

**MEETING DATE:** April 28, 2016

**TITLE:** Authorization to Release the Annual Report to the Board of Water and Soil Resources

**RESOLUTION NUMBER:** 16-033

**PREPARED BY:** Becky Christopher

**E-MAIL:** bchristopher@minnehahacreek.org

**TELEPHONE:** 952-641-4512

**REVIEWED BY:**  Administrator  Counsel  Program Mgr. (Name): \_\_\_\_\_  
 Board Committee  Engineer  Other

**WORKSHOP ACTION:**

<input type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date): _____	<input type="checkbox"/> Refer to taskforce or committee (date): _____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input checked="" type="checkbox"/> Other (specify): <u>Not reviewed at workshop</u>	

**PURPOSE or ACTION REQUESTED:**

Authorization to release the 2015 Annual Activity Report to the Board of Water and Soil 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).

Minnesota Statutes Chapter 103D.351 requires watershed districts to file an annual activity report with BWSR, and for metro watershed districts, the report must meet the requirements described in MR 8410.0150. This annual report includes information on Board members and staff, the previous and current years' work plans, biannual progress toward goals, water quality trends, communication activities, solicitation of consultant services, local plan adoption and implementation, and permits and violations. The annual report is due to BWSR within 120 days of the end of the calendar year (April 29).

The District is also required to submit a copy of its annual audit report to BWSR within 180 days of the end of the District's fiscal year. The District's 2015 audit will be included as an appendix to the annual activity report.

**RESOLUTION**

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**RESOLUTION NUMBER:** 16-033

**TITLE:** **Authorization to Release the Annual Report to the Board of Water and Soil Resources**

WHEREAS, Minnesota Statutes 103D.351 and Minnesota Rule 8410.0150 require that an annual activity report be submitted to the Board of Water and Soil Resources (BWSR) that includes information on Board members and staff, the previous and current years' work plans, biannual progress toward goals, water quality trends, communication activities, solicitation of consultant services, local plan adoption and implementation, and permits and violations; and

WHEREAS, this report is due annually within 120 days of the end of the calendar year; and

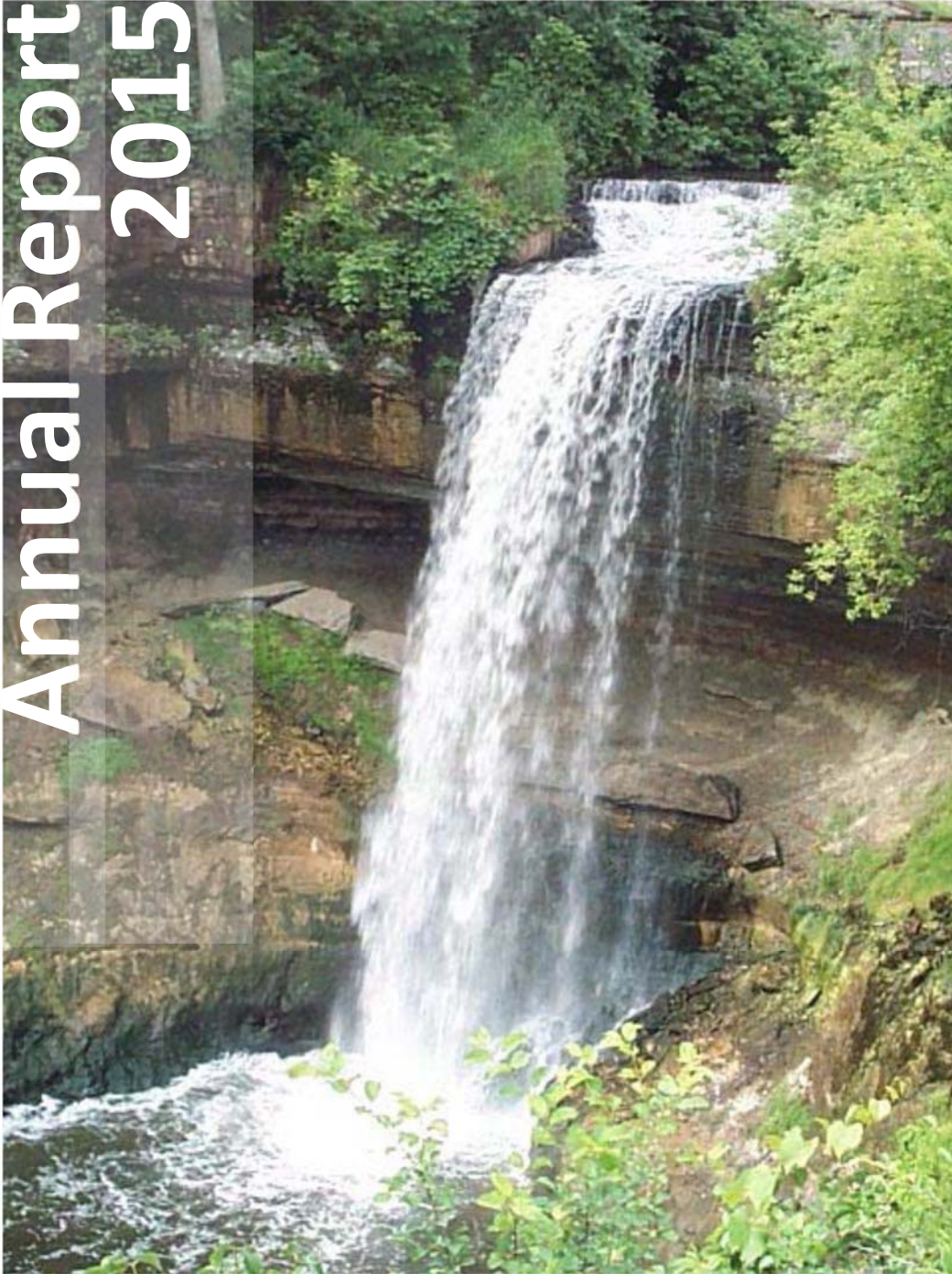
WHEREAS, Minnesota Rule 8410.0150 further requires that the District submit a copy of its annual audit report to BWSR within 180 days of the end of the District's fiscal year;

NOW, THEREFORE, BE IT RESOLVED, that the Minnehaha Creek Watershed Board of Managers accepts the 2015 annual activity report and authorizes its release, along with the District's 2015 audit, to BWSR.

Resolution Number 16-033 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_.  
Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: \_\_\_\_\_.

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

# Annual Report 2015



## **Minnehaha Creek Watershed District 2015 Annual Report to the Board of Water and Soil Resources**



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

## 2015 Annual Report

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

## 2.0 Annual Audit Report

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Provided below is a summary of the District's 2015 budget, revenues, and expenditures. The full 2015 audit report is included as Appendix 1.

*Table 1. 2015 Budget, Revenues, and Expenditures*

<b>Budget</b>	
General Operations and Management Planning	2,628,525
Projects and Programs	11,578,324
<b>Total Budget</b>	<b>14,206,849</b>
<b>Revenues</b>	
Levy	8,266,011
Intergovernmental	2,619,259
Permits	104,986
Investment income	69,773
Rental income	1,384,135
Other	40,269
<b>Total Revenues</b>	<b>12,484,433</b>
<b>Total Expenditures</b>	<b>13,187,762</b>

### 3.0 Annual Activity Report

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

#### 3.A. Board Members

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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	<a href="mailto:swhite@minnehahacreek.org">swhite@minnehahacreek.org</a>
Brian Shekleton, Vice President	Hennepin	<a href="mailto:bshekleton@minnehahacreek.org">bshekleton@minnehahacreek.org</a>
Richard Miller, Treasurer	Hennepin	<a href="mailto:rmiller@minnehahacreek.org">rmiller@minnehahacreek.org</a>
Kurt Rogness, Secretary	Hennepin	<a href="mailto:krogness@minnehahacreek.org">krogness@minnehahacreek.org</a>
Bill Becker	Hennepin	<a href="mailto:bbecker@minnehahacreek.org">bbecker@minnehahacreek.org</a>
Pamela Blixt	Hennepin	<a href="mailto:pblixt@minnehahacreek.org">pblixt@minnehahacreek.org</a>
Bill Olson	Carver	<a href="mailto:bolson@minnehahacreek.org">bolson@minnehahacreek.org</a>

#### 3.B. Staff Contact Information

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The District currently employs 35 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](mailto:admin@minnehahacreek.org)  
[www.minnehahacreek.org](http://www.minnehahacreek.org)

Table 3. MCWD Staff Contacts

<b>Name</b>	<b>Job Title</b>	<b>E-mail</b>	<b>Phone</b>
Lars Erdahl	District Administrator	<a href="mailto:lerdahl@minnehahacreek.org">lerdahl@minnehahacreek.org</a>	(952) 641-4505
Telly Mamayek	Communications and Education Director	<a href="mailto:tmamayek@minnehahacreek.org">tmamayek@minnehahacreek.org</a>	(952) 641-4508
Darren Lochner	Education Program Manager	<a href="mailto:dlochner@minnehahacreek.org">dlochner@minnehahacreek.org</a>	(952) 641-4524
Trevor Born	Communications Coordinator	<a href="mailto:tborn@minnehahacreek.org">tborn@minnehahacreek.org</a>	(952) 641-4520
Sarah Fellows	Education Coordinator	<a href="mailto:sfellows@minnehahacreek.org">sfellows@minnehahacreek.org</a>	(952) 641-4507
Brett Eidem	Cost Share Grant Administrator	<a href="mailto:beidem@minnehahacreek.org">beidem@minnehahacreek.org</a>	(952) 641-4523
David Mandt	Operations and Support Services Director	<a href="mailto:dmandt@minnehahacreek.org">dmandt@minnehahacreek.org</a>	(952) 641-4503
Debora Smith	Office Administrator	<a href="mailto:dsmith@minnehahacreek.org">dsmith@minnehahacreek.org</a>	(952) 641-4502
Jen Scharlow	Technical Support Services Specialist	<a href="mailto:jscharlow@minnehahacreek.org">jscharlow@minnehahacreek.org</a>	(952) 641-4500
Chris Lizee	Receptionist / Administrative Assistant	<a href="mailto:clizee@minnehahacreek.org">clizee@minnehahacreek.org</a>	(952) 641-4500
Katherine Sylvia	Permitting Program Lead	<a href="mailto:ksylvia@minnehahacreek.org">ksylvia@minnehahacreek.org</a>	(952) 473-2855
Heidi Quinn	Permitting Technician	<a href="mailto:hquinn@minnehahacreek.org">hquinn@minnehahacreek.org</a>	(952) 641-4504
Rachel Workin	Permitting Technician	<a href="mailto:rworkin@minnehahacreek.org">rworkin@minnehahacreek.org</a>	(952) 641-4518
Theresa Zerby	Permitting Clerk	<a href="mailto:tzerby@minnehahacreek.org">tzerby@minnehahacreek.org</a>	(952) 641-4519
Lauren Sampedro	District Representative - Permitting	<a href="mailto:lsampedro@minnehahacreek.org">lsampedro@minnehahacreek.org</a>	(952) 641-4517
Miriam Eason	District Representative - Permitting	<a href="mailto:meason@minnehahacreek.org">meason@minnehahacreek.org</a>	(952) 641-4586
Terrence Chastan-Davis	District Representative - Permitting	<a href="mailto:tchastan-davis@minnehahacreek.org">tchastan-davis@minnehahacreek.org</a>	(952) 641-4581
James Wisker	Planning and Projects Director	<a href="mailto:jwisker@minnehahacreek.org">jwisker@minnehahacreek.org</a>	(952) 641-4509
Rena Clark	Planner - Project Manager	<a href="mailto:rclark@minnehahacreek.org">rclark@minnehahacreek.org</a>	(952) 641-4510

Becky Christopher	Lead Planner - Project Manager	<a href="mailto:bchristopher@minnehahacreek.org">bchristopher@minnehahacreek.org</a>	(952) 641-4512
Michael Hayman	Planner - Project Manager	<a href="mailto:mhayman@minnehahacreek.org">mhayman@minnehahacreek.org</a>	(952) 471-8226
Anna Brown	Planner - Project Manager	<a href="mailto:abrown@minnehahacreek.org">abrown@minnehahacreek.org</a>	(952) 641-4522
Matt Cook	Planning Assistant	<a href="mailto:mcook@minnehahacreek.org">mcook@minnehahacreek.org</a>	(952) 641-4506
Tiffany Schaufler	Project and Land Program Manager	<a href="mailto:tschaufler@minnehahacreek.org">tschaufler@minnehahacreek.org</a>	(952) 641-4513
Laura Domyancich	Project and Land Technician	<a href="mailto:ldomyancich@minnehahacreek.org">ldomyancich@minnehahacreek.org</a>	(952) 641-4582
Craig Dawson	Research and Monitoring Director	<a href="mailto:cdawson@minnehahacreek.org">cdawson@minnehahacreek.org</a>	(952) 471-8306
Eric Fieldseth	AIS Program Manager	<a href="mailto:efieldseth@minnehahacreek.org">efieldseth@minnehahacreek.org</a>	(952) 471-7873
Yvette Christianson	Water Quality Manager	<a href="mailto:ychristianson@minnehahacreek.org">ychristianson@minnehahacreek.org</a>	(952) 641-4514
Kelly Dooley	Water Quality Manager	<a href="mailto:kdooley@minnehahacreek.org">kdooley@minnehahacreek.org</a>	(952) 641-4515
Kailey Kreatz	Water Quality Technician	<a href="mailto:kkreatz@minnehahacreek.org">kkreatz@minnehahacreek.org</a>	(952) 641-4501
Jill Sweet	AIS Technician	<a href="mailto:jbjorklund@minnehahacreek.org">jbjorklund@minnehahacreek.org</a>	(952) 471-8976
Rachel Fleck	District Representative – AIS	<a href="mailto:rfleck@minnehahacreek.org">rfleck@minnehahacreek.org</a>	(952) 641-4517
Johanna Grimsley	District Representative - Water Quality	<a href="mailto:jgrimsley@minnehahacreek.org">jgrimsley@minnehahacreek.org</a>	(952) 641-4517
Andy Swanson	District Representative - Water Quality	<a href="mailto:aswanson@minnehahacreek.org">aswanson@minnehahacreek.org</a>	(952) 641-4517
Marcie Lapointe	District Representative - Water Quality	<a href="mailto:mlapointe@minnehahacreek.org">mlapointe@minnehahacreek.org</a>	(952) 641-4517



### 3.C. Assessment of 2015 Work Plans

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District staff prepared 32 individual work plans for 2015 as listed below. All program and project activities were substantially completed as proposed. Expenditures under each work plan are included in the audit report in Appendix 1.

- Operations and Support Services:
  - Information Technology (1003)
  - Government Relations (1004)
- 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)
  - Low Impact Development Grant (3121)
- Capital Projects:
  - Six Mile Marsh Prairie Restoration (3106)
  - Minnehaha Falls/Gorge (3120)
  - Minnehaha Creek Infiltration (3125)
  - Big Island (3126)
  - Gleason Lake Projects (3129)
  - Minnehaha Creek Reach 19-21 (3133)
  - Steiger Lake Wetland Restoration (3135)
  - Six Mile Creek (3139)
  - Taft/Legion Improvements (3140)
  - Minnehaha Creek Reach 14 Stabilization (3141)
  - Long Lake Creek Corridor Projects (3142)
  - Halsted Bay Internal Load Management (3144)
  - 325 Blake Rd Stormwater Management (3145)
  - Cottageville Park (3146)
  - 54th St. Stream Restoration (3147)
- Education and Communications:
  - Cynthia Krieg (4001)
  - Education (4002)
  - Communications (4003)
  - Cost Share (4005)
- Research and Monitoring:
  - Water Quality (5001)
  - E-Grade (5002)
  - Lake Nokomis Project (5003)
  - Aquatic Invasive Species (AIS) (5005)

Appendix 2 includes the District's 2015 annual report publication highlighting major activities from each of the District's programs.

### 3.D. 2016 Work Plans

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District staff prepared 33 individual program and project work plans for 2016 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

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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, 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.

Also in 2016, the District is undertaking a strategic planning process through which it will evaluate and align all of its programs under its new, refocused mission and goals. The District will be assessing all of its activities to identify the projected outcomes, resources allocated, and metrics that will be used to measure progress. This process will provide a framework for future evaluation and reporting.

### 3.F. Trends in Monitoring Data

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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 2001-2015. 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. 45 lakes within the Watershed District met this criteria. An alpha of 0.1 was used to determine if the p-value is significant. Lakes with significant trends are displayed in Tables 4. The statistics for all the lakes analyzed will be included in the 2015 Research and Monitoring Report which will be available in June 2015 on the District website at: <http://www.minnehahacreek.org/data-center/annual-monitoring-reports>.

Lake Harriet and Schutz Lake 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. Further analysis is needed to determine if there was significant changes in water quality after the study was implemented.

For Lake Minnetonka, the eastern bays had the most significant change observed over the fourteen-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 0.25 m/year. Peavey Lake and Priests Bay, a western bay, were the only Lake Minnetonka waterbodies with significant degrading water quality. 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.

A handful of lakes in the Minnehaha Creek Watershed District had data analyzed from 2002-2015, 2002-2014, and 2007-2015. 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 Lake, is the exception, with significant degradation in water clarity at about 0.07 m/year.

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

<b>Trends: 2001-2015</b>					
<b>Lake</b>	<b>Parameter</b>	<b>Slope</b>	<b>Tau</b>	<b>p-value</b>	<b>Improving or Degrading</b>
Harriet	TP	0.469	0.629	0.001	Degrading
Isles	CHLA	-1.225	-0.371	0.060	Improving
Lake Minnetonka: Black	CHLA	-1.800	-0.578	0.025	Improving
Lake Minnetonka: Carsons	SECC	0.250	0.545	0.016	Improving
	CHLA	-0.254	-0.394	0.086	Improving
	TP	-0.773	-0.424	0.064	Improving
Lake Minnetonka: Crystal	SECC	0.115	0.486	0.013	Improving
Lake Minnetonka: Grays	SECC	0.182	0.455	0.047	Improving
	TP	-0.814	-0.455	0.047	Improving
Lake Minnetonka: Lower Lake South	SECC	0.157	0.410	0.037	Improving
	CHLA	-0.191	-0.410	0.038	Improving
	TP	-0.572	-0.410	0.038	Improving
Lake Minnetonka: Priests	TP	1.762	0.778	0.002	Degrading
Lake Minnetonka: St Albans	SECC	0.101	0.448	0.023	Improving
	CHLA	-0.220	-0.410	0.038	Improving
	TP	-0.687	-0.467	0.018	Improving
Lake Minnetonka: Wayzata	SECC	0.145	0.505	0.010	Improving
	CHLA	-0.154	-0.352	0.075	Improving
	TP	-0.419	-0.333	0.092	Improving
Long	SECC	0.040	0.462	0.033	Improving
Nokomis	CHLA	-0.964	-0.429	0.029	Improving
	TP	-1.789	-0.410	0.038	Improving
Peavey	SECC	-0.018	-0.438	0.026	Degrading
	TP	4.569	0.429	0.029	Degrading
Schutz	CHLA	0.933	0.484	0.018	Degrading
Tamarack	SECC	0.070	0.371	0.060	Improving
<b>Trends: 2002-2015</b>					
<b>Lake</b>	<b>Parameter</b>	<b>Slope</b>	<b>Tau</b>	<b>p-value</b>	<b>Improving or Degrading</b>
Cedar	SECC	-0.070	-0.407	0.049	Degrading
Steiger	SECC	0.079	0.527	0.029	Improving
	CHLA	-0.646	-0.491	0.043	Improving
Zumbra-Sunny (Zumbra Bay)	SECC	0.184	0.758	0.0002	Improving
	CHLA	-0.678	-0.473	0.020	Improving
	TP	-0.728	-0.648	0.001	Improving
<b>Trends: 2002-2014</b>					
<b>Lake</b>	<b>Parameter</b>	<b>Slope</b>	<b>Tau</b>	<b>p-value</b>	<b>Improving or Degrading</b>
Grass	CHLA	-2.840	-0.571	0.063	Improving
Twin	TP	-5.841	-0.462	0.033	Improving
<b>Trends: 2007-2015</b>					
<b>Lake</b>	<b>Parameter</b>	<b>Slope</b>	<b>Tau</b>	<b>p-value</b>	<b>Improving or Degrading</b>
Stone	CHLA	-1.888	-0.643	0.035	Improving

### 3.G. Annual Communications

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MCWD developed a strategic plan for communications in 2013 which guides how the District delivers messages to key audiences. In 2015, MCWD issued a total of 30 news releases, 16 newspaper columns, and 47 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 more than a quarter-million views in 2015 and the District continued an active social media presence on Facebook, Twitter, Instagram and YouTube.

### 3.H. Solicitation of Services

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In 2015, 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

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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

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

### 3.K. Permits, Variances, and Violations

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In 2015, the MCWD reviewed and processed 704 permits. This is the highest number of permit applications the District has ever received, and a 12.5% increase from 2014. One permit application was denied and one exception was granted in 2015. A total of 668 inspections were

completed in 2015. 577 were for permitted sites and 91 were for non-permitted sites. Staff turnover and the increase in permit applications influenced a decline from 2014 in the number of inspections completed. 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 8 notices of probable violation in 2015, all of which were resolved. No formal enforcement action was taken by the MCWD Board.

**Appendix 1**  
**MCWD 2015 Audit Report**

**Appendix 2**  
**MCWD 2015 Year in Review Brochure**



# 2015 YEAR IN REVIEW



**MINNEHAHA CREEK**  
WATERSHED DISTRICT

Pictured: Minnehaha Creek near the Burwell House in Minnetonka, first place winner in the landscape category of the Earth Day Photo Contest (photo by Aldo Abelleira)



# BUDGET

	2014	2015	Change
<b>Levy</b>	\$7,897,094	\$ 8,291,310	4.99%
<b>Budget</b>	\$13,019,231	\$ 14,206,850	9.12%

## 2015 BUDGET ALLOCATIONS

AIS Management and Control	\$831,900	Hydrodata	\$560,453
Capital Projects	\$4,255,025	Information Technology	\$174,000
Communications	\$168,600	Land Conservation & Restoration	\$2,961,423
Education	\$193,500	Maintenance	\$466,000
General Operations	\$2,628,526	Permitting	\$265,000
Government Relations	\$37,000	Planning	\$591,000
Grants	\$1,074,423		

# MCWD Board of Managers



**Sherry White**  
*President*  
 Orono  
 swhite@minnehahacreek.org



**Brian Shekleton**  
*Vice President*  
 St. Louis Park  
 bshekleton@minnehahacreek.org



**Richard Miller**  
*Treasurer*  
 Edina  
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**Kurt Rogness**  
*Secretary*  
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**Jim Calkins**  
 Minnetonka  
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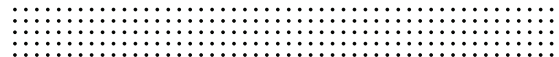
**Pam Blixt**  
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**Bill Olson**  
 Victoria  
 bolson@minnehahacreek.org

The Minnehaha Creek Watershed District (MCWD) is responsible for 181 square miles that drain into the Minnehaha Creek and ultimately the Mississippi River. There are eight major creeks, 129 lakes, and thousands of wetlands within the MCWD. The MCWD includes all or part of 27 cities and two townships in Hennepin and Carver counties.

# FROM THE ADMINISTRATOR



It has already been about a year since I was named administrator of the MCWD. It has been an honor and a privilege to join the dedicated Board of Managers and staff in their important work, and we are very proud to highlight a few of our many efforts in 2015.

I have learned much in my first year, and as a learning organization, we continue to explore responsive approaches to our priorities and our daily business to provide a wide range of community benefits. As you read through this report, you will likely notice the high priority placed on partnership. In fact, it is the cornerstone of the District's new mission statement that was recently adopted by the MCWD Board of Managers:



*We collaborate with public and private partners to protect and improve land and water for current and future generations.*

Whether referred to as cooperation, collaboration, integration or teamwork, it's all about understanding others' goals and priorities, and with that in mind, adding value to protect and improve water resources and create benefits for others in the process. Although perhaps not always the shortest process, we work hard to understand and align with the priorities of partners to achieve greater benefits than just enforcing regulations or working on land and water resource efforts in isolation.

It might sound like common sense, but truly connecting with public and private partners does not happen automatically. It is critically important to acknowledge that land use decisions are inextricably linked with sustainable water use and planning. As administrator, I work closely with our staff and Board of Managers to support this approach in order to achieve greater outcomes, to ensure that we are responsive and accountable to our communities and to be careful stewards of public funds.

As we enter our 50th year as a watershed district, we continue to work hard every day to understand the needs of our partners and to look for ways that our goals and priorities intersect to add value and create win-win community benefits. Focusing on partnerships will be a cornerstone of our 10-year Comprehensive Plan, our work in the focus areas of Minnehaha Creek and Six Mile Creek, our commitment to excellent customer service in our permitting work, and the many other facets of our work throughout the watershed.

Throughout 2016, I look forward to seeing this spirit of teamwork, innovation and service grow and develop and continuing to learn about ways we can make significant lasting improvements to the health of our waters and vitality of our communities. If this all seems a little vague or high-minded, the case studies and examples in this report will more clearly demonstrate the path forward.

- Lars Erdahl

January 2016

## COMPREHENSIVE PLAN

We are in the process of developing our next 10-year comprehensive plan, set to be adopted in 2017. The document guides the District's activities and approach to its work.

Committees of local leaders, professionals and interested residents are already meeting and helping us determine where we should focus our efforts and how we can better integrate our work with others. We'll be releasing more detailed information about the plan in the coming months.

Learn more, get involved, and stay up to date at [minnehahacreek.org/2017](http://minnehahacreek.org/2017).

# PROJECTS AND PLANNING

## MINNEHAHA CREEK GREENWAY TAKES SHAPE

The District's flagship project of the past decade or more reached some major milestones this year. The Minnehaha Creek Greenway is 50 acres of previously-inaccessible green space around a restored Minnehaha Creek in St. Louis Park and Hopkins. Several key Greenway projects wrapped up in 2015 and a few other major pieces got underway. Here are a few of the notable developments of this historic effort to restore Minnehaha Creek through its most degraded stretch and improve the communities, businesses and lives of people that surround it:



**MINNEHAHA CREEK PRESERVE:** The Preserve officially opened in St. Louis Park in July. The work returned a 3,000-foot-long section of the creek to a more natural shape and added more than a mile of trail system, creating access to 39 acres of previously inaccessible-green space. The Preserve manages polluted stormwater from 80 acres of surrounding area that previously flowed untreated into the creek.

**COTTAGEVILLE PARK:** The first phase of work to expand and improve Cottageville Park wrapped up in September. In partnership with the city of Hopkins, we added nearly 5 acres of parkland in a highly developed area. Other improvements keep 26 pounds of phosphorus (which equates to as much as 13,000 pounds of algae) and nearly three tons of eroded soil from entering the creek each year. It also improves wildlife habitat and provides areas to peacefully enjoy the creek.

**JAPS-OLSON COMPANY:** We partnered with Japs-Olson Company to manage stormwater for the company's expansion. In return Japs-Olson donated about four acres of its property near the creek. The land will be restored and used to connect the Minnehaha Creek Greenway trail system to Excelsior Boulevard.

**MEADOWBROOK GOLF COURSE:** The Minneapolis Park and Recreation Board is re-vamping Meadowbrook Golf Course in St. Louis Park after it was damaged by historic flooding in 2014. We are working in partnership to improve the creek as it travels through the golf course and decrease flood risks while also extending the Minnehaha Creek Greenway trail network through the course. The project includes more than 30 acres of restored native habitat.

Learn more at [minnehahacreek.org/greenway](http://minnehahacreek.org/greenway).



## FOCUS: SIX MILE CREEK SUBWATERSHED

One of the hallmarks of our new Comprehensive Plan is a “two track” approach: a “**focal**” track where we focus on an area for a number of years to make lasting, significant improvements; and a “**responsive**” track where we respond to opportunities across the watershed. Building on the success of our first official area of focus, the Minnehaha Creek Greenway, we are embarking on a new focused initiative in the Six Mile Marsh subwatershed. It’s an area west of Lake Minnetonka that includes portions of Laketown Township, Minnetrista, St. Bonifacius, and Victoria.

Our first step is to bring together public and private organizations in the area to learn about their goals, priorities, and planned investments. From there, we’ll identify where the priorities of others intersect with opportunities to improve and protect natural resources. Through these partnerships, we can work cost effectively while achieving goals that go beyond clean water. Keep up with the work at [minnehahacreek.org/six-mile](http://minnehahacreek.org/six-mile).



## RESTORING THE LONG LAKE CREEK CORRIDOR

We partnered with the city of Long Lake and Metropolitan Council to restore a former wastewater treatment pond connected to Long Lake Creek. The work turned the pond into a healthy wetland with a meandering stream running through it.

The project provides wildlife habitat and restores the previously-ditched stream to its natural function. Long Lake Creek is a known carrier of excess sediment and nutrients into Lake Minnetonka, and the project is the first of several restoration projects planned along the stream.

# WHAT MAKES A "HEALTHY" WATERSHED?

Each year we issue our Lake Grades, a compilation of the past season's monitoring data that grades lakes A through F. Though the District collects and releases much more information on water quality, it's the grades that tend to get the most attention, probably because they're easy to understand and remember.

While these grades may give a general sense of the health of a lake, they are far from telling the whole story. They only look at clarity and the content of phosphorus and algae, ignoring other indicators of a healthy ecosystem like diversity of habitat or aquatic life. Nor do the grades consider the interaction between lakes and other ecological features like the landscape or the streams that feed them. They also don't differentiate between deep



and shallow lakes, which function very differently.

Recognizing these shortcomings, our research and monitoring staff are developing a new, holistic way to understand the overall health of the watershed. The E-Grade Program will use a wide array of criteria to evaluate not only deep and shallow lakes, but the other natural resources throughout the watershed.

We're working with a variety of agencies and technical experts to develop the system, which will start rolling out in 2018. We plan to publish two papers in peer-reviewed scientific journals, demonstrating approval from the greater scientific community. Learn more at [minnehahacreek.org/e-grade](http://minnehahacreek.org/e-grade).

## STRANGE FALL WEATHER MEANS HISTORIC YEAR FOR GRAY'S BAY DAM

On Dec. 21 we closed the steel gates of the Gray's Bay dam, sealing Minnehaha Creek from its headwaters of Lake Minnetonka. It was the latest the dam has ever needed to remain open since it was built in 1979.

It's not that it was such a rainy year in general -- in fact, the dam did not discharge water above the mild rate 20 cubic feet per second (CFS) until November. But heavy rains in the late fall caused the lake to rise well above its ideal level going into winter. Plus, when the lake is high, it means the six major streams that feed into it are probably high as well and these streams keep bringing water into the lake days after the rain has stopped. The cooler fall temperatures also mean less water is lost to evaporation than in the summer.

The dam is a key tool in keeping the lake and creek from becoming either too high or too low. Operating it is a complicated calculus -- you have to consider the level of both the lake and creek, recent and projected rainfall, time of year, and if the lake is on track to be at the right level going into the winter (to prevent flooding when the snow melts in the spring).



It's no surprise it took the communities around Lake Minnetonka and Minnehaha Creek nearly a decade to come up with an operating plan that takes all of that information into account. The District uses that model, approved by its communities and the Minnesota DNR, to operate the dam. Learn more at [minnehahacreek.org/water-levels](http://minnehahacreek.org/water-levels).



# AQUATIC INVASIVE SPECIES (AIS)



## WATERCRAFT INSPECTIONS

In 2015, District grants helped fund more than 20,000 hours of inspection staff at a dozen public boat launches across the watershed. Those inspections prevented 17 potential zebra mussel infestations at non-infested lakes, among other invasive species that were stopped.

## BEEFING UP EARLY DETECTION

If a new invasive species can be found in a lake soon enough, and removed quickly, there is often a chance to prevent a full-blown infestation. That's the basis for our Early Detection program, which closely monitors lakes considered at risk of new infestation. In addition to staff monitoring, we recruited and trained 50 volunteers from across the watershed to regularly monitor their own lakes.

We also created an early detection guide that helps users identify different types of invasive species. The handbook has been used throughout the state and is available at [minnehahacreek.org/early-detectors](http://minnehahacreek.org/early-detectors).



**“THOSE INSPECTIONS PREVENTED 17 POTENTIAL ZEBRA MUSSEL INFESTATIONS AT NON-INFESTED LAKES”**

## LESSONS LEARNED AT CHRISTMAS LAKE

In October we concluded a yearlong response effort to contain and eliminate zebra mussels in Christmas Lake, the first response of its kind.

Though zebra mussels were unfortunately found outside of the treatment zone – likely because the treatment areas turned out not to be large enough – it yielded a number of successes and valuable lessons. Among them was that the products we used did appear to kill all the zebra mussels with little other effects on the lake, as no zebra mussels were found alive within the area treated.



## STUDYING HYBRID MILFOIL

We usually think of aquatic plants as either native or invasive. Yet when it comes to watermilfoil (commonly referred to as just “milfoil”), it’s not so simple. There is the invasive Eurasian watermilfoil that has taken hold in lakes across the state, and there is the native Northern milfoil that belongs in our ecosystem. But there is also a hybrid between the two that is not well understood and isn’t as responsive to current techniques for keeping invasive milfoil at bay.

In a study funded by Hennepin County, we worked with the University of Minnesota and Montana State University to observe how hybrid milfoil is distributed in Lake Minnetonka and gauge the success of different ways of managing this aquatic plant.

# "TWO ROADS DIVERGED IN A WOOD..."

- Robert Frost

In 2014, the Mader Family Trust approached our permitting staff about plans to sell a 77-acre parcel of land in Minnetrista. The Trust wanted to learn more about how the series of wetlands on the property would be regulated if a developer were to buy the land. What has happened since is a testament to the power of creative thinking, partnership, and understanding the goals of those you are working with.

To illustrate why we are excited about this project, both for the work itself and the model it created, let's consider two different paths -- two parallel universes, if you will -- that diverge from this first contact: one where the permitting process is handled in the traditional regulatory fashion; and the other, a teamwork approach that is unfolding today.

## THE REGULATORY ROAD MORE TRAVELED

The Trust wanted to sell the land for a housing re-development. According to the city's standard zoning rules, the property was eligible to be divided into six residential lots. Under MCWD and state rules, the degraded wetlands would be protected but not improved.

(Side note: When work does impact wetlands, the developer is required to offset the impacts by restoring other wetlands. If not feasible on site, this is commonly achieved by using a "wetland bank" to buy credits from people who have restored wetlands elsewhere. More on that in a moment.)



## THE PATH WE'RE ON

We facilitated a partnership with the Trust and city of Minnetrista to understand each other's goals. District staff brought its expertise in planning wetland restorations to the table and the city looked at how its rules could encourage an environmentally friendly approach. The Trust, keenly interested in preserving the natural heritage of the land, was flexible in looking for a way that balanced economic return and environmental benefit.

Out of that came a plan for the eventual developer to restore the health of the wetland and adjoining upland buffer -- a total of 42 acres. The restoration would qualify the property as a "cluster development" under the city of Minnetrista's zoning rules, allowing for an additional four properties, increasing the value for the developer and boosting potential tax base for the city. Lastly, as further economic incentive for the wetland restoration, the developer who restores the wetland is eligible to earn the wetland bank credits referenced earlier.



Mader children at their family farm

This creative take on permitting and development is anticipated to become the first wetland bank in the MCWD, reversing a trend that for many years led to net loss of wetlands across the District.

A recent article in the Minnesota Board of Soil and Water Resources newsletter highlighted this creative approach. James Wisker, MCWD Director of Projects and Planning, summed up the moral of our story: "As we have learned time and again, it pays off to think beyond business as usual. By working with landowners, cities and others in a proactive and collaborative manner, the District is able to obtain higher community and natural resource benefits than what could be achieved with a standard, reactive approach."

# GRANTS

## RECORD YEAR FOR GRANT PROGRAMS

Thanks to an increasing interest in clean-water projects, the District's two primary grant programs both received a record number of applications in 2015. The Cynthia Krieg Watershed Stewardship program helps fund innovative ways to encourage stewardship across the watershed. Projects funded this year include workshops on re-using stormwater, educational urban canoe adventures, and resources for maintaining clean-water landscaping.

The Cost Share grant program funds clean-water landscaping like raingardens or restored shorelines. Learn more about the grant funds at [minnehahacreek.org/grants](http://minnehahacreek.org/grants).



## COST SHARE SPOTLIGHT: PARKWAY PLACE TOWNHOMES



Three raingardens under construction at Parkway Place Townhomes

Minneapolis resident Terry Hammink completed the Master Water Steward program (page 11) in 2013 and, like many Stewards, saw how his skills and knowledge could apply right in his front yard. In Terry's case, the front yard is a communal space he shares with the rest of the owners in the Parkway Place Townhomes.

As the townhome association prepared to re-do its parking area, Terry got deeply involved and planned an ambitious project to catch 99 percent of the runoff from the large, two acre lot through raingardens, parking spaces with permeable pavers, and other innovative techniques. The project, which received funding from our Cost Share grant program and Hennepin County, keeps more than 350,000 gallons of polluted stormwater out of nearby Minnehaha Creek each year.

## TAKING THE PULSE OF DISTRICT RESIDENTS

In early 2015 we conducted a scientific, random-sample survey of District residents to gain insight into how they perceive water quality issues and our organization. The survey found that 98 percent of the 600 residents surveyed consider protecting water quality either "very" or "somewhat" important. Nearly half cited water quality concerns as the most important environmental issue facing the Twin Cities, followed by climate change, air pollution and renewable energy.

The survey – which also gathered input on what residents expect from the District and what our priorities should be – is helping us put together our next Comprehensive Plan. The data also helps us track the changes in attitudes and actions of our residents over time. See the full results at [minnehahacreek.org/public-opinion](http://minnehahacreek.org/public-opinion).





# EARTH DAY PHOTO CONTEST DEBUTS

We received more than 100 submissions for our inaugural Earth Day Photo Contest, showcasing the diverse natural beauty of our watershed. See more photos and submit entries for the 2016 contest at [minnehahacreek.org/contest](http://minnehahacreek.org/contest).

## LANDSCAPE CATEGORY



First place, Aldo Abelleira

## RECREATION CATEGORY



First place, Stan Waldhauser

## HELPING COMMUNITIES PLAN FOR INCREASING RAINFALL

With the potential for storms to become more frequent and more intense in a changing climate, communities are taking a new look at how they manage rainwater and flooding. We partnered with two Twin Cities communities – Minneapolis and Victoria – on a federally-funded study that looks the impact of these changes in rainfall and how these communities and others like them can adapt.

The process they followed is covered in the our new guide, *Community Adaptation Planning for Changing Landscapes and Climate*. A copy of the guide is available at [minnehahacreek.org/WET](http://minnehahacreek.org/WET).



# THE STUDENTS BECOME THE MASTERS

## Master Water Stewards program expands metro-wide after successful three-year pilot

One of the District's stated goals is to promote individual stewardship of our natural resources, and to give interested people the knowledge and tools they need to make an impact. Perhaps no initiative in our history better embodies that goal like the Master Water Stewards program, which recently wrapped up the third and final year of its pilot phase and has now expanded metro-wide.

During its first three years, the program was led by the Freshwater Society in partnership with the MCWD and Clean Water Fund. By the end of the pilot program 80 certified Stewards went through a rigorous curriculum and built projects across the watershed that keep more than a million gallons of polluted stormwater out of lakes and streams each year.

As importantly, each Steward studied ways to engage their neighbors in protecting clean water. Stewards commit to at least 25 hours of volunteer work per year and the "capstone" projects they complete as part of the training have two elements: building a project, such as a rain garden; and educating others by hosting an open house, distributing educational materials, or other outreach.

The success of the program inspired watershed districts and cities across the metro to sponsor their own Stewards in 2016. Learn more at [masterwaterstewards.org](http://masterwaterstewards.org).



Stewards standing in front of their recently-installed "cistern," which catches rain to re-use instead of letting it flow into the street

## RECORD DAY FOR MINNEHAHA CREEK CLEANUP



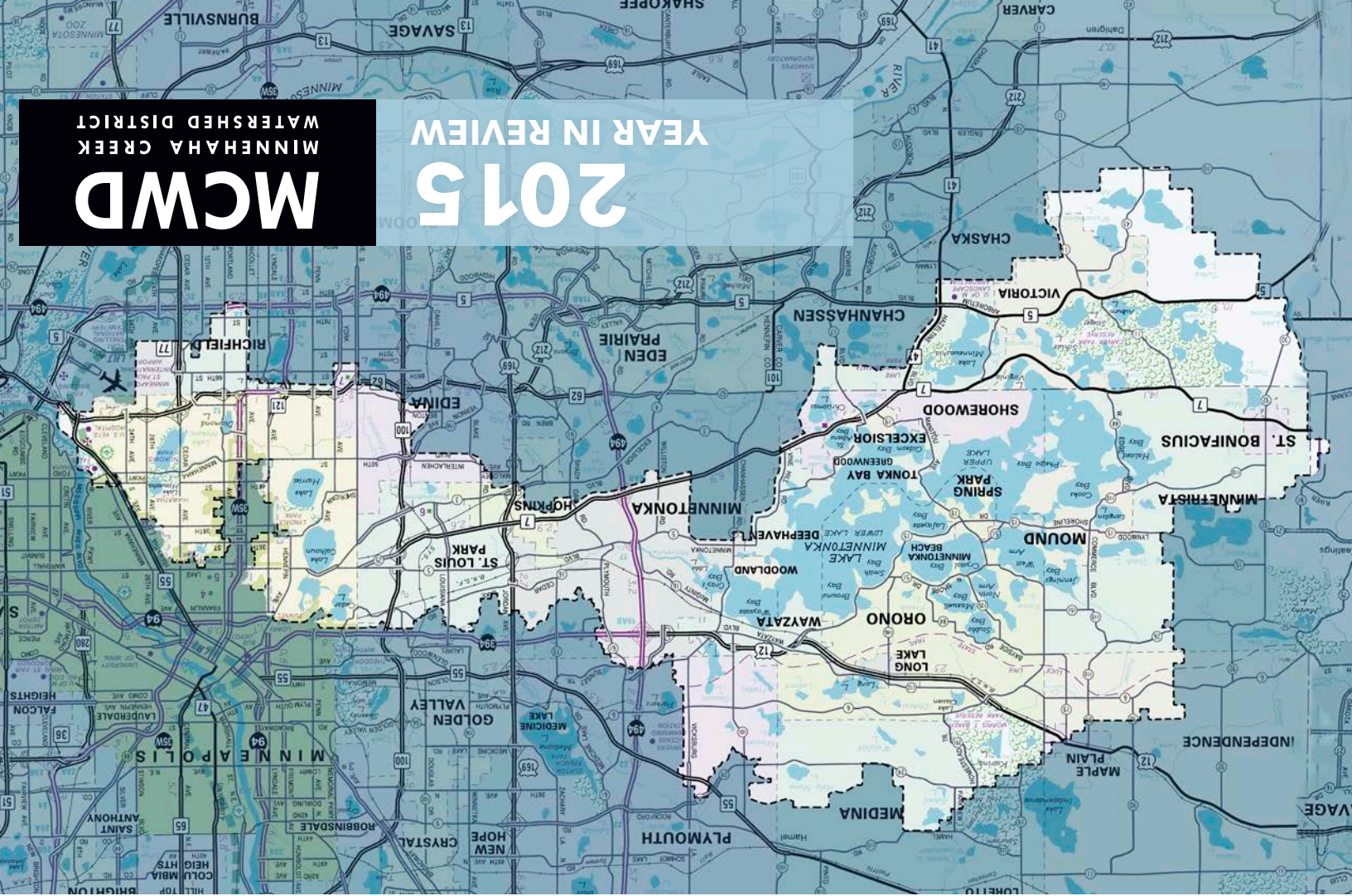
The ninth annual Minnehaha Creek Cleanup was one for the books – a record 1,600 people showed up to collect an all-time high four tons of trash. The event featured an expanded education area that provided activities and information for volunteers of all ages. The 2016 Cleanup is planned for Sunday, July 24. Learn more at [minnehahacreek.org/Cleanup](http://minnehahacreek.org/Cleanup).



# MCWD

MINNEHAHA CREEK  
WATERSHED DISTRICT

# 2015 YEAR IN REVIEW



**MINNEHAHA CREEK**  
WATERSHED DISTRICT

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