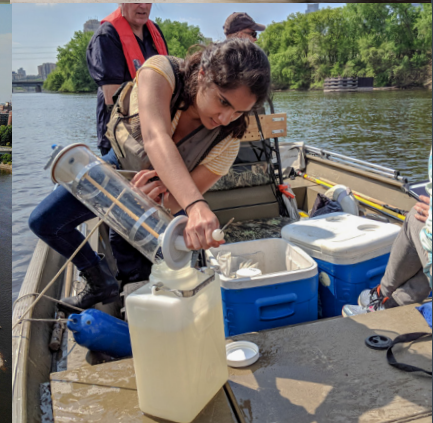




Protect it. Pass it on.

MISSISSIPPI  
WATERSHED  
MANAGEMENT  
ORGANIZATION

# 2018 Annual Activity & Financial Report





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**MISSISSIPPI  
WATERSHED  
MANAGEMENT  
ORGANIZATION**

## 2018 Annual Activity & Financial Report

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### Front Cover

Photo credit: Mississippi Watershed Management Organization

# **2018 Annual Activity & Financial Report**

**Mississippi Watershed Management Organization**

# Abstract

All metro-area watershed management organizations are required to annually submit an activity report, financial report and financial audit within 120 days of the end of the organization's fiscal year.

This report meets the requirements of the Metropolitan Water Management Act ([MS 103B.231](#)) and [Minnesota Rules 8410.0150](#). The intent of an activity and financial report is to provide an annual snapshot or record of where this organization is in meeting its mission, goals and objectives, and what its goals and objectives are for next year. This record is important — not only to meet rule requirements, but also for future organization board and staff members to understand why past decisions were made and directions were taken.

Key components of the required reporting are:

- Budgets and expenditure information
- Annual workplan and evaluation of past workplan
- Status of local water management plan adoption
- Summary of monitoring data
- Permit and enforcement activity
- Status of wetland plans and banking

This report is organized by MWMO areas of expertise and activity. The workplan description is delivered at an area of activity or expertise level, rather than at an individual staff level. Individual workplans are adjusted quarterly to reflect and meet the ever-changing work environment of the MWMO, while areas of activity and expertise needs are driven by annual budget processes of the watershed and its members.

This report may be updated periodically throughout the year. The most recent version will be available on the MWMO's website at [www.mwmo.org](http://www.mwmo.org).



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## Organizational Summary

### Formation and History

The MWMO encompasses 25,543 acres (39.9 square miles) of fully-developed urban lands and waters within the Minneapolis—Saint Paul metropolitan core area. The original members included the cities of Falcon Heights, Lauderdale, Minneapolis, Saint Anthony Village and Saint Paul, the Minneapolis Park and Recreation Board and the University of Minnesota.

### Key Events in the History of the Organization

The first draft of the MWMO Plan was published in December 1986. The 1986 plan was prepared to meet the then-current Minnesota Chapter 509 requirements. The 1986 plan addressed surface water quality and quantity, land use and identified significant point and nonpoint source pollution in the MWMO. It also noted significant groundwater pollution problems from past industrial and commercial practices and storm sewer drainage, but was never approved by the Board of Water and Soil Resources (BWSR) or the MWMO Commission.



During second-generation planning (1997-2000, adopted in 2001), the MWMO acknowledged the limits of its member communities to incur additional financial expenses. Consequently, the MWMO developed strategies for new funding mechanisms. The MWMO sought inclusion on the list of Special Taxing Districts ([MS 275.066](#)) and, in 2001, the MWMO became the first joint powers WMO to receive an ad valorem levy authority necessary to implement plan goals and objectives. Falcon Heights and the University of Minnesota left the organization. In September of 2002, the MWMO hired its first two full-time staff members to implement the plan.

The current plan, approved in May 2011, uses information and data from past studies and actions to address a variety of issues deemed significant by the MWMO Citizen Advisory Committee (CAC), the MWMO Technical Advisory Committee (TAC) and the MWMO Board of Commissioners.

The Mississippi River is the MWMO's natural resource focus, nexus of the urban area we know as the Twin Cities. The river itself provides important water-based ecosystem advantages and facilitates many other beneficial activities and services, including: hydroelectricity; barge access; habitat, wildlife corridors and recreational water-related amenities; industrial, commercial and residential land uses; public drinking water; and stormwater and municipal wastewater discharge. Within the boundaries of the MWMO, surface water either flows directly overland or drains through pipes to the river. All groundwater generally flows toward the river as well.

The MWMO is one of several entities that has developed plans to address critical watershed issues within the MWMO. The MWMO believes coordination of these plans and the entities that drafted them are imperative to successful watershed management. The complex network of private and public (federal, state, regional, municipal and local) agencies involved in water and natural resource management and land-use planning and development must work together to achieve mutual goals. To put financial and human resources to best use, land use and environmental policies, projects and programs stemming from those agencies must be implemented in a complementary, non-duplicative manner.

In 2011, Six Cities Watershed Management Organization was dissolved. The Cities of Columbia Heights, Fridley and Hilltop became members of the MWMO in July 2012, joining the Cities of Minneapolis, Saint Paul, Lauderdale and Saint Anthony Village, and the Minneapolis Park and Recreation Board. These entities entered into a new, revised joint and cooperative agreement (i.e., Joint Powers Agreement under [MS Section 471.59](#)) that now form the MWMO.

The MWMO Watershed Management Plan was amended to include the area within the new member cities. In 2014, the MWMO went through a staff reorganization to better meet the goals of the organization and to support and coordinate implementation with its members to achieve water quality, water quantity and habitat goals. Depending on the season, the MWMO

may have up to 20 staff members across all employment categories—full-time employees, temporary or seasonal employees and interns.

## Vision and Mission Statements

**Vision Statement:** To lead, to inspire, to act, to educate, and to create a shared vision for a river system with ecological integrity.

**Mission Statement:** To lead, and to foster stewardship of the watershed with actions that promote civic ownership and responsibility and through measures that achieve diverse and functional ecosystems.

## Summary of 2018 Services and Operations

Number of Employees (including seasonal and interns) . . . . .	22
Number of FTEs . . . . .	15
FTE Average Length of Service . . . . .	7 years
FTE Turnover Rate. . . . .	0 percent
Total Levy Operating Revenue. . . . .	\$1,820,000
Total Levy Capital Improvements and Initiatives Revenue . . . . .	\$3,825,000

## Board of Commissioners

The governing body of the MWMO is its commission, which consists of seven voting commissioners. All appointments to the commission are made in accordance with [Minnesota Statutes 103B.227](#) and Articles III and IV of the MWMO Joint and Cooperative Agreement. These statutes and articles together lay out the appointment process and powers of the Board of Commissioners of the MMWO.

Notices of all vacancies and appointments shall be published at least 15 days prior to filling a vacancy in a legal publication of the member’s community seeking a commissioner. The council of each member shall appoint one commissioner to represent the member to the commission. Each commissioner shall serve until his or her successor is appointed.

Member councils may select and appoint alternates to the commission in the same manner as commissioners. In the absence of a member’s commissioner, the designated alternate may vote and act in the commissioner’s place. The alternate shall serve a term concurrent with the member’s commissioner. The council of each member shall determine the eligibility and qualifications of its commissioner and alternate.

## Commissioners

**Commissioner Kevin Reich, City of Minneapolis, Chair**

350 South 5th Street, Room 307, Minneapolis, MN 55415  
612-673-2201

**Commissioner Jim Saefke, City of Fridley, Vice-Chair**

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-746-4970

**Commissioner Mary Gaasch, City of Lauderdale, Treasurer\***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-746-4970

*\*Served January–September*

**Commissioner Jerry Faust, City of Saint Anthony Village**

3301 Silver Lake Road, St. Anthony, MN 55418  
612-782-3301

**Commissioner Kale Severson, Minneapolis Park and Recreation Board**

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-746-4970

**Commissioner Cailin Rogers, City of Saint Paul**

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-746-4970

**Commissioner Donna Schmitt, City of Columbia Heights and City of Hilltop**

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-746-4970

## Alternate Commissioners

**Alternate Commissioner Randy Stille, City of Saint Anthony Village**

3301 Silver Lake Road, Saint Anthony, MN 55418  
612-782-3301

**Alternate Commissioner Steve Fletcher, City of Minneapolis**

350 South 5th Street, Room 307, Minneapolis, MN 55415  
612-203-1459

**Alternate Commissioner Chris Meyer, Minneapolis Park and Recreation Board**

2117 West River Road, Minneapolis, MN 55411

612-230-6443

**Alternate Commissioner Matt Haas, City of Saint Paul**

2522 Marshall Street NE, Minneapolis, MN 55418-3329

612-746-4970

**Alternate Commissioner Linda Johnson, City of Hilltop and City of Columbia Heights**

2522 Marshall Street NE, Minneapolis, MN 55418-3329

612-746-4970

**Alternate Commissioner Dolores Varichak, City of Fridley**

2522 Marshall Street NE, Minneapolis, MN 55418-3329

612-746-4970

**Alternate Commissioner Jeffrey Dains, City of Lauderdale\***

2522 Marshall Street NE, Minneapolis, MN 55418-3329

612-746-4970

*\*Assumed primary commissioner position September–December.*

## **Citizen Advisory Committee**

The MWMO Citizen Advisory Committee (CAC) meets at the request of the MWMO Board of Commissioners to assist in managing the water resources of the MWMO. The scope of responsibilities for the CAC include: reviewing funding proposals (Stewardship Fund Grants, Capital Improvement Projects, etc.), reviewing the MWMO's annual capital budget and participating in planning for the watershed. Other responsibilities may be assigned to the CAC by the Board of Commissioners as needed. The CAC provides review and feedback in the form of recommendations to the Board of Commissioners.

Applications are accepted year-round, and open positions are filled throughout the year. Applications submitted to replace incumbents are due by December 15. Appointments are for one year and are renewable annually. Up to two at-large positions may be filled by people who live outside of the MWMO boundaries. All CAC members may be contacted through the MWMO office.



## CAC Positions

### **Columbia Heights (one)**

Connie Buesgens

### **Fridley (one)**

Nick Olberding

### **Hilltop (one)**

*Open*

### **Lauderdale (one)**

*Open*

### **Saint Anthony Village (one)**

Lona Doolan

### **Saint Paul (one)**

Charlene Brooks

### **Minneapolis (five)**

Shiela Wiegman      Downtown

Nicole Menard      North

Perry Dean      Northeast

Craig Larson      South

Ann Lewandowski      Southwest

### **At-Large Positions (five)**

P. Victor Grambsch      Minneapolis

Anne Wilkinson      Minneapolis

Phyllis Carol Hejl      Minneapolis

William Risse      Saint Anthony Village

Andrew Dickhart      Minneapolis-Southwest

Joe Handtmann      Minneapolis-Southwest

## Staff

The MWMO Board of Commissioners first hired staff in September of 2002. The Board of Commissioners first established, and now maintains, personnel policies and structures to attract and retain qualified personnel to implement MWMO activities. This is accomplished by encouraging continual performance improvement through a well-administered training, salary and performance-review programs. In addition to its own full-time employees, the MWMO shares employees with the City of Saint Anthony Village in the areas of human resources and financial management, and the MWMO hires part-time regular and seasonal employees and interns as needed to complete its annual plan of work.

## 2018 MWMO Staff

### Executive Director

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[dsnyder@mwmoo.org](mailto:dsnyder@mwmoo.org)

612-746-4971

### Water Resources Director

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[usingh@mwmoo.org](mailto:usingh@mwmoo.org)

612-746-4980

### Projects and Outreach Director

Stephanie Johnson, PhD, PE

[sjohnson@mwmoo.org](mailto:sjohnson@mwmoo.org)

612-746-4978

### Planning Principal

Dan Kalmon, AICP

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612-746-4977

Communications Principal

Nick Busse

[nbusse@mwmo.org](mailto:nbusse@mwmo.org)

612-746-4974

Capital Projects and Stewardship Specialist

Marcy Bean

[mbean@mwmo.org](mailto:mbean@mwmo.org)

612-746-4979

Project Planning and Implementation Specialist

Brett Eidem

[beidem@mwmo.org](mailto:beidem@mwmo.org)

612-746-4983

Training and Community Learning Specialist

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[amoore@mwmo.org](mailto:amoore@mwmo.org)

612-746-4981

Stewardship and Community Outreach Specialist

Tammy Schmitz

[tschmitz@mwmo.org](mailto:tschmitz@mwmo.org)

612-746-4988

Youth and Community Outreach Specialist

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612-746-4975

Water Resources Specialist

Jen Keville

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612-746-4986

Monitoring and Instrumentation Specialist

Brian Jastram

[bjastram@mwmo.org](mailto:bjastram@mwmo.org)

612-746-4985

Environmental Specialist

Brittany Faust

[bfaust@mwmo.org](mailto:bfaust@mwmo.org)

612-746-4992

Environmental Specialist

Jim Rudolph

[jrudolph@mwmo.org](mailto:jrudolph@mwmo.org)

612-746-4987

Administrative Specialist

Max Dalton

[mdalton@mwmo.org](mailto:mdalton@mwmo.org)

612-746-4976

Administrative Assistant

Christine Gilbert

[cgilbert@mwmo.org](mailto:cgilbert@mwmo.org)

612-746-4972

Capital Projects Intern

Madeline Hankard

Capital Projects Intern

Jackelyn Seamans

Communications and Outreach Intern

Emma Keiski

Water Quality Intern

Kyle Blazek

Water Quality Intern

Shanti Penprase

Water Quality Intern

Rikita Patel

## 2018 Shared Staff

The MWMO shared the following staff with the City of St. Anthony Village in 2018:

Accountant

Ka Vue

[ka.vue@ci.saint-anthony.mn.us](mailto:ka.vue@ci.saint-anthony.mn.us)

612-782-3334

Human Resources Coordinator

Charlie Yunker

[charlie.yunker@ci.saint-anthony.mn.us](mailto:charlie.yunker@ci.saint-anthony.mn.us)

612-782-3315

Finance Director

Shelly Rueckert

[shelly.rueckert@ci.saint-anthony.mn.us](mailto:shelly.rueckert@ci.saint-anthony.mn.us)

612-782-3316

## Consultants

In accordance with Minnesota Statutes [Section 103B.227](#), subdivision 5, the MWMO sends out requests for proposals for legal, professional and technical (engineering) and consultant services at least once every two years (in the fall of even-numbered years). At its annual business meeting in January, the MWMO Board of Commissioners reviews and approves a list of approved consultants. The Board reserves the right to alter the list at any point in order to meet the needs of the organization.

The following is a list of organizations that provided services to the MWMO in 2018:

### Accounting

City of Saint Anthony Village

3301 Silver Lake Rd.

St. Anthony, MN 55418

651-782-3301

### Engineering

Barr Engineering

4700 W. 77th St.

Minneapolis, MN 55435-4803

952-832-2600

### Financial Audit

Redpath and Company

55 E. Fifth St., Ste. 1400

St. Paul, MN 55101

651-426-7000

Emmons and Olivier Resources

651 Hale Ave. N.

Oakdale, MN 55128

651-203-6001

HGA

420 N. 5th Street  
Minneapolis, MN 55401  
612-758-4000

Houston Engineering, Inc.  
6901 East Fish Lake Rd., Ste. 140  
Maple Grove, MN 55369-5400  
763-493-4522

Inter-Fluve  
2121 Randolph Ave., Ste. 200  
St. Paul, MN 55105  
651-243-9700

RESPEC  
1935 County Rd. B2 West, Ste. 230  
Roseville, MN 55113  
651-305-2280

TKDA  
444 Cedar St., Ste. 1500  
UBS Plaza  
St. Paul, MN 55101  
651-292-4400

Stantec  
2335 West Highway 36  
St. Paul, MN 55113  
651-636-4600

Wenck Engineering  
P.O. Box 249  
1800 Pioneer Creek Center  
Maple Plain, MN 55359  
763-479-4201

WSB and Associates, Inc.  
763-541-4800  
701 Xenia Ave. S., Ste. 300  
Minneapolis, MN 55416

## Payroll and Financial Services

City of St. Anthony Village  
3301 Silver Lake Rd.  
St. Anthony, MN 55418  
651-782-3301

## Banking and Investments

4M Fund  
5298 Kyler Ave. NE  
Albertville, MN 55301  
763-497-1490

Multi-Bank Securities, Inc.  
1000 Town Center, Ste. 2300  
Southfield, MI 48075

Northeast Bank  
77 Broadway St. NE  
Minneapolis, MN 55413  
612-379-8811

Pershing, LLC  
1 Pershing Plaza  
Jersey City, NJ 07399

## Legal

Kennedy and Graven, Chartered  
470 Pillsbury Center, 200 S. 6th St.  
Minneapolis, MN 55402  
612-337-9215

Smith Partners  
400 2nd Ave. S.  
Minneapolis, MN 55401  
612-344-1400



## Information Management and Technology

City of Roseville Management Information Services — Metro-INET  
2660 Civic Center Dr.  
Roseville, MN 55113  
651-792-7092

## Other Service Providers

Anoka Conservation District  
1318 McKay Dr. NE  
Ham Lake, MN 55304  
763-434-2030

Ruth Murphy  
442 Summit Ave.  
St. Paul, MN 55102

Fortin Consulting  
215 Hamel Rd.  
Hamel, MN 55340  
763-478-3606

Metropolitan Council Environmental Services  
455 Etna St.  
St. Paul, MN 55304  
763-434-2030

MMC Associates  
1312 Portland Ave.  
St. Paul, MN 55104  
651-647-6816

St. Anthony Falls Laboratory, University of MN  
2 Third Ave. SE  
Minneapolis, MN 55414  
612-624-4363

Three Rivers Park District  
3000 Xenium Ln. N.  
Plymouth, MN 55441  
763-694-7651

Freshwater Society  
2424 Territorial Rd., Suite B  
St. Paul, MN 55114  
651-313-5800

Wilderness Inquiry  
808 14th Ave. SE  
Minneapolis, MN 55414  
612-676-9400

## Communications/Website

AcrossRoads Films  
9001 6th St. NE  
Blaine, MN 55434  
605-484-2827

Dogtooth Design  
755 Montana Ave. E.  
St. Paul, MN 55106  
612-547-6461

Sara Specht  
3433 Bryant Ave. S. #1  
Minneapolis, MN 55408  
612-968-0630

Windmill Design  
1227 Tyler St. NE #180  
Minneapolis, MN 55413  
612-521-4286



**Figure 2.** The newly reconstructed Hall's Island in August 2018. The Minneapolis Park & Recreation Board led a team to rebuild the island, which was destroyed by industrial development in the 1960s. The MWMO joined with several partners helping to fund the project, which will provide a unique new park amenity and a rich source of habitat along the Mississippi River.

## Capital Project Grants

### Purpose

The MWMO's capital project grants fund projects that protect and improve the water quality and ecosystem health of water resources within the MWMO watershed. These projects implement unique and innovative solutions for stormwater management in highly developed urban areas. They also develop community partnerships to build understanding, knowledge and initiative related to water, habitat and natural resource issues and solutions.

### Objectives

- Encourage the integration of the stormwater system with other infrastructure systems, e.g. energy, water supply and reuse, and wastewater treatment to create greater efficiencies of all infrastructure systems.
- MWMO staff actively participate as members of the project team from ideation through design and implementation.

- Build the MWMO's CIP List for the year 2018 and beyond with opportunities to collaborate on capital projects that meet both MWMO and member organization goals.
- Strengthen our ability to reach key audiences by leveraging other MWMO activity areas.
- Leverage funding sources to acquire key parcels of land within the MWMO that will lead to establishment of water quality and habitat improvements.

## 2018 Implementation

The MWMO completed, entered into or continued agreements in 2018 or allocated capital funds for the following capital projects:

### 4th Street SE Landscape for Habitat

An extension of the Towerside District Stormwater System, a habitat-rich landscape will be installed in the public right-of-way as part of the 4th Street SE reconstruction. This innovative approach to the urban landscape will be maintained by the Towerside district developers and will be irrigated by reusing stormwater from the district system. Due to delays in the 2018 construction season, these improvements are now scheduled to be installed in 2019.

### Cemstone Stormwater Reuse

Concrete and aggregate supplier Cemstone captures and reuses stormwater runoff to help make concrete at their North Minneapolis production facility. The MWMO grant supported construction of a 190,000-gallon underground storage system. This system was connected to an existing reuse system within the plant that harvested truck washout water for cement production. The system was built to accommodate a 10-year storm event for the site's 2-acre impervious drainage area. This size system maximizes reuse potential, and has the ability to conserve up to 1.2 million gallons per year of potable water.

### East Side Storage and Maintenance Facility

This new City of Minneapolis Public Works facility will house multiple city departments and create space for city vehicle storage and maintenance areas. With a highly visible location, the project provides opportunities to demonstrate green infrastructure practices to a key user group — public works maintenance staff, who have potential to impact our water resources through their work.

### Fridley Smart Salting BMPs

As part of their new public works facility, the City of Fridley purchased a Cargill AccuBatch 800 brine maker for use in their winter maintenance activities. The MWMO provided a grant

to the city to support the retrofit of a portion of their existing snowplow fleet to allow for use of this brine in snow removal operations. MWMO grant funds were used to purchase equipment for four of their existing vehicles. Brine application systems, GPS units for tying into a web-based tracking software, and road temperature sensors were installed. Funds were also used to purchase an anti-icing trailer system. The city is committed to upgrading the rest of their fleet as new vehicles are purchased and will use lessons learned from the outfitting of these initial four vehicles to inform future decisions.

### **Hall's Island Reconstruction**

The Minneapolis Park and Recreation Board led the creation of a new park along the Mississippi River as part of the Above the Falls Master Plan. The first phase of the park was to reconstruct a historic island in the river, Hall's Island. MWMO grant funds were used for engineering of the island and to establish habitat. The project is part of a key goal of improving habitat in the Critical Area of the river.

### **Hiawatha Collegiate High School Stormwater Reuse**

Hiawatha Collegiate High School's new campus was built with a stormwater reuse system capable of irrigating the school's new soccer field and adjacent landscaping. The underground storage tank will capture an estimated 700,000 gallons of stormwater each year for reuse. The school plans to leverage the educational potential of the system to help teach the students about conservation and sustainability.

### **Northeast Green Campus, Phase II (aka Edison High School Green Campus)**

A two-phase series of complementary projects were installed to manage and reuse stormwater at Thomas Edison High School in Northeast Minneapolis. Phase II was completed in 2017, capturing runoff from the gymnasium roof and plaza and reusing it to irrigate the adjacent athletic fields and track. Stormwater monitoring was established on both phases, and a water quality educational component has been implemented for the students. The estimated average annual volume of water captured and reused is 962,000 gallons.

### **Old Bassett Creek Tunnel, Phase I Cleanout**

MWMO partnered with the City of Minneapolis to begin cleanout of the Old Basset Creek Storm Tunnel. This first phase included cleanout of the uppermost 1,080 feet of the 7,900-linear-foot tunnel. The city had constructed removable lids under the street to obtain access to the tunnel. Sediment was removed utilizing skid steers and walk behind excavators to move the sediment to the access, where a back hoe on the surface would place the sediment in a containment area to allow for the water to decant before hauling away. The project removed approximately 935 tons of sediment and 450 pounds of phosphorus from potentially



entering the Mississippi River. Future phases would require more access hatches be installed to provide construction equipment simple access to the tunnel.

### **Riverfront Regional Park Restoration**

In partnership with Anoka County Parks, the MWMO assisted in funding of riverbank stabilization and stormwater treatment at Riverfront Regional Park. This is the first such project in the park, which contains nearly 7,000 linear feet of riverbank, where there are likely additional projects to partner on in the future. The MWMO helped fund a large raingarden to capture and infiltrate runoff from a majority of the boat landing parking lot, as well as bioengineering around the reconstructed stormwater outfall. The MWMO installed bank pins to monitor erosion of the riverbanks over time, and will look to partner with Anoka County on future stabilization here and at Islands of Peace Park.

### **Towerside District Stormwater System**

This project is part of a larger redevelopment effort that seeks to establish an “Urban Innovation District.” This district stormwater demonstration project to be completed in 2019 will model the difference between a conventional stormwater system layer that provides a singular treatment and conveyance function and an integrated district stormwater system that manages stormwater as a valued resource and redesigns stormwater infrastructure at a net savings to public spaces.

### **Water Works Stormwater Reuse System**

The Minneapolis Park and Recreation Board is leading in the creation of a new park along the Mississippi River, at a highly visited area adjacent to the Stone Arch Bridge in downtown Minneapolis. Part of the RiverFirst initiative, the project will implement a long term vision for the area, integrating historical features of the City with park space, green infrastructure, and stormwater reuse within its park pavilion. The MWMO is funding a stormwater reuse system that will collect and treat roof runoff from the existing rooftops of adjacent buildings. This water will be used for irrigation at the Water Works site and toilet flushing in the pavilion.

### **Westminster Stormwater Reuse Demonstration Project**

This 3,100-member church in downtown Minneapolis installed a stormwater reuse system that uses recycled stormwater for flushing toilets and urinals, irrigating the exterior landscape, and running a stormwater reuse demonstration fountain in the church’s new main plaza. The MWMO and the Metropolitan Council co-funded the stormwater reuse system, which is among the first in the city to use recycled stormwater in interior plumbing.

**Table 1.** Capital Project Grants Implementation

<b>Implementation Table</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
CIP Budget	\$2,500,000	\$2,500,000	\$2,500,000
2333 Jackson Street NE Blue Roof	--	--	\$200,000
24th Avenue SE Infiltration Project	\$650,000	--	--
4th Street SE Landscape for Habitat	--	--	\$500,000
8th Street Stormwater Planters	--	--	\$350,000
Cemstone Stormwater Reuse	--	\$150,000	--
East Side Storage and Maintenance Facility	--	--	\$550,000
Fridley Smart Salting BMPs	--	--	\$80,000
Fridley Street Reconstruction (2015)	\$330,000	--	--
Fridley Street Reconstruction (2017)	\$196,000	--	--
Hall's Island Reconstruction	--	\$1,500,000	--
Hawthorne Eco-Village Apartments	\$160,000	--	--
Hiawatha Collegiate High School Stormwater Reuse	--	\$162,000	\$18,000
Minneapolis Sculpture Garden	\$150,000	--	--
Northeast Green Campus, Phase II	\$380,000	\$23,000	--
NorthPoint Health and Wellness Center Expansion	--	--	\$350,000
Old Bassett Creek Tunnel Phase I Cleanout	--	\$187,000	--
Riverfront Regional Park Restoration	\$10,000	\$18,000	--
St. Anthony Lane South Industrial Park	--	--	\$250,000
Towerside District Stormwater System	\$60,000	--	--
Water Works Stormwater Reuse System	--	--	\$900,000
Westminster Stormwater Reuse Demonstration Project	--	\$550,000	\$50,000

Below is an evaluation of progress made towards MWMO's Watershed Management Plan Goals via capital projects implemented.

Projects implemented in 2017 included: the 24th Avenue SE Infiltration Project; Fridley Street Reconstruction (2015); Hawthorne EcoVillage Apartments; and the Westminster Stormwater Reuse Demonstration Project.

Projects implemented in 2018 included: Cemstone Stormwater Reuse; Fridley Street Reconstruction (2017); Hall's Island Reconstruction; Hiawatha Collegiate School Stormwater Reuse; Old Bassett Creek Tunnel Phase I Cleanout; and the Riverfront Regional Park Restoration.

**Table 2.** Capital Project-Related Watershed Management Plan Goals and Measures Achieved

<b>Water Quality and Quantity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Total Number of Projects	4	6	--
Total Annual TSS Removed (lbs)	14,857	1,870,864	--
Total Annual TP Removed (lbs)	44.26	450	--
Total Volume Reused (gal)	155,872	1,900,000	--
Total Volume Infiltrated (cf)	70,943	51,035	--
<b>Urban Stormwater Management</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Types of BMPs Installed</b>			
Infiltration Basin	21	2	--
Cistern	2	2	--
Filtration Basin	3	0	--
Permeable Pavement	3	0	--
Iron-Enhanced Sand Filter	0	0	--
Pretreatment	2	0	--
Streambank Stabilization	0	2	--
Habitat Restoration	0	1	--
<b>Ecosystem Health</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
SF Vegetation Added	10,046	92,610	--
Trees Added	4	61	--

## 2019 Workplan

Several projects were underway in 2018 that will be finalized and reimbursed in 2019. Those projects include:

- Westminster Stormwater Reuse Demonstration Project
- 4th Street SE Landscape for Habitat
- East Side Storage and Maintenance Facility

In addition, several new capital projects will get underway, including:

- An innovative “smart blue roof” system at 2333 Jackson Street NE in Minneapolis. The new multi-family housing development, known as “JAX Apartments,” will feature a stormwater system that marries multiple treatment methods with smart sensor technology.
- Construction of a stormwater-friendly landscape for the expanded NorthPoint Health and Wellness Center in North Minneapolis. A series of infiltration gardens will be constructed to manage stormwater from a portion of the new building, the plaza, and new parking lot.
- Construction of five stormwater planters along a one-block stretch of South 8th Street in downtown Minneapolis. These bioinfiltration basins will capture and treat runoff from the street, sidewalks and nearby alleys. These best management practices, part of a pilot project with the Downtown Improvement District, will remove an estimated 200 pounds of total suspended solids and 1 pound of total phosphorus annually.

Staff will also collaborate with member organizations to identify priority stormwater projects for the MWMO’s future five-year capital improvement project schedule. The MWMO will work with private landowners to design and fund selected stormwater projects where there is a demonstrable public benefit.





**Figure 3.** MWMO Youth and Community Outreach Specialist Michaela Neu helps a young volunteer at a raingarden planting event at Mill City Commons. The MWMO awarded Mill City a Stewardship Fund Action Grant to build a stormwater-friendly landscape in 2018.

## Communications and Outreach

### Purpose

The MWMO's communications and outreach initiatives provide information, training, educational opportunities, financial resources and other services to promote community partnerships and good stewardship of water and natural resources.

### Objectives

- Provide services and products to inform and educate the watershed community using a variety of methods and media.
- Create and support opportunities for public participation and involvement.
- Collaborate with other professionals, networks and communities to develop partnerships, leverage funding and increase the reach and effectiveness of watershed education.

- Inform and educate land use decision-makers about the relationship between land use and natural resource protection/conservation.
- Develop cultural competencies to directly reach diverse communities of the MWMO.
- Provide training and certificate programs for the evaluation, development and use of new technologies and management practices.
- Promote and host workshops and training opportunities for MWMO staff, staff of member organizations, Master Water Stewards, Citizen Advisors, community volunteers and other entities involved in water resources management.
- Support and promote local stewardship initiatives, community leadership and citizen involvement.
- Create demonstration sites to inform and educate the watershed community

## 2018 Implementation

The MWMO carried out the following communications and outreach activities in 2017:

### Community Outreach

The MWMO partnered on 45 community events, providing exhibits and/or activities for participants. MWMO staff or volunteers engaged more than 1,130 visitors during these activities, teaching them actions they could take to protect water quality and providing resources to empower them. Three new outreach tools were developed this year: the *Good Neighbor Guide*, the *Protecting Water Quality Together* brochure and a freestanding display housed at the MWMO.

The *Good Neighbor Guide* is an “all-in-one” field book with information about the urban watershed, common water pollutants and BMP actions and installations that residents can use to be “good neighbors” to water, habitat and each other. MWMO staff created and implemented a robust outreach campaign to pilot the *Good Neighbor Guide* at more than 30 of the community events. During events, staff surveyed visitors to gauge their knowledge about stormwater and water pollutants in their own neighborhoods. A post-event survey was sent to participants to measure learning and to identify which actions they would be willing to take to protect water quality. Results will guide 2019 outreach planning.

The *Protecting Water Quality Together* brochure was designed to overcome barriers in engaging residents living in high-density housing, since they don’t own property where they can use or install Best Management Practices. The brochure encourages them to clean up after



pets, wash vehicles at commercial car washes, join community clean ups, adopt a stormdrain, reduce waste and support clean water policies and projects.

### Email Bulletins/Newsletter

Once again in 2018, the MWMO sent out a quarterly email newsletter (coinciding with the winter, spring, summer and fall seasons) to inform subscribers about MWMO projects, initiatives and events. The MWMO also sends out periodic email bulletins on a variety of watershed-related topics. Email list subscribers can choose their own topics of interest; more than two-dozen individual topics are available, including categories such as “Classes and Workshops,” “Home and Garden Tips,” and “News Releases.”

MWMO uses the GovDelivery/Granicus platform, and has experienced consistent growth in both the number of subscribers as well as the engagement rate since implementing the platform in 2017. (Prior to 2017, the MWMO used MailChimp as its direct email platform.)

**Table 3.** MWMO Email List Overview

<b>Metric</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Email Bulletins Sent	26	106	135
Engagement Rate	22.2%	38.8%	45.7%
Total Subscribers	2,073	3,628	5,016

### Greening Teen Teamworks

Greening Teen Teamworks provides water quality education to the Minneapolis Park and Recreation Board’s Teen Teamworks summer youth employment program. Educators worked with the Teen Teamworks crews multiple times over the course of the summer and reached approximately 200 youth. Working through Teen Teamworks provides repeated contact with hard-to-reach audiences and practical opportunities to use their knowledge to protect clean water. Greening Teen Teamworks encourages crews to take action to improve water quality at their park work sites.

### Master Water Stewards

The Master Water Stewards program increases knowledge and awareness of water quality and create a base of volunteers who are able and comfortable to work within their communities to affect change. In 2018, the third cohort of 15 Master Water Stewards installed stormwater BMPs in six different locations around the watershed for their capstone projects. The fourth cohort of three Master Water Stewards trainees began their coursework in the fall of 2018. With three cohorts of certified stewards, the MWMO is actively working with the stewards and with the Freshwater Society to develop a volunteer leadership structure to maximize engagement and provide relevant continuing education and volunteer opportunities.

## Media Relations

The MWMO continued working with local and national news media outlets in 2018, promoting its projects and initiatives through news releases and interviews with reporters. Staff tracked a total of 16 earned media hits during the course of the year. When available, links to media stories that mention the MWMO are posted on the MWMO website in the [“Newsroom” section](#).

## Mississippi River Green Team

The Mississippi River Green Team is a two-year employment and conservation program for teens from North and Northeast Minneapolis. In 2018, 18 youth were employed. The Green Team was co-created by the Minneapolis Park and Recreation Board (MPRB) and the MWMO as an opportunity for youth to have a mentored job experience, learn about environmental careers, and acquire new skills. Typical daily activities include working to prevent water pollution, removing invasive species, building raingardens, planting trees and prairie plants, and assisting in citizen science projects. Youth have the chance to participate in the Mississippi River Green Team for two years.

After those two years, they are a part of a supportive network that works with them to help secure jobs to expand their skills and get them ready for the future. At least five Mississippi River Green Team alumni found jobs in environmental fields at local organizations such as Minneapolis Park and Recreation Board, Three Rivers Park District, Mississippi Park Connection and the Minnesota Valley National Wildlife Refuge. The MWMO also developed a partnership with The Nature Conservancy in which three youth completed a month-long internship through the Leaders in Environmental Action for the Future (LEAF) program.

## Professional Workshops and Trainings

The MWMO sponsored and facilitated trainings on turfgrass maintenance and winter maintenance with reduced environmental impacts. More than 126 winter and summer maintenance professionals, property owners and supervisors in the public and private sectors attended a total of six trainings held in 2018. These trainings are a part of a voluntary maintenance certification program through the Minnesota Pollution Control Agency and were subsidized by a PCA/EPA 319 grant.

Also this year, in partnership with Augsburg University, the MWMO offered a series of three workshops to property owners and managers in the Cedar-Riverside neighborhood. These workshops included information about managing stormwater, creating sustainable landscapes and finding funds and support for large-scale water-quality-protecting projects. The workshop series developed into a community of practice, which aims to support ongoing stormwater management with an emphasis on collaboration among property owners for maximum impact. Representatives from four different properties came together for this workshop series in addition to a variety of experts and other stakeholders.

In 2018, the MWMO launched a new model for education and engagement for elected officials. These two-hour workshops focused on a single topic related to watershed management and include time for activities and networking in addition to a presentation. Two workshops were held and 44 elected officials and staff engaged.

## Social Media

The MWMO maintains an active social media presence on Twitter, Facebook, LinkedIn, Instagram and YouTube. Once again in 2018, MWMO social media channels experienced steady growth in both user engagement and overall numbers of followers. Facebook and Twitter in particular are among the MWMO's most impactful communication platforms, with some individual posts reaching tens of thousands of users

**Table 4.** Snapshot of MWMO Social Media Followers

Channel	2015	2016	2017	2018
Facebook	556	881	1,163	1,624
Instagram	N/A	133	269	650
LinkedIn	23	59	89	134
Twitter	511	720	945	1,178

## Stewardship Fund Grants

MWMO Stewardship Fund Grants provide financial assistance to community-led projects and education efforts to improve and conserve water and natural resources in the watershed.

Financial assistance is provided through four types of Stewardship Fund Grants. Mini Grants offer up to \$3,000 in funding for short-term or smaller-scale water quality projects. Planning Grants offer up to \$10,000 in funding to plan projects that are significant in scope and cost. These grants are used to assess the potential success of a project or develop the details required to make a project actionable. Action Grants offer up to \$50,000 in funds for the implementation of fully-designed projects, significant in scope and cost. Master Water Steward Grants are offered to stewards that have completed their certification who wish to accomplish projects that will improve and/or protect water quality.

All proposals are reviewed by MWMO staff. Planning and Action Grants are also reviewed by the MWMO Citizen Advisory Committee and approved by the MWMO Board of Commissioners.

Grants are awarded based on a project's ability to:

- **Develop partnerships with community organizations.**

Projects create partnerships and build community understanding with organizations and

people wanting to proactively engage in clean water issues, demonstrate new methods, and extend the MWMO's ability to protect clean water and improve water quality, and protect and restore habitat and natural resources through building community knowledge and stewardship.

- **Protect or improve the quality of water, habitat, and natural resources.**  
Projects reduce pollution entering our streams, wetlands, lakes, river and groundwater, and projects that prevent flooding, lessen the effects of drought, retain water on site and/or restore and maintain habitat.
- **Build community understanding, knowledge, and initiative related to water, habitat, and natural resource issues and solutions.**  
Projects engage and educate people in the community about water quality issues. These projects will result in awareness of water issues and changed behaviors that protect water. Organizations receiving grants will increase their ability to lead and promote clean water efforts.

*Note:* Stewardship Fund Grants may be used to create new external programs, but are not intended to sustain ongoing efforts. Projects must benefit people who live, learn, and/or work in or near the MWMO watershed. Physical projects must also lie within the MWMO watershed boundaries or drain to receiving water bodies within the watershed.

**Table 5.** Stewardship Fund Grants

<b>Stewardship Fund Grants</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Total no. awarded (no. proposed)	15 (37)	21 (32)	--
Master Water Steward Grants	--	2 (2)	--
Mini Grants ( <i>Total; breakdown by season below</i> )	9 (22)	9 (14)	--
Spring	4 (9)	3 (6)	--
Summer	5 (13)	6 (8)	--
Planning Grants	3 (10)	5 (10)	--
Action Grants	3 (5)	5 (6)	--

## Stormwater Park and Learning Center

The MWMO's Stormwater Park and Learning Center hosted several exhibits in 2018. All exhibits were tied to water quality and environmental stewardship. This year's exhibits included *Hydro-Illuminata*, by iron artist Jim Brenner; *Upstream*, by ceramicist and public artist Anna Metcalfe; and *Waterways and Otterways*, by local painter and educator Kat Corrigan.

Facility tours, programming associated with each exhibit, and community events such as Art-a-Whirl and Share the River Northeast brought in 452 people from across the watershed to the building and exposed them to the work of the MWMO.

Further development of experiences with the stream table and watershed model and the development of a new free-standing unit with rotating seasonal displays have enhanced the interpretive space for group programming.

## Story Map and Travel Time Application

The MWMO developed a pilot Story Map and Travel Time Application in 2016. The intent behind these online, interactive tools was to utilize another format for telling the story of unseen infrastructure and the MWMO's role in managing stormwater. The Travel Time Application used outputs from the MWMO's watershed modeling work to create a connection for average citizens about how the stormwater that leaves their front yard makes its way to the River.

Feedback on these tools was excellent, and in 2018 the MWMO began a project to update and expand the pilot Story Map and Travel Time Application. This project will continue into 2019 and includes: refreshing the messaging that's contained within the Story Map; expanding the Travel Time Application to cover additional MWMO areas; and new interactive features that are more focused on water quality.

## Website

Traffic to the MWMO website continued to grow in 2018, with a 25.6 percent increase in users and a 16.3 percent increase in sessions. Pageviews decreased slightly, by 2.1 percent.

**Table 6.** MWMO Website Traffic Overview

<b>Metric</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Pageviews	44,929	85,499	98,357	96,610
Sessions	15,568	30,634	37,634	44,080
Users	9,049	17,641	23,232	29,418

## Youth Outreach

In 2018, the MWMO developed a comprehensive youth outreach plan to be more intentional and specific with the type of programming offered. Goals of the plan include providing resources and opportunities to connect youth to the importance of our water resources. Much of the programming has coincided with the interpretive development of the Stormwater Park and Learning Center.

The MWMO's Stormwater Park and Learning Center hosted 17 groups for Stormwater 101 programs. These represent the MWMO's signature outreach programming, utilizing our watershed floor map, a stream table, a watershed model and onsite stormwater BMPs. More than 300 visitors engaged with staff during these programs to learn about the Mississippi River, stormwater and water quality.

The MWMO also piloted a customized program — an opportunity for engagement and learning through a specialized experience. The MWMO partnered with Urban Boatbuilders and East Side Neighborhood Services on a canoe-building project that took place at the Stormwater Park and Learning Center. Over the course of nine weeks, members of the Mississippi River Green Team and teens from ESNS put in approximately 70 hours of work to build a skin-on-frame wooden canoe, all the while connecting with the Mississippi River.

In addition to hosting its own youth programming, the MWMO partnered on 10 youth events, including Children's Water Festival, the Mde Maka Ska Canoe Festival, and macroinvertebrate sampling programs, engaging approximately 300 youth through these events.

**Table 7.** Communications and Outreach Implementation

<b>Implementation Table</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Communications and Outreach Budget	\$250,000	\$250,000	\$250,000
Stewardship Fund Grants Budget	\$250,000	\$250,000	\$250,000
Graphic Design and Photography	\$5,959	\$1,794	--
Greening Teen Teamworks	\$10,977	\$7,162	--
Mississippi River Green Team	\$44,105	\$11,414	--
Community Outreach	\$5,240	\$4,074	--
Professional Workshops and Trainings	\$9,631	\$11,589	--
Share the River Nordeast	\$1,897	\$2,453	--
Stewardship Fund Action Grants	\$175,252	\$77,543	--
Stewardship Fund Mini Grants	\$20,648	\$28,853	--
Stewardship Fund Planning Grants	\$12,920	\$28,544	--
Stewardship Fund Master Water Steward Grants	--	\$8,723	--
Stormwater Park and Learning Center	\$967	\$3,035	--
Story Map and Travel Time Application	--	\$2,700	\$72,300
Video Production	\$41,278	\$5,249	--
Watershed Partners	\$5,000	--	--
Website	\$14,961	\$8,208	--
Youth Outreach	--	\$6,442	--



**Table 8.** Communications and Outreach-Related Watershed Management Plan Goals and Measures Achieved

Number Engaged (by Audience)	2017	2018	2019
Professional	160	170	--
Community	1,452	1,311	--
Youth	820	826	--

## 2019 Workplan

- Outreach at community events will continue offering residents resources to take water-friendly actions at home and in their community, using the Good Neighbor Guide and other resources. Sites will be selected strategically to build relationships with new, underserved, and/or other target audiences, such as those near MWMO-funded projects. As part of these efforts, the MWMO will support community cleanups.
- The MWMO will continue to fund Stewardship Fund Mini Grants, Planning Grants, and Action Grants. Efforts to assist grantees from targeted populations will continue as opportunities to deepen these relationships are growing. A new Stewardship Fund Grant for Master Water Stewards, initiated in 2018, will be continued.
- New Citizen Advisory Committee members will be trained and supported through upcoming Planning and Action Grant reviews as they learn their role. Strategic recruitment of CAC members from underserved populations will continue.
- Information and networking sessions will be offered to volunteers. Volunteers will be invited to participate in outreach opportunities in 2019 and recognized for their efforts.
- The MWMO will support the Master Water Stewards program to certify and support community leaders and also develop a model for long-term engagement.
- The MWMO will host exhibits, events and programs at the Stormwater Park and Learning Center.
- The MWMO will continue to offer workshops to educate and engage local policy-makers and community leaders.
- The MWMO will continue to work with representatives from large properties in the Cedar-Riverside neighborhood to establish a community of practice around stormwater management and sustainable landscaping.
- The MWMO will offer training opportunities for professional audiences whose work

directly impacts water quality.

- The Mississippi River Green Team will enter its twelfth year, with expanded support and partnerships.
- The MWMO will continue to refine the youth outreach plan to strengthen awareness and connection to our water resources. Ways in which programs can expose career pathways in the environmental field will also be explored.
- The MWMO will work with web developers to continue improving the usability and functionality of its website.
- The MWMO will continue sending out its quarterly email newsletter as well as periodic email bulletins on other topics of interest.
- The MWMO will continue to tell its story and expand its reach on social media, with an overall goal of maximizing user engagement.
- MWMO communications staff will produce and submit the MWMO's annual report to the Board of Water and Soil Resources, as well as the MWMO's "Annual Magazine" — a shortened, photo-filled version of the annual report designed for consumption by a general audience.
- Design and installation of new interpretive signage at MWMO project sites will be continued, and a formal interpretive signage master plan will be finalized and adopted. The plan will specify graphic standards and other requirements for MWMO-funded signage.



**Figure 4.** Stormwater outfall 1NE gushes 30 cubic feet per second of runoff into the Mississippi River during the spring melt in Northeast Minneapolis.

## Monitoring

### Purpose

The MWMO's water quality monitoring efforts provide a scientific basis for identifying and tracking water quality and quantity issues, and provide information to aid in the selection of projects and evaluate the success of those projects.

The MWMO is charged with protecting water quality within the watershed, pursuant to Minnesota Statutes Chapter 103B.201 and Minnesota Rules Chapter 8410.003, which established a Joint Cooperative Agreement among the MWMO's member organizations. Minnesota Rules Chapter 7050 requires that all water bodies comply with water quality standards. Furthermore, section 303d of the Federal Clean Water Act requires states to develop total maximum daily loads (TMDLs) for waters with impaired uses.

### Objectives

- Monitor biological, chemical and physical parameters of surface and groundwater resources in the watershed.

- Monitor water quality within the watershed.
- Develop a record of baseline data to characterize water quality and identify pollutants that exceed water quality standards.
- Assess pollutants listed on the Minnesota Impaired Waters list for the TMDL process.
- Collect rate and volume data for the Mississippi River and key subwatersheds.
- Monitor performance of stormwater management practices.
- Collaborate with stakeholders to identify and apply a standardized data collection and assessment approach.
- Develop partnerships and collaborate with other organizations and/or agencies both inside and outside the watershed boundaries to improve water quality in the Mississippi River.
- Assess land use impacts on water quality.
- Participate in the technical development and update of statewide monitoring databases.
- Make data accessible to the public and public entities and to MWMO staff for use as an education tool (e.g., BMP performance data).
- Develop emergency monitoring plan in case of emergencies affecting water resources.

## 2018 Implementation

### Stormwater Pipeshed and Precipitation Monitoring

The MWMO continued to monitor six long-term stormwater pipeshed monitoring sites in 2018. At five of those sites, a combination of area/velocity sensors and/or automated samplers were used to collect water quantity and quality data throughout the year. Those data are used to calculate estimates of annual pollutant loads for the pipesheds. Summaries of stormwater and other monitoring data will be available on the MWMO website. Additional stormwater pipes throughout the watershed were equipped with flow monitoring equipment in order to provide data for the calibration and validation of Hydraulic and Hydrologic (H and H) modeling efforts further discussed in the Watershed Assessments section of this report. MWMO monitoring staff also worked with staff from the City of Minneapolis to survey for and sample potential illicit discharges from stormwater outfalls emptying into the Mississippi River. Precipitation data were collected at several automatic and manual gauges throughout the watershed.

## River Monitoring

Water quality samples were collected at eight sites within the Mississippi River twice per month between April and October and once per month from November to February. Mississippi River shoreline sites were also sampled for *E. coli* analysis, specifically for the continued collection of data related to the Upper Mississippi River Bacteria TMDL. Staff gauges at six locations along the river were visited on a weekly basis to track river level changes throughout the year. Bathymetry data were collected in the Mississippi River upstream of the Upper St. Anthony Lock and Dam to a railroad bridge, North 41st Avenue, in Minneapolis. This data will be combined with previous and future years' bathymetric data in order to assess any changes to the river bottom that may be occurring as a result of the Upper St. Anthony Falls Lock Closure.

## BMP Monitoring, Operations and Maintenance

MWMO monitoring staff continued to operate, maintain and monitor the St. Anthony Regional Stormwater Treatment and Research System. Biannual inspections were conducted and adjustments to the system were made to improve its functioning. The system's sand filter vault was maintained in the fall of 2018 with the help of City of St. Anthony Village staff. Water quantity and quality entering and exiting each component of the facility were monitored in order to assess effectiveness.

Monitoring continued at the Edison High School Green Campus BMPs, including assessment of water quantity into a reuse tank from various surfaces as well as the amount of water re-used for irrigation. Water quality data from the re-use tank was also collected. A parking lot tree trench was monitored for flows in and out of the trench. Data were provided to MWMO education staff to share with educators at Edison High School.

Precipitation and tank level monitoring continued at the Towerside District Stormwater System, and data also continue to be collected at BMPs within the MWMO's Stormwater Park and Learning Center site.

## Lake and Wetland Monitoring

The MWMO continued to monitor water levels in the Kasota Ponds wetlands. Water quality sampling and biological sampling will occur on a five-year schedule, with the next rounds beginning in 2021. In 2018, data and summaries from the past 10 years of monitoring activities at the three Kasota Ponds wetlands were combined into [a report released in 2019](#). The report will also contain plans and recommendations for future actions at the site.

The MWMO contracts with Anoka Conservation District to monitor lake levels and water quality of Sullivan (Sandy) and Highland (Unnamed) lakes. In 2018, the lake levels were recorded weekly staff and data submitted to the DNR's LakeFinder database. The next lake

water quality sampling will occur in 2019.

## **Data Management, Reporting and Outreach**

MWMO monitoring staff took over sole management of the MWMO's remote monitoring network in 2018 and all monitoring data were stored and managed together in one database. MWMO staff collaborated with several other metro-area organizations using the same database software. Monitoring staff also reached out to and met with member cities to assess their monitoring needs and develop monitoring plans.

Water quality data collected by the MWMO are submitted to the MPCA's EQuIS database and summary data are reported on the monitoring pages of the MWMO website. Other data are available upon request to monitoring staff.

## **Special Projects**

The MWMO continued its collaboration with the University of Minnesota's Biosystems and Bioproducts Engineering Department to complete the final spring data collection for the 2018 Analysis of Runoff from Impervious Surfaces in Downtown Minneapolis study investigating potential differences in runoff pollutant concentrations from various impervious surfaces in Downtown Minneapolis. (See the Watershed Assessment section for details.)

Monitoring staff also installed and monitored staff gauges in a number of ponds on the Columbia Golf Course in Minneapolis to support a watershed assessment study investigating groundwater flow in and around the golf course for the purpose of determining BMP placement.

Continuing a long-term partnership with the City of Minneapolis Health Department, MWMO monitoring staff worked with interns hired for erosion and sediment control inspections to generate reports and a map of all inspections completed throughout the summer of 2018.



**Table 9.** Water Quality Monitoring Implementation

<b>Implementation Table</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Monitoring Budget	\$150,000	\$200,000	\$200,000
Bathymetry Project	\$925	\$1,400	\$2,500
Data Management Software	\$8,000	\$8,000	\$8,000
St. Anthony Regional Treatment Monitoring	\$1,215	\$255	\$5,500
Minneapolis Illicit Discharge Monitoring	\$455	\$325	\$1,000
Laboratory Analysis	\$116,640	\$95,000	\$115,000
Monitoring Equipment	\$20,105	\$30,500	\$35,000
Monitoring-Related Training	\$1,580	\$1,300	\$2,000
Real-Time Data Management	\$11,740	\$2,233	\$10,000
Edison High School BMP Monitoring	\$13,630	--	\$1,000
Analysis of Runoff from Impervious Surfaces in Downtown Minneapolis Study (Lab and Permit Costs Only)	\$10,970	\$13,884	\$5,000
EnviroDIY Datalogging System for Real-Time Water Resources monitoring	--	\$15,000	\$12,000

**Table 10.** Monitoring-Related Watershed Management Plan Goals and Measures Achieved

<b>Monitoring</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Number of Stormwater Monitoring Sites	7	7	7
Number of Wetland Monitoring Sites	3	3	3
Number of River Sample Locations	6	8	8
Number of BMPs Monitored	2	4	5

*Note: The MWMO is currently gathering long-term trend data. For more detailed monitoring information, visit the [MWMO website](#) or contact [Water Resources Director Udai Singh](#).*

## 2019 Workplan

The 2019 work plan for the MWMO's monitoring program includes:

### New Monitoring Initiatives for 2019

- Install additional equipment in the MWMO Stormwater Park and Learning Center's outdoor best management practices to monitor the effectiveness of the practices and use the instrumented facility for research, education and outreach.
- Install additional monitoring equipment at the Towerside stormwater reuse facility to monitor the outflow volume to University of Minnesota's stormwater pipe network.
- Instrument and monitor additional BMPs throughout the watershed for effectiveness assessment.
- Delineate catchments and investigate connections and groundwater flow, etc., at the Kasota Ponds, and release the Kasota Ponds Report summarizing the past 10 years of data.
- Update long-term monitoring program outlook, including monitoring for emerging issues.
- Work with City of Columbia Heights to monitor Jackson Pond's iron-enhanced sand filter.

### Ongoing Monitoring Efforts

- Many of the monitoring activities conducted in 2018 will be continued in 2019, including:
- Monitor stormwater and precipitation at long-term sites.
- Monitor the Mississippi River for water quality, bacteria, and bathymetry.
- Continue operation, maintenance and monitoring data collection at the St. Anthony Regional Stormwater Treatment and Research System.
- Monitor the Thomas Edison High School BMPs, and other BMPs throughout the watershed.
- Continue to work with the Anoka Conservation District for monitoring Highland and Sullivan Lakes.
- Continue to work with member cities to assess and assist in accomplishing their monitoring needs.
- Continue to work with the MPCA and other agencies on projects as they arise, including existing TMDL work. Monitoring Data will be submitted to the MPCA's EQuIS database, be summarized on the MWMO website, and be available upon request to MWMO staff.



**Figure 5.** The Malcolm Yards area at the Towerside Innovation District. The MWMO is working with developers and the Minneapolis Park and Recreation Board to establish new district stormwater infrastructure and public green space as the area begins to redevelop.

## Planning

### Purpose

Planning provides direction to the MWMO's activities. Our planning efforts clarify and integrate the MWMO's goals, responsibilities and future courses of action. Through planning, we coordinate implementation of MWMO standards and goals by member organizations, and maintain involvement with Mississippi River regional working groups.

### Objectives

- Develop and maintain the MWMO's role in water management.
- Keep the MWMO's Watershed Management Plan current to address new circumstances and changing priorities.
- Develop plans for new watershed initiatives.

- Review and approve local management plans and amendments that impact water and natural resources.
- Develop consensus among stakeholders for managing resources in the watershed.
- Work with member organizations on the implementation of ordinances, standards, plans, and enforcement.
- Participate in regional working groups for protection and improvement of the Mississippi River.

## 2018 Implementation

The MWMO completed, continued or began the following planning initiatives in 2018:

### Ecological System Plan

The MWMO and the Minneapolis Park and Recreation Board (MPRB) further developed the Ecological System Plan in 2018. The plan provides a framework for how environmental considerations can be addressed in ongoing planning efforts at MPRB, as well as how and where the organization can look to partner with other local, regional and statewide planning organizations to achieve shared environmental goals. As of the end of 2018, the plan has solidified goals and created a series of maps establishing a solid baseline for data associated with stormwater runoff, existing green spaces, vegetation types and habitat corridors, carbon sequestration, and urban heat island effect.

### Member City Local Water Plans

In 2018 and early 2019, MWMO staff submitted comments on the each of its member cities' local water plans and met with the cities' consultants to finalize any requested changes to the plans. The meetings concluded with all cities meeting or agreeing to meet the content requirements stated in the MWMO's Watershed Management Plan. For work extending into 2019, cities submitted a signed letter of intent to meet any remaining content requirements and implement ordinances equal to the standards in the MWMO's plan.

### Restorative One Water Redevelopment (Integrated Utility Hub)

The MWMO completed a logic model and stakeholder analysis that helped it focus most of its efforts over the past year on building partnerships within the City of Minneapolis (coordinator's office, Public Works, Community Planning and Economic Development, Environmental Programs); CenterPoint Energy; Xcel Energy; local developers United Properties and Wall Development Company; and the McKnight Foundation. All of these partners are being asked to contribute access to key infrastructure, expertise, and funding



that will advance an Integrated Utility Hub (IUH) feasibility study. This feasibility study is currently set up to provide a citywide non-site specific analysis of the viability of an IUH in Minneapolis. If the results of the feasibility are favorable to the city, then it will be up to the city, developers and neighborhoods to site the IUH.

### **Towerside District Stormwater System Administration and Committee Membership**

This year saw the approval of a third amendment to Stormwater Declaration and Easement Agreement for the addition of a new parcel to the stormwater system. This decreased the overall cost individual owners will pay for long-term operations and maintenance (O&M) on the system, and increased the escrow owners have available for stormwater reuse to \$180,000. A program that will redistribute the escrow to owners' reuse projects was also initiated. In addition, all final capital payments were made to the MWMO, and a final round of O&M fees were collected. This brought owners to their fully funded positions of \$50,000 for a repair and replacement escrow and a \$17,000 O&M escrow limit.

In addition to working with the developers in Towerside, the MWMO has been active in a number of committees that have helped grow and form the Towerside organization. In 2018, the MWMO's support role as a member of the Implementation Committee was concluded with Towerside's appointment of an interim executive director. Our support has now shifted to being a founding member of the Towerside Technical Advisory Committee, which consists of a mix of experts on stormwater, energy, zoning, affordable housing, architecture, public realm, restorative systems, etc., who will provide support services for the neighborhood review committees that approve development projects in the area prior to the plans advancing to the cities.

### **Towerside District Stormwater System and Habitat Initiatives**

In 2018, the MWMO, Minneapolis Park and Recreation Board (MPRB), and Prospect Park Properties moved closer to finalizing their efforts to create a green space/park that reuses stormwater from the district's 205,000 gallons of underground storage at the corner of 29th Avenue SE and 4th Street SE. In addition, the MWMO and MPRB signed a new memorandum of understanding (MOU) with Wall Development Company to design a district stormwater and linear park system on 20 acres directly north of the existing Towerside District Stormwater System.

The MWMO cofunded and contributed to the completion of the Towerside Framework for Planning and Implementation. The purpose of this document is to establish a planning and implementation framework in the Towerside Innovation District that aligns with the 2040 Comprehensive Plans for the Cities of St. Paul and Minneapolis. The MWMO's contribution focused on implementation topics related to green infrastructure, habitat, a district stormwater system and a restorative development model based on an Integrated Utility Hub.



**Table 11.** Planning Implementation

<b>Implementation Table</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Planning Budget	\$50,000	\$50,000	\$50,000
Integrated Utility Hub Coalition	--	--	--
Phase II District Stormwater Informational Study	\$8,505	--	--
Towerside Master Framework Plan	--	--	--
Ecological System Plan	\$25,707	\$78,480	--

Below is an evaluation of progress made towards MWMO's Watershed Management Plan goals via planning initiatives undertaken.

**Table 12.** Planning-Related Watershed Management Plan Goals and Measures Achieved

<b>Planning</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
New Initiatives and Related Studies Started	5	3	3	7	7	--
New Initiatives Resulting in CIP Outcome	--	--	2	4	--	--
New Initiatives Resulting in Policy Change	--	--	--	1	--	--
New Initiatives Resulting Partnership Agreements	--	--	1	1	3	--
Amendments Completed to Maintain WMP Relevance	--	1	1	--	--	--

## 2019 Workplan

In 2019, the MWMO will:

- Continue working with member cities on implementing ordinances equal to the standards in the MWMO's Watershed Management Plan.
- Continue working with the Minneapolis Park and Recreation Board (MPRB) on the Ecological System Plan. The next step in finalizing the plan is getting to recommendations for future policy and implementation that will improve integration of these sustainable practices in future park design and function. The MWMO and the MPRB hope to finalize and adopt the plan in 2019.
- Partner with Capitol Region Watershed District to co-fund and participate in the development of a Blue/Green Framework for the Community Enterprise Zone and the Towerside Innovation District. The final long-range master plan will embody the science and engineering necessary for future developers to create an extensive water and habitat ecology that benefits the community and the Mississippi River.
- Work with the two more developers (Aeon and Oppidan) to plug in to the Towerside District Stormwater System and begin reusing water from the system. Amendments will be made to the Stormwater Management Declaration and Easement Agreement (which governs the TDSS), allowing for any needed encroachment work or new parcels to be added to the TDSS.



**Figure 6.** MWMO staff and University of Minnesota researchers prepare a rain simulator test to collect water quality samples of runoff from a downtown Minneapolis parking lot on March 23, 2018. The team's work is documented in a new report, "Analysis of Runoff from Impervious Surfaces in Downtown Minneapolis."

## Watershed Assessment

### Purpose

The MWMO's watershed assessment and research activities seek to develop a scientific base of knowledge that characterizes physical, chemical, cultural, historic, biological, social, economic, organizational and political resources of the MWMO to guide planning and management decisions in the watershed.

### Objectives

- Conduct assessments within the watershed to define the ecological, physical, biological, cultural, social, economic, organizational and political characteristics of the MWMO.
- Conduct project-based diagnostic and feasibility studies.
- Provide information to support other MWMO projects and activity areas.
- Provide watershed information to organizations both inside and outside the MWMO's boundaries.

## 2018 Implementation

### 1NE Watershed Stormwater Management Planning and Preliminary Design

The MWMO is partnering with the City of Minneapolis and Minneapolis Park and Recreation Board (MPRB) to improve stormwater management, increase flood resiliency, reduce pollutant loading to the Mississippi River, and improve ecological function within the 1NE Watershed. The focus of this project is to evaluate different stormwater management options, including: reconfiguring existing infrastructure, adding new infrastructure, installing stormwater best management practices and/or modifying stormwater management techniques on both city and MPRB-owned properties. In addition, the effort will identify options to enhance or improve habitat along key corridors previously identified by the MWMO. This project builds upon previous work in the 1NE Watershed. Outcomes include stormwater and habitat improvement scenarios that may be feasible within the watershed, as well as recommendations for improvements to be made in the next three to five years.

### Analysis of Runoff from Impervious Surfaces in Downtown Minneapolis

The runoff response of urban watersheds is dominated by impervious surfaces. Understanding the entrainment and transport of potential contaminants on urban surfaces is necessary for the development and implementation of sound water-management practices. An analysis of runoff from impervious surfaces study project was undertaken beginning in 2016. The project goals are to gather and analyze data from four impervious surface types (streets, sidewalks, parking lots, and rooftops) in downtown Minneapolis.

In 2017, rainfall simulations and subsequent runoff sampling was conducted on three sites each for street, sidewalk, and parking lot locations in downtown Minneapolis during both the summer season (July and August) and the fall season (October). Automated sampling equipment was installed at two rooftop sites in downtown Minneapolis to collect samples during actual rainfall events. Due to the outdoor plumbing at one site, equipment had to be removed during winter, while the other site was left in operation to collect melt samples from the rooftop.

In 2018, sampling continued at all roof runoff sites during spring, and final sets of field experiment data were collected. The data collected during the study was organized and evaluated by principal investigators from University of Minnesota and final report was submitted to MWMO. MWMO staff reviewed the final report and made it available [on MWMO website](#). MWMO staff will work with University of Minnesota researchers to decide for the next step with the study.



## **City of Minneapolis East Side Storage and Maintenance Facility Feasibility Study**

The MWMO led a feasibility study in partnership with the City of Minneapolis to further enhance the stormwater management system design at the new East Side Storage and Maintenance Facility (ESSMF). This facility will be constructed on University Avenue and 26th Avenue NE, with the idea that it would expand public green space, add habitat, and capture at least 1.1 inches of runoff for the entire 9-acre site. Some of the BMPs developed include raingardens, tree trenches, permeable pavers, an iron-enhanced sand filter, and underground storage system, and potential for reuse. This study will serve as the foundation for the future facility design. The city finalized the design in collaboration with MWMO and construction is underway.

## **Columbia Golf Course Field Investigations**

As part of our work to improve stormwater management, increase flood resiliency, reduce pollutant loading to the Mississippi River, and improve ecological function within the 1NE Watershed, the MWMO and MPRB partnered to collect groundwater and surface water data in the southern portion of Columbia Golf Course, and perform a water balance around the site in 2018. These efforts were meant to help the partners better understand the groundwater-surface water interactions in this portion of the Golf Course, which is a former lakebed. Results of the work will be used to inform future planning and engineering of stormwater management techniques in the southern portion of the 1NE Watershed.

## **Lincoln School Playground Stormwater Feasibility Study**

As part of a community-led initiative to redesign a neglected school playground space, MWMO undertook analysis of opportunities to manage stormwater. Completed in 2018, the Lincoln Playground feasibility study evaluated ways to manage stormwater to integrate into learning opportunities for the school, as well as any regional stormwater management opportunities to improve water quality adjacent to the playground.

## **NorthPoint Health & Wellness Center Expansion Feasibility Study**

NorthPoint is part of a significant redevelopment which will expand its campus in North Minneapolis. Hennepin County administers the facility, and applied for an MWMO Capital Project Grant in 2018. In order to determine the potential of above-and-beyond stormwater management practices on the site, a feasibility study was prepared. Based on the study, designs were focused on visible stormwater practices supplemental to underground filtration, ultimately removing 99.1 percent of the total suspended solids and 70.8 percent total phosphorus annually.

## **Towerside District Stormwater Phase II Feasibility Study**

In 2017, MWMO started a Phase II district stormwater initiative in the Towerside Innovation



District. This initial feasibility study was completed in 2018, with three potential design alternatives to improve water quality, flood resiliency and habitat. During the study, the MWMO engaged the Minneapolis Park and Recreation Board and City of Minneapolis long-range planning staff. Through these discussions, the design and planning partnership expanded to include both of these organizations which was formalized in a memorandum of understanding between the MWMO, MPRB and the Wall Development Company. In addition, the feasibility included a discussion on restorative infrastructure that could accommodate future closed-loop systems at a district scale.

### **Towerside District Stormwater After-Action Report**

MWMO's Towerside District Stormwater System Phase I report was completed in 2018. The report is an analysis on the effectiveness and efficiency of the design and planning process for the Phase I Towerside District Stormwater System project that occurred between 2013 and 2016. Also included are proposed adjustments and recommendations to improve the design, planning, contractual and policy process on future projects. This project builds on the existing Green Fourth Street concept design study in the heart of the Towerside Innovation District. This is a continuation of MWMO efforts to utilize an integrated systems-based approach to manage stormwater as an asset in a fully developed urban setting.

### **Upper Harbor Terminal District Stormwater Feasibility**

The MWMO worked with the Upper Harbor Terminal (UHT) development team and the City of Minneapolis to complete a district stormwater concept design (preliminary feasibility) for the UHT. The City of Minneapolis reinforced its support for a district stormwater system at the site by including it in the Upper Harbor Terminal Concept Plan that was approved by the Minneapolis City Council. This is a significant show of support from the city and the developer that will advance the district stormwater project to 30 percent design in 2019.

### **Watershed-Scale Hydrologic/Hydraulic and Water Quality Models**

The MWMO is undertaking a major initiative to create detailed hydrology and hydraulic (H&H) and water quality models across our jurisdiction. The H&H models are being used to simulate and inform the management of flooding throughout the MWMO, while the water quality models are used to estimate pollutant loading from the landscape and into MWMO waterbodies. Results of the modeling initiative will be used to help the MWMO and its member communities to better understand the functioning of our stormwater systems, as well as prioritize the placement and design of future capital projects.

The MWMO is divided into multiple project areas for this effort. The following areas had modeling projects ongoing in 2018:

- North Minneapolis Region: a 7,500-acre portion of North Minneapolis. The MWMO worked with the City of Minneapolis to create an H&H model of this area, which was finalized in 2017. The MWMO created a water quality model in 2018.
- East Minneapolis Region: a 4,300-acre portion of Minneapolis. The MWMO worked with the City of Minneapolis to create an H&H model of this area, focusing on those areas within the MWMO's jurisdiction.
- Northern Columbia Heights, Fridley and Hilltop Region: a 2,300-acre area covering the northern-most subwatershed of the MWMO. The MWMO started a project to create both H&H and water quality models of this area in 2018. Work will continue into 2019.

**Table 13.** Watershed Assessment Implementation

<b>Implementation Table</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Watershed Assessment and Research Program Budget	\$800,000	\$775,000	\$500,000
1NE Watershed Stormwater Management Planning and Preliminary Design Project	\$128,767	\$118,233	--
Analysis of Runoff from Impervious Surfaces in Downtown Minneapolis	\$47,178	\$23,589	--
City of Minneapolis East Side Storage and Maintenance Facility Feasibility Study	\$26,896	--	--
Columbia Golf Course Field Investigations	--	--	--
Integrated Utility Hub Study	\$20,000	--	--
Integrated Utility Hub Feasibility Study	--	--	\$150,000
Lincoln School Playground Stormwater Feasibility Study	\$4,000	\$4,500	--
Nicollet Island Upland Restoration Plan	--	\$2,800	--
NorthPoint Health and Wellness Center Expansion Feasibility Study	--	\$33,250	--
Old Bassett Creek Tunnel Condition Assessment, Cleanout Plan, and Structural Integrity Study	\$88,108	--	--
Riverfront Regional and Islands of Peace Park Riverbank Stabilization Feasibility Study	--	--	\$43,500
Towerside District Stormwater Phase II Feasibility Study	\$48,185	--	--
Upper Harbor Terminal District Stormwater Feasibility Study	\$16,248	\$44,999	--
Village Green Pond Subwatershed Feasibility Study	--	--	\$24,250
Watershed-Scale H&H and Water Quality Modeling	\$358,035	\$347,681	\$420,000

## 2019 Workplan

In 2019, the MWMO will:

- Continue work on the H&H and water quality modeling projects that are underway and start working in two additional watersheds in 2019. The MWMO will also continue sponsoring studies to explore the feasibility and potential benefit of capital projects, as needed.
- Work with the Anoka County Parks Department to stabilize the Mississippi Riverbank along parkland at both Riverfront Regional and Islands of Peace Parks, located in the City of Fridley.
- Continue its work with the Minneapolis Park and Recreation Board and Wall Development Company to design privately owned public spaces, an extensive district stormwater system with habitat corridors, and a regional linear park system on 20 acres directly north of the University of Minnesota Transitway bounded by Malcom Avenue SE and 29th Avenue SE.
- Work with the City of Minneapolis, the Upper Harbor Terminal development team, the Minneapolis Park and Recreation Board, and neighborhood representatives to develop content for a preferred district stormwater plan that meets MWMO and partner goals at Upper Harbor Terminal. The plan will be the basis for a final 30 percent design and cost/benefit analysis. This integrated district stormwater system will also treat regional stormwater and improve habitat connectivity between the Mississippi River and surrounding neighborhoods.
- Continue to seek out new partners and clarify existing partners' support for access to key infrastructure, technical expertise, and funding that will advance an Integrated Utility Hub feasibility study.
- In partnership with the City of Fridley, evaluate opportunities for best management practices to manage stormwater in the Village Green Pond subwatershed. The study will evaluate improvements to the pond itself (150 acres upstream) and will include opportunities within Commons Park as the city is working on its park master plan efforts.

# Financial Information

## Policy

During plan development (1997-2000), the MWMO acknowledged the limits of its member communities to incur additional financial expenses and therefore developed strategies for new funding mechanisms. The MWMO sought inclusion on the list of Special Taxing Districts (MS Chapter 275.066); and, in 2001, MWMO became the first joint powers WMO to receive levy authority. This funding is necessary to implement plan goals and objectives of the watershed management plan. Taxes are levied in accordance with procedures specified in the Joint and Cooperative Agreement (JCA) and Minnesota Statutes 103B.201 – 103B.255 and the Metropolitan Surface Water Management Act (Act), and are subject to limitations set forth in Minnesota Tax Statutes, the Act, the JCA and the Watershed Management Plan. It is the Board of Commissioners' policy to use funds raised in the most effective and efficient manner possible. The MWMO completed an update to its comprehensive plan in 2011 which changed the way projects are selected for inclusion on the CIP. This was amended in May 2015 with a minor CIP Schedule update occurring in September 2016.

The MWMO will continue to coordinate its CIP with those of its members. Projects are required to have feasibility studies completed that describe estimated water quality and quantity benefits and habitat or resource protection and improvement prior to the MWMO committing funds to the construction of the project. This means anyone wishing to partner with the MWMO will need to invite the watershed to the table early in project design and assessment. The MWMO believes this will improve the project selection process and allow for better budgeting.

## Budget

In general, the MWMO follows the following process to set its annual budget and select capital projects to which grant funding is allocated:

- Seek and receive project proposals from members by May of the prior year.
- Submit a draft budget and amended CIP at the July board meeting.
- Select proposed projects for the next fiscal year at the September board meeting.
- Submit a preliminary budget to counties by September 30.
- Make the updated CIP final and approve a final budget at the November board meeting.
- Submit a plan amendment, if needed, to the Board of Water and Soil Resources.
- Submit final levy documents to Anoka, Hennepin and Ramsey Counties by December 15.

**Table 14.** MWMO Budget

<b>2018 Budget</b>	
Projects and Initiatives	\$3,825,000
Administration	\$1,820,000
Subtotal Budget	\$5,645,000
Contingency 1.0% (Uncollected Levy)	\$55,000
<b>Total Budget</b>	<b>\$5,700,000</b>
<b>Capital Projects and Initiatives</b>	<b>\$3,825,000</b>
<i><b>Capital Projects</b></i>	<i><b>\$2,575,000</b></i>
1NE Watershed System (Multi-Benefits SW Projects)	\$500,000
Right-of-Way Greening Projects	\$300,000
Minneapolis Water Works	\$400,000
Towerside Phase II	\$495,000
Old Bassett Creek Tunnel	\$380,000
Minneapolis: Upper Harbor Terminal	\$500,000
<i><b>Initiatives</b></i>	<i><b>\$1,250,000</b></i>
Communications and Outreach	\$250,000
Planning	\$50,000
Monitoring	\$200,000
Watershed Assessments (Research, Hydrologic and Hydraulic Studies)	\$500,000
Stewardship Grant Fund	\$250,000
<b>Administration</b>	<b>\$1,820,000</b>
Staff Salary and Benefits	\$1,520,000
Commissioner Expenses	\$5,000
Office Admin: Energy, Repair, Equipment, and Supplies	\$110,000
Service Providers - Legal, Engineering, IT, Auditor	\$160,000
Facility Replacement Schedule	\$25,000
Operating Reserve (additional funds are not needed in 2017)	\$0



The presence of line items in the 2018 budget with no money raised in the current fiscal year does not mean there is no money available to the line item; rather, it means additional funds did not need to be raised in the current fiscal year. For additional financial information, including the 2018 audit, go to [mwmo.org](http://mwmo.org) or contact [Douglas Snyder, Executive Director](#).

Each year, the MWMO receives a Certification of Apportioned Levies from the Minnesota Department of Revenue. This chart is then used by the three counties in the MWMO to apportion the levy. The following table represents the estimated breakout of levies for each county within the MWMO for 2018.

**Table 15.** Certification of Apportioned Levies

**District 072 - Middle Mississippi River Watershed Management Organization**  
**Certification of Apportioned Levies**  
**Payable 2018**

(1) <i>Payable 2018 Property Tax Levy</i>		\$5,700,000	
<b>County</b>	<b>(2) Payable 2017 Taxable Net Tax Capacity</b>	<b>(3) Net Tax Capacity Percent Distribution</b>	<b>(4) Apportioned Payable 2018 Levy (1x3)</b>
ANOKA COUNTY	\$17,629,391	6.2478%	\$356,125
HENNEPIN COUNTY	\$263,076,690	93.2331%	\$5,314,286
RAMSEY COUNTY	\$1,464,684	0.5191%	\$29,589
WATERSHED TOTAL	\$282,170,765	100.0000%	\$5,700,000

