



**Minnehaha Creek Watershed District
2016 Annual Report to the
Board of Water and Soil Resources**



2016 Annual Report

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1.0 Introduction

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. Metro watershed districts are required to follow reporting requirements described in MR 8410.0150.

2.0 Annual Audit Report

Provided below is a summary of the District's 2016 budget, revenues, and expenditures. The full 2016 audit report is included as Appendix 1.

Table 1. 2016 Budget, Revenues, and Expenditures

Budget	
General Operations	1,527,969
Projects and Programs	11,268,125
Total Budget	12,796,094
Revenues	
Levy	8,691,109
Intergovernmental	228,255
Permits	79,800
Investment income	60,183
Rental income	1,536,159
Other	60,077
Total Revenues	10,656,213
Total Expenditures	11,996,632

3.0 Annual Activity Report

The following information is provided to satisfy the requirements of MN Rules 8410.0150, Subpart 3.

3.A. Board Members

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

Table 2. MCWD Board of Managers

Manager	County	Contact Information
Sherry Davis White, President	Hennepin	swhite@minnehahacreek.org
Brian Shekleton, Vice President	Hennepin	bshekleton@minnehahacreek.org
Richard Miller, Treasurer	Hennepin	rmiller@minnehahacreek.org
Kurt Rogness, Secretary	Hennepin	krogness@minnehahacreek.org
Bill Becker	Hennepin	bbecker@minnehahacreek.org
Jessica Loftus	Hennepin	jloftus@minnehahacreek.org
Bill Olson	Carver	bolson@minnehahacreek.org

3.B. Staff Contact Information

The District currently employs 30 staff. The names, job titles, and contact information are provided in Table 3. The District maintains an office for staff and meetings. The address is given below:

Minnehaha Creek Watershed District Office
15320 Minnetonka Blvd.
Minnetonka, MN 55345
Ph: 952-471-0590 Fax: 952-471-0682
Email: admin@minnehahacreek.org
www.minnehahacreek.org

Table 3. MCWD Staff Contacts

Name	Job Title	E-mail	Phone
Lars Erdahl	District Administrator	lerdahl@minnehahacreek.org	(952) 641-4505
Telly Mamayek	Communications and Education Director	tmamayek@minnehahacreek.org	(952) 641-4508
Darren Lochner	Education Program Manager	dlochner@minnehahacreek.org	(952) 641-4524
Sarah Fellows	Education Coordinator	sfellows@minnehahacreek.org	(952) 641-4507
David Mandt	Operations and Support Services Director	dmandt@minnehahacreek.org	(952) 641-4503
Maddie Johnson	Technical Support Services Specialist	mjohnson@minnehahacreek.org	(952) 641-4500
Chris Lizee	Receptionist / Administrative Assistant	clizee@minnehahacreek.org	(952) 641-4500
Kristin Terrell	Receptionist / Administrative Assistant	kterrell@minnehahacreek.org	(952) 641-4500
Katherine Sylvia	Permitting Program Lead	ksylvia@minnehahacreek.org	(952) 473-2855
Heidi Quinn	Permitting Technician	hquinn@minnehahacreek.org	(952) 641-4504
Rachel Workin	Permitting Technician	rworkin@minnehahacreek.org	(952) 641-4518
Theresa Zerby	Permitting Clerk	tzerby@minnehahacreek.org	(952) 641-4519
Chase Vanderbilt	District Representative - Permitting	cvanderbilt@minnehahacreek.org	(952) 641-4580
Luke Menden	District Representative - Permitting	lmenden@minnehahacreek.org	(952) 641-4586
Jack Distel	District Representative - Permitting	jdistel@minnehahacreek.org	(952) 641-4581
James Wisker	Planning and Projects Director	jwisker@minnehahacreek.org	(952) 641-4509
Rena Clark	Planner - Project Manager	rclark@minnehahacreek.org	(952) 641-4510
Becky Christopher	Lead Planner - Project Manager	bchristopher@minnehahacreek.org	(952) 641-4512
Michael Hayman	Planner - Project Manager	mhayman@minnehahacreek.org	(952) 471-8226

Anna Brown	Planner - Project Manager	abrown@minnehahacreek.org	(952) 641-4522
Matt Cook	Planning Assistant	mcook@minnehahacreek.org	(952) 641-4506
Tiffany Schaufler	Project and Land Program Manager	tschaufler@minnehahacreek.org	(952) 641-4513
Laura Domyancich	Project and Land Technician	ldomyancich@minnehahacreek.org	(952) 641-4582
Craig Dawson	Research and Monitoring Director	cdawson@minnehahacreek.org	(952) 471-8306
Eric Fieldseth	AIS Program Manager	efieldseth@minnehahacreek.org	(952) 471-7873
Yvette Christianson	Water Quality Manager	ychristianson@minnehahacreek.org	(952) 641-4514
Kelly Dooley	Water Quality Manager	kdooley@minnehahacreek.org	(952) 641-4515
Kailey Cermack	Water Quality Technician	kcermack@minnehahacreek.org	(952) 641-4501
Jill Sweet	AIS Technician	jbjorklund@minnehahacreek.org	(952) 471-8976
Marcie Lapointe	District Representative - Water Quality	mlapointe@minnehahacreek.org	(952) 641-4517

3.C. Assessment of 2016 Work Plans

District staff prepared 34 individual work plans for 2016 as listed below. All activities were substantially completed as proposed with the exception of the FEMA Flood Repairs and Meadowbrook Golf Course projects which experienced delays and are expected to proceed in 2017. Expenditures under each work plan are included in the audit report in Appendix 1.

- Operations and Support Services:
 - General Operations (1002)
 - Information Technology (1003)
 - Government Relations (2406)
- Planning and Permitting:
 - Permit Administration (2001)
 - Planning and Projects (2002)
 - Project Maintenance and Land Management (2003)
 - Land Conservation (2004)
 - Land Restoration (2005)
 - Habitat Restoration Initiative (2006)
- Capital Projects:
 - Six Mile Marsh Prairie Restoration (3106)
 - Minnehaha Falls/Gorge (3120)

- Minnehaha Creek Reach 19-21 (3133)
- Steiger Lake Wetland Restoration (3135)
- Turbid-Lunsten/Six Mile Creek (3139)
- Taft/Legion Improvements (3140)
- Minnehaha Creek Reach 14 Stabilization (3141)
- Long Lake Creek Corridor (3142)
- 325 Blake Rd Stormwater Management (3145)
- Cottageville Park (3146)
- 54th St. Stream Restoration (3147)
- FEMA Flood Repairs (3148)
- Highway 101 Causeway (3149)
- Meadowbrook Golf Course (3150)
- Powell-Meadowbrook Stormwater (3151)
- Education and Communications:
 - Cynthia Krieg Education Grant (4001)
 - Education (4002)
 - Communications (4003)
 - Cost Share (4005)
- Research and Monitoring:
 - Water Quality (5001)
 - E-Grade (5002)
 - Lake Nokomis Project (5003)
 - Joint Watershed Research Grant Program (5004)
 - Aquatic Invasive Species (AIS) (5005)
 - Research and Monitoring General Operations (5006)

Appendix 2 includes the District's 2016 annual report publication highlighting major activities from each of the District's programs.

3.D. 2017 Work Plans

District staff prepared 24 individual program and project work plans for 2017 which can be found on the District website at: <http://www.minnehahacreek.org/about/district-finances/budget>.

3.E. Evaluation of Progress on Goals and Implementation Actions

The annual reporting requirements under the newly revised MN Rules 8410 call for an evaluation of progress toward goals and implementation actions every two years. As a part of its 2017 Comprehensive Plan update which is scheduled to be complete at the end of this year, the District is in the process of compiling information on progress made toward the goals set in the 2007 Plan. This information will be included in next year's annual activity report to BWSR.

In 2016, the District undertook a strategic planning process through which it evaluated and aligned all of its programs under its new, refocused mission to protect and improve land and water for future generations. The overarching organizational strategy to accomplishing the District's mission is to 1.) develop high impact capital projects integrated with non-water

initiatives through multi-jurisdictional partnerships and 2.) change the land-use and water policy environment to increase early value added partnership with private development, public infrastructure and public policy/planning. Through the strategic planning process the District assessed all of its activities to identify the projected outcomes, resources allocated, and metrics that will be used to measure progress. Operationalizing the resulting 2017 Strategic Alignment Plan will provide a framework for future evaluation and reporting.

3.F. Trends in Monitoring Data

The Research and Monitoring Department evaluated long-term trends on lakes in the District. The water quality for the majority of lakes was assessed from 2001-2016. Using R-studio statistical package, trends were computed using the Mann-Kendall test on water clarity (SECC), algal abundance (CHLA) and total phosphorus (TP) in the epilimnion on lakes with at least eight years of consecutive data. About 50 lakes within the Watershed District met this criteria. An alpha of 0.05 was used to determine if the p-value is significant. Similar analyses will be conducted on the water quality and yields for major stream stations (about 17 stations) throughout the watershed. The statistics for all the lakes and stream stations analyzed will be included in the 2016 Research and Monitoring Report, which will be available in May 2016 on the District website at: <http://www.minnehahacreek.org/data-center/annual-monitoring-reports>. Lakes with significant trends are displayed in Tables 4.

Lake Harriet and Lake Minnewashta had significant degradation in at least one water quality parameter. Lake Nokomis had significant improvements in chlorophyll and phosphorus concentrations. The biomanipulation study the District conducted to improve water quality in Lake Nokomis occurred during this time frame. The Lake Nokomis Biomanipulation Study Technical Report will be posted on the District's website later this year.

For Lake Minnetonka, the eastern bays had the most significant change observed over the fifteen-year period. Most of those bays had significant improvements in chlorophyll-*a* and phosphorus concentrations and water clarity. The significant improvement in water clarity for the eastern bays was less than 0.29 m/year. Zebra mussels were discovered in Lake Minnetonka in 2011. As an extension of the zebra mussel study conducted by the District, water quality from 5 years before and after 2011 was statistically compared. The eastern bays had significant improvements in water clarity, chlorophyll-*a*, and phosphorus after the introduction of zebra mussels. Peavey Lake and Priests Bay, a western bay, were the only Lake Minnetonka waterbodies with significant degrading water quality.

A handful of lakes in the Minnehaha Creek Watershed District had data analyzed from 2002-2016, 2004-2016, 2005-2016 and 2006-2016. The majority of these lakes were found to have significant improvements in water quality. Zumbra-Sunny Lake, specifically, the Zumbra bay, has significant improvements in water quality across all three parameters. Cedar, Powderhorn and Turbid lakes are the exception. Cedar and Powderhorn lakes have significant degradation in water clarity, whereas, Turbid Lake has significant degradation in chlorophyll-*a* and phosphorus.

Table 4. Significant water quality trends for lakes within Minnehaha Creek Watershed District

Trends: 2001-2016					
Lake	Parameter	Slope	Tau	p-value	Improving or Degrading
Harriet	TP	0.363	0.458	0.015	Degrading
Isles	CHLA	-1.558	-0.45	0.017	Improving
	TP	-1.024	-0.4	0.034	Improving
Lake Minnetonka: Crystal	SECC	0.122	0.517	0.006	Improving
Lake Minnetonka: Lower Lake South	SECC	0.134	0.417	0.027	Improving
	CHLA	-0.215	-0.483	0.010	Improving
Lake Minnetonka: Peavey	SECC	-0.014	-0.442	0.019	Degrading
	TP	3.022	0.383	0.043	Degrading
Lake Minnetonka: St Albans	SECC	0.066	0.45	0.017	Improving
	CHLA	-0.222	-0.45	0.017	Improving
	TP	-0.548	-0.4	0.034	Improving
Lake Minnetonka: Wayzata	SECC	0.131	0.5	0.008	Improving
Long	SECC	0.044	0.6	0.002	Improving
Minnewashta	SECC	-0.058	-0.4	0.042	Degrading
Nokomis	CHLA	-0.956	-0.433	0.022	Improving
	TP	-1.611	-0.433	0.022	Improving
Zumbra-Sunny (Zumbra Bay)	SECC	0.168	0.695	0.0004	Improving
	CHLA	-0.772	-0.543	0.005	Improving
	TP	-0.636	-0.429	0.029	Improving
Trends: 2002-2016					
Lake	Parameter	Slope	Tau	p-value	Improving or Degrading
Cedar	SECC	-0.071	-0.448	0.023	Degrading
Grass	CHLA	-1.523	-0.667	0.016	Improving
Powderhorn	SECC	-0.060	-0.429	0.037	Degrading
Steiger	CHLA	-0.948	-0.576	0.011	Improving
West Auburn	CHLA	-0.800	-0.410	0.038	Improving
Trends: 2004-2016					
Lake	Parameter	Slope	Tau	p-value	Improving or Degrading
Lake Minnetonka: Carsons	SECC	0.223	0.538	0.012	Improving
	CHLA	-0.29	-0.436	0.044	Improving
	TP	-0.647	-0.436	0.044	Improving
Lake Minnetonka: Grays	SECC	0.148	0.436	0.044	Improving
Trends: 2005-2016					
Lake	Parameter	Slope	Tau	p-value	Improving or Degrading
Lake Minnetonka: Lafayette	SECC	0.253	0.606	0.007	Improving
	CHLA	-0.467	-0.667	0.003	Improving
Trends: 2006-2016					
Lake	Parameter	Slope	Tau	p-value	Improving or Degrading
Lake Minnetonka: Spring Park	SECC	0.286	0.655	0.006	Improving
	TP	-0.880	-0.6	0.013	Improving
Turbid	CHLA	2.840		0.020	Degrading
	TP	3.812	0.556	0.032	Degrading

3.G. Annual Communications

MCWD developed a strategic plan for communications in 2013 which guides how the District delivers messages to key audiences. In 2016, MCWD issued a total of 19 news releases, 14 newspaper columns, and 42 e-newsletters on topics including capital projects, program activities, water quality data, events, and finances. The District distributed both a mid-year and annual report to cities, counties, state agencies, and other stakeholders. The annual report can be found in Appendix 2. Other past news releases and newsletters can be found at: <http://www.minnehahacreek.org/about/newsroom>. The MCWD website received nearly a quarter-million views in 2016 and the District continued an active social media presence on Facebook, Twitter, Instagram and YouTube.

3.H. Solicitation of Services

In 2016, in accordance with MN Statutes 103B.227, the District solicited professional services for legal counsel, engineering, managed service provider, and government relations. The process will be repeated in 2017.

3.I. Status of Local Plans

There are three of twenty-nine communities in the watershed that have not completed updates to their local water management plans in response to the District's last plan update: Chanhassen, Watertown Township, and Laketown Township. These plans have been requested repeatedly by the District. With revised local water plans now due for all communities in 2017-2018, the District will focus its effort on ensuring that the next round of plans are completed in compliance with Minnesota Statutes 103B.235 and Minnesota Rules 8410.0160.

The primary requirement of local government units (LGUs) in the District's 2007 Plan was the assignment of load reduction targets. The District's 2007 Plan requires that LGUs report annually to the District regarding progress toward these targets and other implementation activities in their local plans. Several LGUs have already met these targets, and others are still in progress. Since the adoption of the 2007 Plan, the MN Pollution Control Agency (MPCA) completed Total Maximum Daily Loads (TMDLs) for the majority of nutrient-impaired lakes in the District. The load reduction requirements placed on LGUs under these TMDLs are generally higher than those required under the District's 2007 Plan. The District's 2017 Plan will be updated to align with the TMDL goals and will establish a framework for working cooperatively with communities to make progress toward these reductions.

3.J. Status of Locally Adopted Ordinances

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

3.K. Permits, Variances, and Violations

In 2016, the MCWD reviewed and processed 673 permits. This represents a 9.6% decrease from permits received during 2015. In 2016, MCWD and the City of St. Louis Park agreed that the City would exercise sole permitting responsibility in the area of erosion control within the portion of St. Louis Park in the Minnehaha Creek Watershed District. This agreement was based on a finding that the City's Erosion Control ordinance[s] were at least as protective of water resources as the MCWD's Erosion Control rule. One permit application was denied and one variance was granted in 2016. A total of 403 inspections were completed in 2016. The majority of non-compliant sites were resolved through MCWD inspection reports to permittees and on-site meetings to go over corrections and solutions to site-specific issues. MCWD issued one notice of probable violation in 2016. One formal enforcement action was issued by the MCWD Board and one Wetland Conservation Act violation was referred to the DNR.