek-Halsted Bay Carp Management Project**

- Three carp barriers constructed
- Three utility installations completed for aeration of shallow lake systems
- Adult biomass removals
  - Through combination of targeted removals and natural mortality, carp population across nine primary lakes has been reduced by approximately 24,000 individuals, an estimated 175,000 lbs removed
  - When work was initiated, 12 of 14 lakes had carp levels above threshold where damage is caused to lake ecosystems. Through removals, an additional two lakes are meeting the target threshold and lakes across the subwatershed have seen population declines:

Lake	Est. Number of Individuals	
	2016	2019
Mud	5,148	4,273
Parley	16,167	10,277
West Auburn	7,201	2,389
East Auburn	6,121	3,849
Turbid	2,273	158
Wassermann	10,031	1,271
Piersons	3,580	2,364
Steiger	2,886	2,328
Zumbra	5,953	5,116
<b>TOTAL</b>	<b>59,360</b>	<b>35,127</b>

### **Stormwater Pond Maintenance**

- Bde Maka Ska Cell 1
  - Identified 42% wet volume loss
  - Removed 2,000 cu/yds unregulated fill
- Pamela Park
  - Identified 59% wet volume loss
  - Removed 1,800 cu/yds contaminated sediment

### **Land Conservation**

- Purchased site for Halsted Bay Watershed Load Management (alum dosing facility)
  - 5.15 acres including 1.25 acres upland and 3.9 acres wetland
  - When constructed, the facility will treat an estimated 1,400 lbs phosphorus



## Trends in Monitoring Data

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The Research and Monitoring program evaluates trends for its long-term (“anchor”) lake and stream monitoring stations throughout the District. The 22 lake and 12 stream stations were assessed for trends in water quality and stream yield from 2010-2019. All the stations had eight or more years of consecutive data. Trends were computed using the Mann-Kendall test on water clarity (secchi disk), algal abundance (chlorophyll-a) and total phosphorus (TP) in the lake surface water.

For streams, the Mann-Kendall test was used to compute stream yield trends. Flow-corrected concentrations were assessed for water quality trends. A locally weighted scatterplot smoothing (LOWESS) residual was calculated between the parameter of interest (TSS or TP concentrations) and flow. MCWD staff used the Mann-Kendall test to determine if a significant trend existed for TSS or TP at each anchor monitoring site.

All statistical analyses were computed using R-studio statistical packages. An alpha of 0.05 was used to determine if the p-value was significant. Lakes and stream trends are displayed in the tables below.

### **Minnehaha Creek Subwatershed**

In Minnehaha Creek Subwatershed, nearly every stream station showed improving total phosphorus or total suspended solids concentrations. However, there were no lakes within the Minnehaha Creek Subwatershed where all water quality parameters (TP, chl-a, clarity) were improving or degrading.

Minnehaha Creek Watershed District, and partner agencies, have prioritized water quality improvement projects in the Minnehaha Creek Subwatershed in recent years, which may have contributed to improving water quality conditions in Minnehaha Creek stream locations.

### **Six Mile Creek Subwatershed**

Six Mile Creek Subwatershed also showed significant improvements in stream water quality conditions with respect to total phosphorus and total suspended solids. These data suggest that recently implemented wetland and stream improvement projects have improved stream water quality conditions.

Lake water quality within Six Mile Creek is not showing significant improvements. In-lake issues such as sediment phosphorus release or common carp sediment resuspension are likely driving poor water quality in Six Mile Creek Lakes.

### **Other Subwatersheds**

No other subwatersheds had significant lake or stream water quality improvements. Furthermore, several lakes in other subwatersheds, including Langdon Lake, Painter Creek, and the Gleason Lake Subwatershed, show degrading water quality conditions. These trends are relatively intuitive since these watersheds have had fewer BMPs implemented relative to Six Mile Creek and Minnehaha Creek.

*Significant trends for lakes within Minnehaha Creek Watershed District.*

<b>Subwatershed</b>	<b>Lake</b>	<b>Total Phosphorus</b>	<b>Chlorophyll-a</b>	<b>Secchi Disk</b>
Christmas Lake	Christmas Lake	No Trend	No Trend	No Trend
Gleason Lake	Gleason Lake	Degrading	Degrading	Degrading
Long Lake	Long Lake	No Trend	No Trend	No Trend
	Tanager Lake	No Trend	No Trend	No Trend
Six Mile Creek	Parley Lake	No Trend	No Trend	No Trend
	Wassermann Lake	No Trend	No Trend	No Trend
	Steiger	No Trend	Degrading	No Trend
	Wauburn	No Trend	No Trend	No Trend
	Zumbra	No Trend	No Trend	No Trend
Lake Virginia	Lake Virginia	No Trend	No Trend	No Trend
Minnehaha Creek	Calhoun	No Trend	No Trend	No Trend
	Cedar	No Trend	No Trend	Degrading
	Isles	No Trend	No Trend	No Trend
	Powderhorn	No Trend	Degrading	No Trend
	Nokomis	No Trend	No Trend	No Trend
	Harriet	No Trend	No Trend	No Trend
	Hiawatha	Improving	No Trend	No Trend
Lake Minnetonka	Carman Bay	No Trend	No Trend	No Trend
	Crystal Bay	No Trend	No Trend	No Trend
	Forest Bay	No Trend	No Trend	No Trend
	Grays Bay	No Trend	No Trend	No Trend
	Halsted Bay	No Trend	No Trend	No Trend
	Jennings Bay	No Trend	No Trend	No Trend
	Lower Lake South Bay	Degrading	No Trend	No Trend
	Stubbs Bay	No Trend	No Trend	No Trend

*Significant trends for streams within Minnehaha Creek Watershed District.*

<b>Subwatershed</b>	<b>Stream Station</b>	<b>Total Phosphorus Trend</b>	<b>Total Suspended Solids</b>
Dutch Lake	Dutch Lake: Lake Outlet	Improving	No Trend
Langdon Lake	Langdon Lake Outlet	Degrading	Degrading
Minnehaha Creek	Minnehaha Creek I-494 Ramp	No Trend	No Trend
	Minnehaha Creek W. 34 St.	No Trend	No Trend
	Minnehaha Creek Excelsior Blvd	Improving	No Trend
	Minnehaha Creek: W. 56th St.	Improving	No Trend
	Minnehaha Creek: 21st/Minnehaha Pkwy	Improving	No Trend
	Minnehaha Creek: Hiawatha Ave	Improving	No Trend
Painter Creek	Painters Creek: W. Branch Rd	Degrading	No Trend
Six Mile Creek	Six Mile Creek: Auburn Lk East Inlet	Improving	Improving
	Six Mile Creek: Lundsten Lk - North Outlet	Improving	Improving
	Six Mile Creek: Mud Lake Outlet	Improving	No Trend

## Annual Communications

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MCWD's outreach is guided by the District's 2017 Watershed Management Plan. The goal of MCWD's communication efforts are to increase integration of land use and water planning by raising awareness within the land use community about the benefits of collaborating with the watershed district. As part of the District's 2019 communications strategy, the District solicited earned media and conducted outreach to cities, counties, state agencies and other stakeholders via an electronic newsletter and capital project email updates. MCWD's media outreach resulted in media coverage in multiple outlets with a total of 232 news articles.

A system for regularly updating local communities and key stakeholders on dam operations, flood risk and recreation impacts was also developed by the District. By establishing regular high water email updates, MCWD provides timely information and resources for local communities impacted by high water.

Another outreach tool of the District is its website, which received approximately 3.7 million views and the District continues to maintain a presence on various social media platforms. Past news releases and newsletters can be found on the website at: <http://www.minnehahacreek.org/about/newsroom>.

## Solicitation of Services

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In accordance with MN Statutes 103B.227, the District solicits proposals for legal, professional, or technical consultant services at least every two years. Below are the dates when the District most recently solicited proposals:

- March 2018 - legal and information technology services
- June 2019 – accounting services
- August 2019 – banking services
- November 2019 – engineering and government relations services

## Status of Local Plans

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MN Statutes § 103B.235 and MN Rules § 8410.0160 grant watershed districts the authority to review and approve local water management plans (LWMPs). Under this framework, watershed districts can assign responsibilities to local government units (LGUs) for carrying out implementation actions defined in the watershed plan. The LWMP is a required element of the LGU comprehensive land use management plan which LGUs were required to update by the end of 2018.

The primary focus of the LWMP requirements set forth in the District’s 2017 Plan is on improving the integration of land use and water planning. To effectively integrate the goals of MCWD and its LGUs in a way that maximizes community benefits and effectively leverages public funds, the District has invited a partnership framework with its communities. In addition to the legally required elements of LWMPs, as defined in State statute and rules, the MCWD Plan requires communities to develop a coordination plan which describes how the LGU and MCWD will share information and work together to integrate land use and water planning.

As of April 2019, 24 of the District’s 29 communities have received approval of their LWMP. The remaining communities have submitted draft LWMPs that are undergoing review or further revision.

## Status of Locally Adopted Ordinances

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The District’s 2017 Plan did not establish any requirements for local ordinances.

## Permits, Variances, and Violations

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In 2019, the MCWD reviewed and processed 689 permit applications. No permits were denied, and there were six variances or exceptions approved. A total of 136 inspections were completed in 2019. The majority of non-compliant sites were resolved through MCWD inspection reports to permittees and on-site meetings to discuss corrections and solutions to site-specific issues. MCWD issued two notices of probable violation in 2019, and two Wetland Conservation Act violations. No formal enforcement actions were issued by the MCWD Board of Managers.

