



Protect it. Pass it on.

MISSISSIPPI
WATERSHED
MANAGEMENT
ORGANIZATION

2023 Annual Activity & Financial Report





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2023 Annual Activity & Financial Report

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2023 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 mwmo.org.

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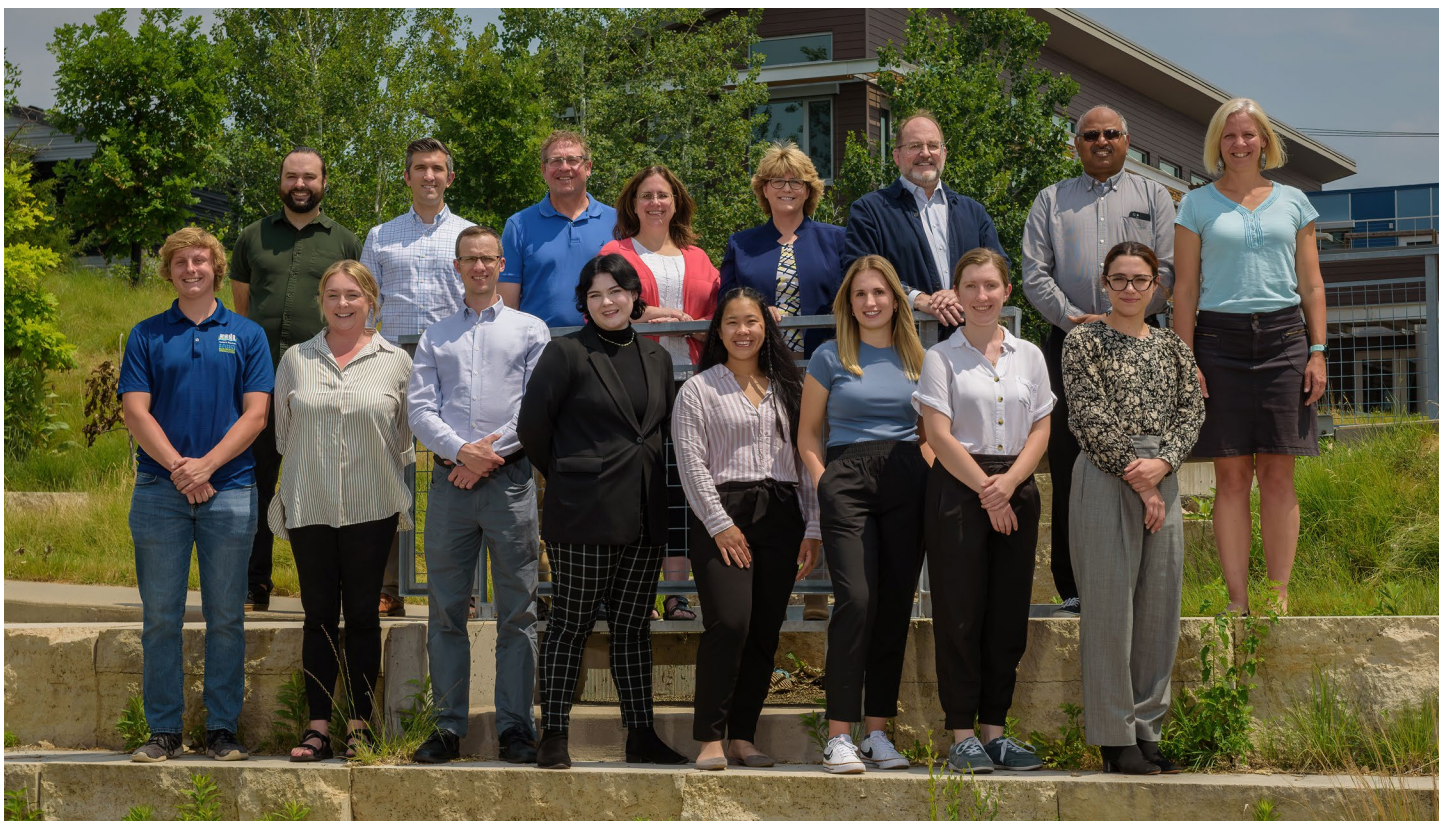


Figure 1. MWMO staff in June 2023: (top row, from left) Adam Flett, Nick Busse, Dan Kalmon, Jennifer Doyle, Nancy Stowe, Kevin Reich, Udai Singh, Abby Moore, and (bottom row, from left) Conner Price, Emmy Baskerville-Doeckel, Shawn James, Akadia Johnson, Mary Yang, Mary Thelen, Eva Hanson, and Isabella Radler.

Organizational Summary

Formation and History

The MWMO encompasses 25,309 acres (39.5 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 stormsewer drainage, but was never approved by the Board of Water and Soil Resources (BWSR) or the MWMO Commission.

In 2000, the University of Minnesota opted out of the organization. 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 ([Minnesota Statutes 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. In addition, MWMO land in Falcon Heights and Lauderdale was placed in the Capitol Region Watershed District during its formation by BWSR. In September of 2002, the MWMO hired its first two full-time staff members to implement the plan.

The Mississippi River is the MWMO's natural resource focus and the nexus of the urban area we know as the Twin Cities, and the river is the setting for our work. 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 [Minnesota Statutes 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.

The current plan, approved in January 2022, 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. This includes new items such as Diversity, Equity, and Inclusion (DEI), climate adaptation, and maintenance of Green Stormwater Infrastructure (GSI).

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 2023 Services and Operations

Number of Employees (including seasonal and interns)	.22
Number of FTEs	.15
FTE Average Length of Service	.542 years
FTE Turnover Rate.	28.5 percent
Capital Improvements and Initiatives Revenue	\$4,440,000
Capital Asset Replacement Revenue	\$200,000
Operating Revenue	\$2,211,000
Contingency.	.\$120,000
Total Levy	\$6,971,000

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 MWMO Board of Commissioners.

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 Steve Eggert, City of Fridley, Chair

7071 University Ave. NE, Fridley, MN 55432
763-571-3450

Commissioner Randy Stille, City of St. Anthony Village, Vice-Chair

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

Commissioner LaTrisha Vetaw, City of Minneapolis, Treasurer

350 S Fifth St., Rm. 307, Minneapolis, MN 55415
612-673-2201

Commissioner Jeffrey Dains, City of Lauderdale

1891 Walnut St., Lauderdale MN 55113
651-645-7068

Commissioner Billy Menz, Minneapolis Park and Recreation Board

2117 West River Rd. N, Minneapolis, MN 55411
612-230-6443

Commissioner Connie Buesgens, City of Columbia Heights and City of Hilltop

1021 44th Ave. NE, Columbia Heights, MN 55421
763-788-5072

Commissioner Michael Lukes, City of St. Paul

2522 Marshall St. NE, Minneapolis, MN 55418
612-746-4970

Alternate Commissioners

Alternate Commissioner Michael Rainville, City of Minneapolis

350 S 5th St., Rm. 307, Minneapolis, MN 55415
612-203-1459

Alternate Commissioner Mary Gaasch, City of Lauderdale

1891 Walnut Street, Lauderdale, MN 55113
651-645-5918

Alternate Commissioner Jan Jenson, City of St. Anthony Village

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

Alternate Commissioner Bertha Risdahl, City of Hilltop and City of Columbia Heights

1021 44th Ave. NE, Columbia Heights, MN 55421
612-746-4970

Alternate Commissioner Becka Thompson, Minneapolis Park and Recreation Board

2117 West River Rd. N, Minneapolis, MN 55411
612-230-6443

Alternate Commissioner Tom Tilberry, City of Fridley

7071 University Ave. NE, Fridley, MN 55432
612-716-5879

Alternate Commissioner for City of St. Paul

Open

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 (e.g., Planning and Action Grants through the Stewardship Fund program), 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 each year.

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)

Open

Fridley (one)

Nick Olberding

Hilltop (one)

Open

Lauderdale (one)

Open

St. Anthony Village (one)

Lona Doolan

Saint Paul (one)

Open

Minneapolis (five)

<i>Open</i>	North
Perry Dean	Northeast
<i>Open</i>	South
<i>Open</i>	Southwest
Gareth Becker	Downtown

At-Large Positions (five)

Mary Fitzgerald	Minneapolis
Akia Vang	Minneapolis
Sam Westlund	Minneapolis
<i>Open</i>	
<i>Open</i>	

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 well-administered training, salary and performance-review programs.

In addition to its own full-time employees, the MWMO shares employees with the City of St. 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.

2023 MWMO Staff

Executive Director

Kevin Reich

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612-746-4971

Projects and Outreach Director

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Monitoring, Assessment, and Research

Program Manager

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Environmental Specialist

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ehanson@mwmw.org

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Projects and Planning Specialist

Shawn James

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612-746-4983

Administrative and Operations Specialist

Akadia Johnson

ajohnson@mwmw.org

612-746-4982

Environmental Specialist

Mary Thelen

mthelen@mwmw.org

612-746-4987

Community Outreach Specialist

Mary Yang

myang@mwmw.org

612-746-4975

Water Quality Intern

Madison DelCastillo

Water Quality Intern

Aiden Kingsbury

Water Quality Intern

Conner Price

Water Quality Intern

William Umhoefer

FT Employees Leaving the MWMO in 2023

Brian Jastram
Monitoring and Instrumentation Specialist

Isabella Radler
Environmental Specialist

James Rudolph
Water Resources Specialist

Isabel Seibert
Administrative and Operations Specialist

Udai Singh
Water Resources Director

2023 Shared Staff

The MWMO shared the following staff with the City of St. Anthony Village in 2023:

Accountant
Trenton Sax
trenton.sax@savmn.com
612-782-3320

Finance Director
Shelly Rueckert
shelly.rueckert@ci.saint-anthony.mn.us
612-782-3316

Human Resources Coordinator
Jennifer Doyle
jennifer.doyle@ci.saint-anthony.mn.us
612-782-3315

Consultants

In accordance with [Minnesota Statutes 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 2023:

Accounting

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

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

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

Financial Audit

Redpath and Company
55 E Fifth St., Ste. 1400
St. Paul, MN 55101
651-426-7000

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

Engineering

Barr Engineering
4700 W 77th St.
Minneapolis, MN 55435-4803
952-832-2600

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

Emmons and Olivier Resources
651 Hale Ave. N
Oakdale, MN 55128
651-203-6001

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

HGA
420 N Fifth St.
Minneapolis, MN 55401
612-758-4000

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 Sixth St.
Minneapolis, MN 55402
612-337-9215

Information Management and Technology

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

Baztec, Inc
4931 Russell Ave N
Minneapolis, MN 55430
612-296-2641

Bolton & Menk
7575 Golden Valley Rd., #200
Golden Valley, MN 55427
612-220-4999

Braun Intertec
11001 Hampshire Ave. S
Minneapolis, MN 55438
952-995-2000

Culture Brokers, LLC
1610 5th St NE
Minneapolis, MN 55413
651-321-2167

Dudley Edmondson
4302 Cooke St
Duluth, MN 55804
218-349-0218

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

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

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

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

Sarah Nassif
37 Arthur Ave SE
Minneapolis, MN 55414
612-207-8751

Wilderness Inquiry
1611 County Road B West, Ste 315
St Paul, MN 55113
612-676-9400

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



Figure 2. Project partners at a groundbreaking ceremony for Graco Park on Aug. 29, 2023. *From left:* MWMO Executive Director Kevin Reich, Graco CEO and President Mark Sheahan, Met Council Member Robert Lilligren, MPRB Superintendent Al Bangoura, MPRB President Meg Forney, MPRB and MWMO Commissioner Billy Menz.

Capital Project Grants

Purpose

The MWMO's Capital Project Grants fund water quality and ecosystem health enhancements within the MWMO watershed. These projects provide unique and innovative solutions for stormwater management in highly developed urban areas. They also provide opportunities for 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 for all infrastructure systems.
- Participate as members of project teams from ideation through design and implementation.
- Build the MWMO's capital improvement project (CIP) list with opportunities to collaborate

on capital projects that meet both MWMO and member organization goals.

- Strengthen our ability to reach key audiences by collaborating with 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.

2023 Implementation

In 2023, the MWMO completed, entered into, or continued agreements and allocated capital funds for the projects listed below.

More detailed information about our projects can also be found at mwmn.org/projects.

5th Street NE Diversion Manhole

Design of the Fifth Street NE diversion manhole is associated with the Northern Columbia Green Infrastructure project, which began in 2020. For the first season of plant establishment in the northwest basin in 2024, the inlet will continue to end with a pipe bulkhead on the east side of the Fifth Street NE curb line, upstream of two hydrodynamic separators. The design of the diversion manhole and connection between the stormsewer running north to south along Fifth Street NE was completed in 2023, and construction will take place in the fall of 2024.

37th Avenue Green Stormwater Infrastructure

The City of Columbia Heights (in coordination with the City of Minneapolis) is reconstructing approximately 5,230 feet of 37th Avenue between Central Avenue and Stinson Avenue NE. The project exists on the boundary of Columbia Heights and Minneapolis, and includes adding a pedestrian trail on the north side of 37th Avenue, a boulevard between 37th Avenue and the proposed trail, and the inclusion of several green stormwater infrastructure (GSI) features.

GSI features will include tree trenches, bioswales, and the creation of native plant habitat. The work provides the opportunity to make right-of-way improvements with many benefits (infrastructure, environmental, societal, aesthetic), for various users. These improvements will further the goal of improving water quality by reducing the overall impervious area within the corridor, creating disconnected impervious areas with the inclusion of the proposed trail, and incorporating beneficial GSI.

Columbia Heights City Hall Snowmelt System

The City of Columbia Heights constructed a heated sidewalk serving approximately 5,000

square feet of exterior sidewalk and parking garage driveway area at its new city hall, located at the corner of 40th Avenue NE and Central Avenue NE. This system is designed to eliminate the need for chloride-based (i.e., salt) deicers used to melt ice in the winter.

Without the snowmelt system, assuming a conservative salt application at the rate of 1 pound of salt per 250 square feet, around 20 pounds of deicing salt would be applied after each snow event. This would be enough to contaminate up to 7,600 gallons of water in a single snow event. In addition to saving the city money, the system will eliminate the need for an amount of salt that could contaminate an estimated 121,000 gallons per year of stormwater runoff that flows to the Mississippi River.

Columbia Stormwater Pretreatment

The MWMO and the City of Minneapolis installed a stormwater pretreatment unit known as a hydrodynamic separator at the intersection of 35th Avenue NE and NE Tyler Street to help ensure the long-term functionality of the Northern Columbia Green Infrastructure project to the west (downstream). The system is designed to screen, separate, and trap trash, debris, sediment, and hydrocarbons from stormwater runoff.

The project was completed in 2020 and MWMO funding was mostly released in 2021. In 2022, the remaining 10 percent of the grant was released with the city's submission of the operations and maintenance plan.

Graco Park Development

The MWMO awarded the Minneapolis Park and Recreation Board (MPRB) a Capital Project Grant of up to \$480,000 to fund native habitat restoration, stormwater management features, and a heated sidewalk snowmelt system for the planned Graco Park at Sibley Street NE between Eighth Avenue and 10th Avenue NE in Minneapolis.

The Graco Park concept plan includes a multi-use, net-zero building with a geothermal heat source, walkways, gathering spaces, a trail under the Plymouth Avenue bridge that connects to Boom Island Park, public access to the river, and extensive integration of native habitat restoration and stormwater management features. The Mississippi East Bank Trail will continue to travel through the park, with safety upgrades at the intersection of Plymouth/Eighth Avenue NE and Sibley Street NE.

Juxtaposition Arts Campus Expansion

Juxtaposition Arts (JXTA), a teen-staffed nonprofit art and design center, gallery, retail shop, and artists' studio space in North Minneapolis, was awarded a \$216,000 Capital Project Grant for a stormwater retention and reuse system and native plantings at its campus expansion project at 2015 Emerson Avenue N in Minneapolis.

JXTA sought to provide stormwater management features that are innovative, highly visible, and that provide educational benefits for their students and partners. The MWMO previously assisted JXTA in the development of raingardens at its Skateable Art Plaza through an Action Grant. Investigation of the site identified significant environmental pollutants in the soil that require complete removal and disposal. The stormwater management features were installed in 2022, and the project was completed in 2023 with the planting of pollinator-friendly vegetation and development of educational signage.

Metro Transit Bus Garage

The MWMO worked with Metro Transit to design and implement a stormwater reuse system that will be used for washing buses at a new bus operations and maintenance facility in North Minneapolis. The system utilizes a 40,000-gallon underground cistern and multiple filtration methods to capture and treat runoff from the building's roof. This will allow facility staff to conserve up to 13,000 gallons of potable water each day and up to 2.5 million gallons of water per year. Construction was largely completed in 2022, and the facility opened in 2023.

Northern Columbia Green Infrastructure

Following extensive outreach and engagement in 2019, the MWMO and its partners began installation of new stormwater best management practices (BMPs) at the Columbia Golf Course and Columbia Park in October 2020. The project expanded an existing wet stormwater pond and constructed one new dry pond and one new wet basin at the golf course park, along with the necessary stormsewer improvements to convey stormwater. As part of the Northeast Stormwater Management Initiative, these upgrades will improve water quality, restore habitat, enhance the playability of the golf course, and improve the flood resiliency of the park, golf course, and upstream neighborhoods.



Construction and habitat restoration work was mostly completed in 2022, and final grading of the new wet basin and vegetation establishment work occurred in 2023, with final vegetation establishment to occur in 2024 and 2025, which marks the additional two-year maintenance phase, in which the restoration areas will be further supported by the MWMO. During this time, City of Minneapolis and Minneapolis Park and Recreation Board staff will be trained in native vegetation maintenance techniques, with the goal of them taking over the maintenance in 2026.

NorthPoint Health and Wellness Center Expansion

Construction of a stormwater-friendly landscape for the expanded NorthPoint Health and Wellness Center in North Minneapolis took place in 2022. Stormwater management features

include a raingarden, modular wetlands, and underground storage with a stormwater reuse system. This system was constructed to manage stormwater from a portion of the new building, the plaza, and the new parking lot.

The MWMO has been partnering with Hennepin County on this initiative since 2018. During 2020, the project was redesigned to come up with a more cost-effective solution to achieve the county's goals for the project. Construction of the stormwater management features was mostly completed in 2022. In 2023, the project was completed with the addition of the raingarden and vegetation.

Southside Green Zone Infrastructure Improvements

The MWMO awarded the City of Minneapolis a \$210,000 Capital Project Grant to install green infrastructure as part of a street reconstruction project at two key intersections along Minnehaha Avenue in the city's Southside Green Zone.

The city is working to convert 4,797 square feet of pavement into green space and treat stormwater runoff from approximately 1.3 acres of public right-of-way, adjacent roadways, and surrounding properties at Franklin and Minnehaha Avenues, and at 21st Avenue S and Minnehaha Avenue. The project will serve as a model for future collaborations between the city's Transportation and Surface Water and Sewers Divisions by informing approaches, scopes, procedures, and designs that could be replicable for future projects associated with the city's Concrete Streets Rehabilitation Program. The project will also create a unique opportunity for training and green jobs by using the vegetation installation and maintenance as a learning lab for local youth and nonprofit programs that invest in local, green jobs for the first five years of plant maintenance. The maintenance work will begin in 2024.

Towerside Fourth Street SE Landscape for Habitat

The management of an existing operations and maintenance grant along Fourth Street SE was taken over by MWMO staff in 2022 due to a shortage of staff at the Towerside Innovation District. The MWMO will continue to maintain the pollinator and migratory bird habitat project along a four-block stretch of Fourth Street SE between Malcom Avenue SE to 25th Avenue SE until the remaining grant funds run out. The MWMO will continue to work closely with Towerside to plan for long-term operations and maintenance.

Upper Harbor Terminal

In 2023, MWMO staff continued to work with the City of Minneapolis, the Upper Harbor Terminal (UHT) development team, the Minneapolis Park and Recreation Board (MPRB), and neighborhood representatives to develop a shared public/private district system that manages stormwater, habitat, privately owned public space, and informal trails. Much of this work

began in the planning phase, as further explained in the Watershed Assessment and Planning sections of this report. Projects listed below are outcomes of the planning phase.

Upper Harbor Terminal Shoreline and Overlook

The Upper Harbor Terminal (UHT) shoreline and pedestrian overlook project is located along the west side of the Mississippi River between 33rd Avenue N and Dowling Avenue N, and is the result of a multi-year planning and construction phasing effort involving the City of Minneapolis, MPRB, MWMO, and private developers.

In 2022, a 1-mile stretch along the riverbank was cleared of undesirable vegetation and many of the remaining industrial structures were demolished. The shoreline and riverbank were substantially regraded to a 3.5:1 slope to allow for quality vegetation establishment and were seeded with a native prairie seed mix. This effort helped stabilize slopes and soils along the river to prevent loss of shoreline, as well as restore habitat with a variety of vegetation types, including oak forest, along the Mississippi River Corridor Critical Area (MRCCA). In 2023, native seeding and perennial plugs establishment took place.

A pedestrian overlook and restoration of a ravine are also planned as part of this project. The overlook will allow for a better-connected stormwater and habitat area within the UHT district stormwater system. It also serves as a headwall to a restored riverbank ravine and the living ephemeral stream falls that will discharge to the Mississippi River. The overlook will allow for educational opportunities and provide a viewing platform for the nearby heron rookery. Construction of the overlook and ravine restoration will begin by summer 2024.

Upper Harbor Terminal District Stormwater 90-Percent Design

Continuing efforts to design a district stormwater system at Upper Harbor Terminal (UHT), MWMO awarded funding to Barr Engineering to assist developers in completing their designs. Collaboration will continue with the MWMO, City of Minneapolis, the Minneapolis Park and Recreation Board (MPRB), developers, and neighborhood representatives to develop a shared public/private District System that manages habitat, privately owned public places, and surface stormwater (HPS).

This project scope includes collaboration with partners to support development of two final agreements that will govern the Upper Harbor District System. The Reciprocal Easement Operating Agreement (REOA) and the Access Agreement. It will advance the design of the southern regional treatment system from 30 percent to 90 percent, which includes a water treatment system, storage tank, and stormwater pipe connections. The design of the reuse system will also be advanced to 90 percent and 100 percent, including UV treatment, pumping, and two ephemeral streams. This effort commenced in 2022, but was largely underway in 2023.

Upper Harbor Terminal Southern Regional Treatment System

Included in the Upper Harbor Reciprocal Easement Operating Agreement (see Planning Section) were funding commitments from the MWMO and Public Works to build and maintain the Southern Regional Treatment and Common Reuse Systems.

MWMO staff, Barr Engineering, Minneapolis Public Works, First Avenue, and United Properties started working together on the Southern Regional Treatment System design in May 2023. We finished a 90 percent design set for review by November 2023. The design process was funded through the “Upper Harbor Terminal District Stormwater 90 Percent Design” line item in Table 1 below.

Xcel Energy Marshall Operations Center

The MWMO provided grant funding to Xcel Energy to enhance water quality and habitat improvements at its newly constructed facility at the northwest corner of St. Anthony Parkway and Marshall Street NE in Northeast Minneapolis. The funding will be used for a variety of pollinator and wildlife habitat improvements, as well as stormwater best management practices.

Stormwater management features are anticipated to remove an estimated 95 percent of phosphorus and sediment from the site’s stormwater runoff. The redeveloped site will also serve as a connection between several existing prairie and woodland habitat areas near the Mississippi River. In 2022, infiltration basins, vegetated swales, and pretreatment structures were constructed, most of the invasive plant species were removed, and some of the native trees were planted around the infiltration basins. In 2023, the project was completed with the planting of the remaining trees, native prairie seeding, installation of shrubs and perennials around the building, and the addition of interpretive features.

Funding Availability and Outcomes

Table 1 on the following page shows the funding spent or anticipated to be spent over a three-year window for each MWMO capital project. Amounts spent are rounded to the nearest \$1,000. Capital projects are either identified in the MWMO’s Watershed Management Plan as part of its Capital Improvement Program or are awarded funding through a competitive grant application process. Each year, funding is made available to allow for the completion of the projects identified in the plan (\$3.03 million allocated for 2023).

Table 1. Capital Project Grants Implementation

Implementation Table	2022	2023	2024
CIP Budget	\$2,700,000	\$2,862,000	\$3,034,000
5th Street Diversion Manhole Design and Construction	\$11,000	\$23,000	\$320,000
37th Avenue Green Stormwater Infrastructure	--	\$215,000	\$59,459
3030 Nicollet Stormwater Infrastructure	--	--	\$486,900
Columbia Heights City Hall Snowmelt System	\$119,000	\$13,000	--
Columbia Stormwater Pretreatment	\$16,000	--	--
Downtown East Green Infrastructure	\$500,000	--	--
Fridley Hydrodynamic Separator	--	--	\$64,000
Graco Park Development	--	\$314,000	\$166,000
Green Central Green Stormwater Infrastructure	--	--	\$202,205
Hoyer Heights Tree Trenches	\$38,000	--	--
Juxtaposition Arts Campus Expansion	\$171,000	\$32,000	--
Metro Transit Bus Garage	--	\$40,000	--
Northern Columbia Green Infrastructure	\$350,000	\$517,700	\$55,000
NorthPoint Health and Wellness Center Expansion	\$284,000	\$32,000	--
Northrup King Campus Redevelopment	--	--	\$750,000
Ole Olson Park	--	--	\$419,960
One Southside	--	--	\$275,000
Phillips Safety Improvements Green Stormwater Infra-	--	--	\$315,350
Southside Green Zone Infrastructure Improvements	--	--	\$210,000
Sylvan Hills Park Regional Treatment			\$1,493,000
Towerside Fourth Street SE Landscape for Habitat	\$15,000	\$4,000	\$4,000
Upper Harbor Terminal District Stormwater 60% Design	\$235,000	\$235,000	\$37,000
Upper Harbor Terminal District Stormwater 90% Design	\$100,000	\$304,000	\$304,000
Upper Harbor Terminal Easement Descriptions	\$8,000	\$35,000	\$35,000
Upper Harbor Terminal Shoreline and Overlook	\$1,267,000	\$139,000	\$1,194,000
Water Works Stormwater Reuse System	\$100,000	--	--
Xcel Energy Marshall Operations Center	\$110,000	\$170,000	\$15,000

Capital Projects Substantially Completed over the Last Three Years

Below is a summary of progress made towards MWMO's Watershed Management Plan Goals via capital projects. The projects are associated with the year they have been deemed substantially complete.

Projects commenced in 2021 included: Downtown East Greening.

Projects commenced in 2022 included: Columbia Heights City Hall Snowmelt System; Juxtaposition Arts Campus Expansion; NorthPoint Health and Wellness Center Expansion; Upper Harbor Terminal District Stormwater 60-Percent Design; and Water Works Stormwater Reuse System.

Projects commenced in 2023 included: Xcel Energy Marshall Operations Center, Upper Harbor Shoreline, 37th Avenue Green Stormwater Infrastructure

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

Water Quality and Quantity	2021	2022	2023
Total Number of Projects	1	5	3
Total Annual TSS Removed (lbs.)	946	932	3,360
Total Annual P Removed (lbs.)	4.8	3.79	15.26
Total Volume Reused (gal.)	0	132,943	0
Total Volume Infiltrated (cu. ft.)	0	5,005	666,035
Urban Stormwater Management	2021	2022	2023
Types of BMPs Installed			
Infiltration Basin	0	0	13
Cistern	0	4	0
Filtration Basin	1	6	0
Permeable Pavement	0	0	0
Iron-Enhanced Sand Filter	0	0	0
Pretreatment	0	0	0
Streambank Stabilization	0	1	0
Habitat Restoration	0	0	1
Tree Trench	0	3	12

Ecosystem Health	2021	2022	2023
Vegetation Added (sq. ft.)	11,536	192,160	134,818
Trees Added	35	50	121

2024 Workplan

Several projects were underway in 2023 that will be finalized and reimbursed in 2024, including:

- 37th Avenue Green Stormwater Infrastructure
- Fifth Street Diversion Manhole
- Graco Park Development
- Northern Columbia Green Stormwater Infrastructure
- Northrup King Campus Redevelopment
- Southside Green Zone Infrastructure Improvements
- Upper Harbor Terminal District Stormwater 90-Percent Design
- Upper Harbor Terminal Shoreline and Overlook
- Xcel Energy Marshall Operations Center

In addition, nine capital projects will largely get underway in 2024:

3030 Nicollet Stormwater Infrastructure

A stormwater reuse system and other green infrastructure will be installed at a planned multi-family housing development at 3030 Nicollet Avenue in Minneapolis. The building will replace a former Wells Fargo branch that was damaged during civil unrest in 2020 and then demolished. Along with a new Wells Fargo branch, the project will construct 110 units of affordable housing and affordable commercial condos that will be sold to local entrepreneurs.

Grant funds will be used to support the final design and installation of the stormwater and habitat features at the site. A rainwater harvesting system will use reclaimed stormwater runoff from the building's roof for toilet flushing and irrigation. A stormwater infiltration tank will treat and infiltrate the runoff from both 3030 Nicollet Avenue and the adjacent parking lot to the north. A raingarden will filter water from the roof overflow drains, while a permeable paver patio area will capture and treat additional runoff.

Fridley Hydrodynamic Separator

The City of Fridley will install a Hydrodynamic Separator (HDS) within a residential neighborhood at the intersection of Buchanan Street NE, Lincoln Street NE, and 52nd Avenue NE. The purpose of the HDS would be to reduce pollutants reaching Sullivan Lake, which is on the State Impaired Waters list for nutrients and discharges into the Mississippi River. The HDS will treat a 16.2-acre drainage area and is estimated to remove 1 pound per year of total phosphorus and 366 pounds per year of total suspended solids from the stormwater before entering Sullivan Lake, which discharges to the Mississippi River.

Green Central Green Stormwater Infrastructure

The City of Minneapolis Public Works will implement green stormwater infrastructure (GSI) within its Green Central Safe Routes to School project, located in the Central and Midtown Phillips Neighborhoods. A total of three GSI basins and one sustainable landscaping area are proposed at three intersections: East 34th Street and Portland Avenue, East 28th Street and South 10th Avenue, and East 34th Street and Clinton Avenue South. This project will convert a total of 4,495 square feet of impervious surface to infiltration basins and permeable green space, which will treat runoff from a total of approximately 0.56 acres of public right-of-way, adjacent roadway, and adjacent properties. This will result in an estimated reduction of 215 pounds per year of total suspended solids (TSS) and 1.19 pounds per year in total phosphorus (TP) that flow to the Mississippi River. The basins will be planted with native vegetation, providing pollinator and wildlife habitat.

Northrup King Campus Redevelopment

Artspace Projects, Inc. (Artspace), a nonprofit arts organization specializing in creating, owning, and operating affordable spaces for artists and creative businesses, received approval for an MWMO Capital Project Grant of up to \$750,000 for the Northrup King Campus Redevelopment Project. The Northrup King Campus is approximately 13 acres and is located at 1500 Jackson St. NE in Minneapolis.

Design work and cost estimates for stormwater management and habitat enhancement features were refined in 2021. The applicant proposed multiple ways to improve stormwater management for this historic site that currently has no stormwater practices, including: two filtration tanks; a combined rate control and treatment tank (with up-flow filter); permeable pavement areas; tree trench filtration systems; sunken trenches along streets; bioswales; runnel conveyance; and reuse/cisterns. The project also includes native and pollinator-friendly plantings. Construction of the project is anticipated to begin in spring 2024.

Ole Olson Park

Ole Olson Park, located along the west bank of the Mississippi River in North Minneapolis, will undergo expanded habitat enhancement and shoreline restoration as part of the development of a trail connection between Ole Olson Park and the 26th Avenue Overlook. This project will restore and expand prairie habitats that will stabilize slopes and reduce soil erosion. On a portion of the site, steep slopes, likely formed by previous industrial users, will be reshaped to a more gradual slope. The more gradual slope will help ensure native plant establishment, enhance access to the river, and reduce the need for retaining walls. An existing prairie habitat restoration project at Ole Olson will also be expanded to better connect to the 26th Avenue Overlook project that MWMO supported in 2019.

One Southside

Southside Community Health Services is redeveloping a 0.7-acre site located at 1010 Lake Street in the Midtown-Phillips neighborhood of Minneapolis. The redevelopment project will incorporate stormwater management features that are innovative, highly visible, and provide both water quality and habitat benefits to the MWMO watershed, as well as health benefits for their staff, patients, partners, and the South Minneapolis community.

The redevelopment will include a terraced water feature that treats stormwater, a water reuse storage tank to store and use for irrigation, and permeable pavers with an engineered underground storage chamber. The entire system is designed to intercept, collect, retain, and reuse stormwater runoff. It will also provide native habitats for pollinators and wildlife as well as for the enjoyment of the community. The project will result in an estimated reduction of 200 pounds per year of total suspended solids (TSS) and 0.61 pounds per year in total phosphorus (TP) that flow to the Mississippi River.

Phillips Green Stormwater Infrastructure

The City of Minneapolis Public Works Department will incorporate green stormwater infrastructure (GSI) into a traffic calming and pedestrian safety improvement project within the Phillips Neighborhood. A total of nine GSI basins and two areas of sustainable landscaping are proposed at two intersections: East 24th Street and Elliot Avenue, and East 24th Street and 10th Avenue South. This project will convert a total of 3,451 square feet of impervious surface to infiltration basins and permeable green space, which will treat runoff from a total of approximately 0.68 acres of public right-of-way and surrounding properties. This will result in an estimated reduction of 219 pounds per year of total suspended solids (TSS) and 1.21 pounds per year in total phosphorus (TP) that flow to the Mississippi River. The basins will be planted with native vegetation, providing pollinator and wildlife habitat.

Sylvan Hills Park Regional Treatment

The City of Fridley will reconstruct Sylvan Hills Park with a combination of surface and underground stormwater treatment features, including curb cuts, stormsewer pipe redirection, and an underground pipe diversion to bring off-site water into the neighborhood park. The park will capture stormwater from around 77 acres and will be designed to treat water from up to a 1.1-inch rainfall event. Stormwater features include infiltration basins, bio-swales, and an underground infiltration tank. Estimated annual water quality benefits include removal of over 16.1 pounds of total phosphorus and more than 5,000 pounds of total suspended solids annually. Local flooding will also be reduced. Additionally, more than 20,000 square feet of native vegetation will be planted and one of the infiltration basins will be adjacent to the planned playground and designed to be a nature-focused play area.

Upper Harbor Terminal Northern Common Reuse System and Ephemeral Stream

Continuing the multi-year planning and construction effort at Minneapolis' Upper Harbor Terminal (UHT), the Common Reuse System and Ephemeral Stream will be constructed on Tax Parcel 2 of the UHT development site in conjunction with park development by the Minneapolis Park and Recreation Board. The Common Reuse System consists of infrastructure for the collection, storage, and distribution of stormwater runoff for reuse. This includes an underground storage tank, conveyance infrastructure, UV treatment, and a pumping system. Reuse water is intended for use at an ephemeral stream and for landscape irrigation. The Ephemeral Stream is a constructed network of surface stormwater features. Water flow will occur during, and shortly following, precipitation events, and is intended to support a living stream system favorable to macroinvertebrate taxa such as mayflies, dragonflies, and damselflies. Both the Common Reuse System and Ephemeral Stream are scheduled to be constructed in 2024.

Upper Harbor Terminal Southern Regional Treatment System

Final designs and bid documents are scheduled to be released for bid on February 16, 2024. The construction of the Southern Regional Treatment System and the Common Reuse System on Parcel 5 is central to MWMO's ability to generate and cycle water through a system of connected habitat, public places, stormwater basins, and living streams, all of which will exist at various levels of design and completion after the 2024 construction season.



Figure 3. MWMO Artist-in-Residence Sarah Nassif (center) leads visitors in a Weaving Water fiber art exercise at the Longfellow River Gorge Festival on Sept. 10, 2023.

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, Minnesota Water Stewards, Citizen Advisors, community volunteers and other entities involved in water resources management.
- Support and promote local stewardship initiatives, community leadership and public engagement.
- Create demonstration sites to inform and educate the watershed community.

2023 Implementation

The MWMO carried out the following communications and outreach activities in 2023:

Community Outreach

The MWMO partnered on 39 community events, providing tours, activities and/or presentations for participants. Many events were based in the new “Meet the Mississippi” campaign and arts related programming, which seeks to provide access to recreational activities in the watershed while learning about water and habitat protection. More than 2,264 participants engaged with staff during these events to learn about actions they could take to protect water quality. Additionally, the MWMO continued to build connections with communities through general neighborhood outreach and responding to inquiries for information or help around stormwater issues, and highlighted community projects through communications channels to demonstrate the diversity of perspectives and efforts in protecting water in the MWMO. The MWMO continues to seek opportunities for outreach in under-served or under-represented areas of the watershed and prioritizes these opportunities as they arise.

Email Communications

Email is a key part of the MWMO’s communication strategy. The MWMO sends out a monthly email newsletter that serves as a digest of news and events from all MWMO program areas. It also provides periodic email bulletins on specific topics. Subscribers may select from a list of topics based on their individual areas of interest. The MWMO uses the GovDelivery email marketing platform.

Table 3. Snapshot of MWMO Email Communications

Metric	2019	2020	2021	2022	2023
Number of Bulletins	118	85	99	85	66
Impressions	70,000	70,600	74,300	104,000	112,000
Engagement Rate	53.8%	40.8%	48.8%	51.8%	48.3%
Total Subscribers	6,129	7,874	9,083	9,984	10,744

Minnesota Water Stewards

The Minnesota Water Stewards program increases knowledge and awareness of water quality and creates a skilled volunteer corps who work within their communities to effect change. In 2023, the MWMO sponsored the training of a cohort of five stewards. The course content is now primarily delivered online and the cohort had virtual check-in sessions monthly to get to know one another, learn about how course content applies in the MWMO, and plan capstone projects. The group met in person for a watershed tour in May and then again at the Confluence of Stewards with all metro-area stewards in October.

New in 2023, the MWMO had two stewards taking part in the “Art for Water” track of the Water Stewards program. These practicing artists participated in the standard course curriculum, but then completed a public art project for their capstone project instead of a typical stormwater best management practice installation.

Green Workforce Development Programs

The Mississippi River Green Team is a two-year employment and conservation program for teens from North and Northeast Minneapolis. 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. In 2023, 16 youth were employed in the program.

Youth have the chance to participate in the Mississippi River Green Team for up to 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. Many Green Team alumni have gone on to pursue degrees and careers in environmental fields.

In addition to the Green Team, the MWMO and MPRB piloted a “next level” workforce development program, the Green Infrastructure Inspection Team (GrIIT). GrIIT is geared for 16–18-year-olds who have completed two years of the Mississippi River Green Team or a similar environmental employment program. In 2023, two youths and a supervisor piloted the

program and completed more than 250 project inspections on MPRB lands. They performed maintenance on many stormwater BMPs, initiated long-term ecological monitoring at Columbia Park and Golf Course, and surveyed park lands for specific invasive species.

Professional Workshops and Trainings

Again in 2023, the MWMO sponsored and facilitated trainings on turfgrass maintenance and smart salting. More than 150 winter and summer maintenance professionals, property owners, and supervisors in the public and private sectors attended a total of four trainings held in 2023. Two sessions were delivered virtually, while two were hosted in person at the MWMO. These trainings are a part of a voluntary maintenance certification program through the Minnesota Pollution Control Agency.

Social Media

The MWMO uses social media to engage the public on a range of topics related to its mission. It currently maintains an active social media presence on Twitter, Facebook, LinkedIn, Instagram, Flickr, and YouTube. It is difficult to provide an apples-to-apples comparison of analytics data between different platforms, since each one uses different metrics. With that being said, below is a snapshot of the MWMO's social media audience and overall reach in 2023. Comparable numbers for previous years are included, if available.

Table 4. MWMO Social Media Followers

Channel	2019	2020	2021	2022	2023
Facebook	2,100	2,287	2,418	2,528	2,700
Instagram	972	1,156	1,320	1,531	1,787
LinkedIn	242	428	523	742	1,008
Twitter	1,346	1,435	1,500	1,485	1,477
YouTube	103	168	326	446	556

Table 5. MWMO Social Media Impact

Channel	2020	2021	2022	2023
Facebook (Reach)	62,470	31,245	29,167	58,133
Instagram (Reach)	4,991	4,299	32,841	15,451
LinkedIn (Impressions)	--	--	37,625	36,403
Twitter (Impressions)	209,064	121,819	71,648	17,423
YouTube (Views)	18,816	52,100	47,878	59,831



Figure 4. A volunteer plants native vegetation as part of a habitat restoration event at Sheridan Memorial Park on Sept. 20, 2023. The restoration project was funded by an MWMO Stewardship Fund Grant to the Sheridan Neighborhood Organization and led by Friends of the Mississippi River.

Stewardship Fund Grants

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

Financial assistance is provided through three types of Stewardship Fund Grants. In 2022, Community Grants offered up to \$5,000 in funding for short-term or smaller-scale water quality projects. Planning Grants offered up to \$20,000 in funding to plan projects that are significant in scope and cost; they are used to assess the potential success of a project or develop the details required to make a project actionable. Action Grants offered up to \$50,000 in funds for the implementation of fully-designed projects that are significant in scope and cost.

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 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 6. Stewardship Fund Grants

Stewardship Fund Grants	2021	2022	2023
Total no. awarded (no. proposed)	14 (25)	14 (18)	20 (21)
Mini Grants (<i>Total; breakdown by season below</i>)	8 (18)	6 (10)	12 (12)
<i>Spring</i>	4 (11)	5 (8)	8 (8)
<i>Summer</i>	4 (7)	1 (2)	4 (4)
Planning Grants	2 (3)	3 (3)	6 (6)
Action Grants	4 (4)	5 (5)	2 (3)

Stormwater Park and Learning Center

Again in 2023, the MWMO’s Stormwater Park and Learning Center hosted botanist and artist Sarah Nassif as the MWMO Artist-in-Residence. Nassif’s Personal Watersheds Exhibit was on view in different iterations throughout the year. Weaving Water Workshops — free fiber art workshops that reveal and celebrate connections between craft, community, and water — were held periodically through the year.

In addition to Personal Watersheds, the gallery also hosted The Mississippi Pearl, a community-made piece developed by Art to Change the World (ACW). ACW hosted workshops to engage the community with the piece during its time on view.

The MWMO also hosted two large community events in the summer of 2023. The annual Share the River Nordeast event in June welcomed more than 100 people for an evening of community, canoeing, and cookies. A July event hosted in partnership with Public Art St Paul as part of the WAKPA triennial art festival, Watershed Moment, drew more than 60 participants for an evening of art-making, facility tours and socializing.

Website

The MWMO website serves as the main hub for information about MWMO projects and programs. MWMO staff maintain the website internally and contract with a website development firm for technical support as needed.

In 2023, MWMO staff worked with web developers to develop a plan for a number of future website improvements, including a redesigned homepage and project map interface, as well as search engine optimization, improved site search, and accessibility testing and remediation. These upgrades will be implemented in 2024 (see “2024 Work Plan” below).

Table 7. MWMO Website Traffic Overview

Metric	2019	2020	2021	2022	2023
Pageviews	100,605	95,626	96,986	97,642	108,924
Sessions	47,523	47,335	54,646	52,066	55,342
Users	33,495	33,729	38,806	37,228	37,270

Youth Outreach

The MWMO staff facilitated “Stormwater 101” programs, the MWMO’s signature outreach programming, which utilizes a watershed floor map, a stream table, a watershed model, and on-site stormwater BMPs, for 321 youth.

Table 8. Communications and Outreach Implementation

Implementation Table	2022	2023	2024
Communications and Outreach Budget	\$250,000	\$250,000	\$250,000
Stewardship Fund Grants Budget	\$250,000	\$350,000	\$350,000
Arts-Engaged Outreach Programming	--	\$58,625	--
Community Outreach	\$16,385	\$10,560	--
Drone Equipment Purchase	\$3,248	--	--
Email Communications	\$6,381	\$6,700	--
Minnesota Water Stewards	\$13,328	\$9,025	--
Mississippi River Green Team	\$14,313	\$17,435	--
Professional Workshops and Trainings	\$8,000	\$9,660	--
Stormwater Park and Learning Center	\$8936	--	--
Website	\$7,820	\$11,025	--
Youth Outreach	\$7,237	\$311	--

Table 9. Communications and Outreach-Related Watershed Management Plan Goals and Measures Achieved

Number Engaged (by Audience)	2021	2022	2023
Professional	277	502	424
Community	706	1205	1820
Youth	283	223	321

2024 Workplan

- MWMO staff will provide communications support and leadership for the Mississippi Centennial Celebration, a multi-agency effort to commemorate 100 years of Mississippi River protection and restoration in the Twin Cities Metro Area in 2026.
- The MWMO will launch a podcast, “River of Ideas,” focusing on in-depth discussions about green infrastructure, urban planning, water quality, and related topics.
- The MWMO will launch a redesigned website with an updated homepage, project page interface and other improvements. The MWMO will also undertake an accessibility audit and remediation project to maximize the website’s accessibility to users with disabilities.
- The MWMO will offer resources and support for residents to take water-friendly actions at home and in their communities. Priorities will be building relationships with new,

underserved, and/or other target audiences, such as those near MWMO-funded projects.

- The MWMO will focus on connecting residents with the Mississippi River through various recreational offerings through the “Meet the Mississippi” outreach campaign.
- The MWMO will continue to fund Stewardship Fund Community Grants, Planning Grants, and Action Grants. Efforts to assist grantees from targeted populations will continue as opportunities arise.
- Citizen Advisory Committee (CAC) members will engage with MWMO activities, mainly through upcoming Planning and Action Grant reviews and through other engagement opportunities. Strategic recruitment of CAC members from under-represented populations will continue.
- The MWMO will train five new Minnesota Water Stewards and support continued engagement of certified stewards in their work as community leaders on behalf of water quality and habitat.
- The MWMO will continue to offer opportunities to educate and engage local policymakers and community leaders.
- The MWMO will offer training opportunities for professional audiences whose work directly impacts water quality.
- The MWMO will work with partners to develop and support training opportunities that support the development of a skilled workforce for green infrastructure maintenance.
- The Mississippi River Green Team will enter its 17th year with expanded support and partnerships.
- The MWMO will continue to support youth programs to strengthen awareness and connection to our water resources. Program offerings will be highlighted on the web.
- The MWMO will continue to partner with artist, Sarah Nassif to develop an Arts-Engaged Outreach Strategic Plan for the MWMO and continue to bring Weaving Water Workshops to other parts of the watershed beyond Stormwater Park and Learning Center.
- The MWMO will expand arts-engaged outreach programming as a way to reach new audiences and consider environmental challenges from different perspectives.



Figure 5. The Mississippi River flows rapidly over St. Anthony Falls during spring flooding on April 24, 2023.

Monitoring and Research

Purpose

The MWMO's monitoring and research 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

- Develop a record of baseline data to characterize the quality and quantity of surface and groundwater resources in the watershed.

- Work with the Minnesota Pollution Control Agency to assess pollutants listed on the Minnesota Impaired Waters list for the TMDL process.
- Collect volume and water quality data for key subwatersheds to identify and quantify sources of pollution.
- Assess land use impacts on water quality.
- Evaluate the performance of green stormwater infrastructure (GSI).
- Provide information to help optimize the design of new GSI.
- Investigate and test innovative monitoring and treatment technologies.
- Make data accessible to the public, other organizations, and MWMO staff.
- 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.
- Share monitoring data with non-technical audiences to build knowledge of the watershed and stormwater pollution.
- Develop an emergency monitoring plan in case of emergencies affecting water resources.

2023 Implementation

Capital Projects and Stormwater Best Management Practices (BMP) Inspection, Operation, Maintenance, and Monitoring

Edison High School Green Campus BMP Monitoring

MWMO staff continued to monitor two Edison High School Green Campus BMPs: a parking lot tree trench and an underground stormwater reuse tank. Precipitation, stormwater volume, pumping rates, and water levels were collected. Monitoring data from the reuse system were provided to MWMO outreach staff to share with educators at Edison High School.

Jackson Pond Iron-Enhanced Infiltration Bench

Stormwater quantity and quality data collection continued at the Jackson Pond iron-enhanced sand filter in Columbia Heights. Monitoring equipment to measure outflow from the Jackson Pond iron-enhanced sand filter was maintained and operated for a fourth year. Because of an unusually dry year and scheduling conflicts with the City of Columbia Heights' operation of pumps and MWMO's monitoring staff, no water quality samples were collected in 2023. Data

from outflow weirs was collected to estimate the total volume of water treated by the iron-enhanced sand filter BMPs. MWMO staff will continue to collaborate with City of Columbia Heights public works staff to monitor the Jackson Pond sand filter system in 2024.

St. Anthony Regional Stormwater Treatment and Research System

MWMO monitoring staff continued to inspect, operate, maintain, and monitor the St. Anthony Regional Stormwater Treatment and Research System in 2023. The quantity and quality of water entering and exiting each component of the facility were monitored in order to assess the treatment systems' effectiveness. In May, the sluice gates were closed to begin system cleanout and settled stormwater was pumped out. A sediment deposition analysis was conducted to assess patterns of sediment and organic matter in the swirl chamber. Sediment in the swirl chamber was partially cleaned out in July with the remainder of the sediment removed in November. The swirl chamber was put back online in November after cleanout was complete. Cleanout of the secondary treatment (cartridge chamber and sand filter) and investigation of potential retrofits for these pieces of the system to improve performance will recommence in 2024.

Towerside District Stormwater System

MWMO monitoring staff continued monitoring precipitation, tank level, and stormwater overflow at the Towerside District Stormwater System. Monitoring staff, along with projects and planning staff, continued overseeing the contractor to maintain and operate the ultraviolet treatment system to treat the stormwater from the reuse tank that is used for community gardens.

Other BMP Monitoring Activities

- Infiltration rate, treatment efficiency, and plant health of the 8th Street Stormwater Planters in downtown Minneapolis were collected throughout the 2023 monitoring season. Objectives of the project and results from the first year of monitoring were presented at the Minnesota Water Resources Conference in October 2021.
- Stormwater flow, volume, and water quality data were collected at the MWMO's Stormwater Park and Learning Center filter media lab site. Monitoring supported continued work on a research project begun in 2021, with the objective of evaluating three different types of filter media: iron-enhanced sand, biochar-amended sand, and regular sand. These filter media are being evaluated for efficiency of pollutant removal from stormwater running off the shared Tony Jaros and MWMO parking lot.
- Staff monitored level and reuse amounts at the Minneapolis Sculpture Garden in collaboration with Minneapolis Park and Recreation Board staff.

Data Management, Reporting, and Outreach

MWMO monitoring staff began the in-house operation, maintenance, and management of the MWMO's remote monitoring data network in 2018. All monitoring data are now stored and managed in one database. Long-term and annual datasets were analyzed and compiled. MWMO staff continued to collaborate 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 annually to the Minnesota Pollution Control Agency's EQUIS database at the end of the monitoring year, and summary data are reported on the monitoring pages of the MWMO website. Other data are made available upon request to staff, stakeholders, agencies, and research institutions. A summary of 2023 monitoring efforts can be found on the MWMO website.

Lake and Wetland Monitoring

The MWMO continued to monitor water levels in the Kasota Ponds wetlands and maintained a web-connected monitoring system to autonomously collect and publish level, water temperature, and conductivity data from Kasota Pond West. Water quality and biological sampling were conducted in 2021 following a five-year monitoring schedule; they will be monitored next in 2026.

The MWMO contracts with Anoka Conservation District (ACD) to monitor lake levels and water quality of Sullivan (Sandy) Lake and Highland (Unnamed) Lake in Columbia Heights. In 2022, the lake levels were recorded weekly and data were submitted to the Minnesota Department of Natural Resources LakeFinder database. ACD staff will next monitored the water quality of Sullivan (Sandy) Lake and Highland (Unnamed) Lake in 2025 following a three-year monitoring schedule.

Mississippi River Monitoring

In 2023, water quality samples were collected twice per month between April and October and once per month from November to March at seven sites on the Mississippi River within the MWMO's jurisdiction. Water samples were also collected on a biweekly basis from seven sites on the Mississippi River for E. coli analysis, specifically for continuing data collection for the Upper Mississippi River Bacteria Total Maximum Daily Load (TMDL). Staff gauges at seven locations along the river were visited on a weekly basis to track river level changes throughout the year. Hourly river level data was also collected in the Mississippi River at three locations using an automated continuous level logger.

Stormwater Pipeshed (Source) and Precipitation Monitoring

The MWMO had 10 long-term stormwater pipeshed monitoring sites in 2023. Seven of those sites use a combination of area/velocity sensors and automated samplers to collect water quantity and quality data throughout the year. Those data are used to calculate stormwater runoff volume and annual pollutant loads for the pipesheds. Summaries of stormwater runoff volume and other monitoring data are available on the MWMO website.

Three additional stormwater pipes were equipped with flow monitoring equipment to provide stormwater runoff flow data for the calibration and validation of Hydraulic and Hydrologic (“H&H”) modeling efforts (further discussed in the Watershed Assessment section of this report).

Precipitation data were collected at one manual and 11 automatic rain gauge sites throughout the watershed.

Partnership

65th Avenue Stormwater Tunnel Monitoring

MWMO monitoring staff provided technical service to the West Mississippi Watershed Management Commission and maintained, operated, and collected water quantity and quality data at their 65th Avenue stormwater outfall monitoring site.

Downtown Improvement District (DID) Tree Research

MWMO staff partnered with staff at DID to install soil moisture, temperature, and salinity sensors adjacent to downtown trees in an attempt to understand how fertilization and salt runoff impact tree health and determine whether the timing of tree watering can be better optimized.

Erosion and Sediment Control Internship Program

MWMO monitoring staff worked with the City of Minneapolis Health Department to fund an erosion and sediment control internship program. The MWMO helped fund four interns in 2023 and an activity report was submitted to the MWMO.

Minnesota Stormwater Research Council

MWMO has been a contributor to and a member of the Minnesota Stormwater Research Council (MSRC) since it was founded in 2016. MWMO has a staff member serve on the MSRC Advisory Board to help select impactful research projects that support improved effectiveness in stormwater management. In 2023, the MSRC funded four new projects to improve stormwater pond performance.

Special Projects

34th Avenue Monitoring

MWMO monitoring staff began collecting water quantity and water quality data at the 34th Avenue stormwater tunnel in North Minneapolis in an effort to understand existing baseflow conditions that will discharge into the future Upper Harbor Southern Regional Treatment System. MWMO will be evaluating the need for continued monitoring at 34th Avenue in early 2024.

Columbia Golf Course Monitoring

Monitoring staff collected water level data in a number of ponds and groundwater wells on the Columbia Golf Course in Northeast Minneapolis to investigate groundwater flow conditions in and around the golf course. The collected data is being used in an ongoing study that will be used for the purpose of determining potential future BMP placement in the southern portion of the golf course.

Lowry Avenue Sand Filter

Water level and outflow were collected at the Lowry Sand Filter in 2023 in collaboration with the City of Minneapolis. The sand filter was installed at the southwest corner of Lowry Avenue and Marshall Street in NE Minneapolis in 2012 and treats low flows from 137.5 acres of Hennepin County right-of-way and surrounding neighborhoods. There is interest in understanding the performance of the sand filter in removing particulates; however, the sand filter has been repeatedly plugged since attempts were first made to monitor performance in 2017.

In 2023, MWMO installed level logging pressure transducers to measure water levels in the sedimentation and sand filter chambers, and an AV sensor to measure flow discharging from the sand filter. MWMO was supposed to collect water quality samples from the sand filter and discharge chamber when the sand filter was operational. Because water was standing in the sand filter chamber the entire monitoring season — meaning the sand filter was completely clogged — no water quality samples were collected in 2023. MWMO staff will continue to collaborate with the City of Minneapolis on monitoring the effectiveness of the sand filter in 2024, including examining retrofit solutions that might minimize filter clogging.

Table 9. Water Quality Monitoring Implementation

Implementation Table	2022	2023	2024
Monitoring Budget	\$225,000	\$180,000	\$250,000
Laboratory Analysis	\$103,000	\$88,000	\$110,000
Monitoring Equipment	\$54,000	\$16,000	\$45,000
Monitoring Related Training	\$4,000	\$8,000	\$5,000
Partner support	\$46,000	\$46,000	\$47,000
Professional Services	\$4,500	\$10,000	\$2,000
St. Anthony Regional Treatment	\$3,500	\$2,000	\$30,000
Software and Data Management	\$10,000	\$10,000	\$11,000

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

Monitoring	2022	2023	2024
Number of Stormwater Monitoring Sites	10	11	11
Number of River Sample Locations	7	7	7
Number of BMPs Monitored	10	11	11

Note: The MWMO is currently gathering long-term trend data. For more detailed monitoring information, visit the [MWMO website](#) or contact [Monitoring, Assessment, and Research Program Manager Emily Resseger](#).

2024 Workplan

The 2024 work plan for the MWMO’s monitoring and research programs includes:

New Monitoring Initiatives for 2024

- Analyze river monitoring data to determine long-term trends in water quality.
- Work with MWMO Projects and Outreach staff to develop habitat/vegetation monitoring protocols for existing and future GSI sites.
- Evaluate the cumulative impact of water saved through MWMO reuse projects.
- Develop monitoring goals associated with the long-term operations of stormwater management features at the Upper Harbor Terminal site.

- Update the MWMO's long-term monitoring program outlook, including monitoring for emerging issues.

Ongoing Monitoring and Research Efforts

Many of the monitoring and research activities conducted in 2023 will continue in 2024, including: stormwater and precipitation monitoring at long-term sites; Mississippi River monitoring for water level, water quality, bacteria, and bathymetry; and monitoring select stormwater BMPs throughout the watershed. MWMO monitoring staff will continue to work with Anoka Conservation District to monitor Highland and Sullivan Lakes, and will continue to work with member cities to assess and assist in accomplishing their monitoring needs.

MWMO staff will support the City of St. Anthony Village public works staff in inspection, operation, and maintenance of the primary treatment chamber of the St. Anthony Regional Stormwater Treatment and Research System and will continue to lead the inspection, operation, and maintenance of the secondary treatment system chambers and monitoring treatment efficiency of the entire system. A major effort of 2024 will be evaluating performance issues with the secondary treatment system, specifically tailwater issues from the main storm tunnel, and working on a retrofit solution alongside MWMO projects and outreach staff.

The MWMO will also take the opportunity to evaluate broader needs for the monitoring program, including opportunities to streamline the river monitoring program, more effectively monitor outfalls to the Mississippi River that are often plagued with tailwater issues for multiple months a year, monitor GSI in a more targeted way to obtain more expeditious performance and operations information, and partner with projects staff to improve operations and maintenance outcomes in the watershed.

The MWMO will continue to work with the MPCA and other federal, state, and local agencies on projects as they arise, including current total maximum daily load (TMDL) studies. Monitoring data will be submitted to the MPCA's EQuIS database, published on the MWMO website, and will be available upon request.



Figure 6. An aerial photo showing construction progress at the Upper Harbor Terminal site on Oct. 9, 2023.

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 constituents 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.

2023 Implementation

The MWMO completed, continued or began the following planning initiatives in 2023:

10-Year Watershed Management Plan (2021-2031)

In 2023, the MWMO completed guidance regarding MWMO's standards and our member cities' new MRCCA ordinances. Staff also continued to develop new plans for operations and maintenance of MWMO's grant-funded capital projects. Staff also initiated two new planning processes: one on diversity, equity, and inclusion; and a second that will result in a climate action framework for the MWMO.

Towerside District Stormwater Administration

In 2023, staff continued to serve as the district administrator for the Towerside District Stormwater System. Extensive time commitments at the Upper Harbor project took time away from completing the transition of MWMO's district administrative duties to the Towerside landowners.

The MWMO continued its membership on 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.

Upper Harbor Terminal

In 2023, MWMO staff continued to work with the City of Minneapolis, the Upper Harbor Terminal (UHT) development team, and the Minneapolis Park and Recreation Board (MPRB) to develop a shared public/private district system that manages habitat, privately owned public spaces, and surface stormwater (HPS).

Ongoing planning has led to final design for district systems related to the parkway, Parcel 3’s performance venue, and the MPRB’s Parcel 2 site, as well as construction related to the UHT shoreline and overlook project (as discussed in the “Capital Project Grants” section of this report).

Upper Harbor Reciprocal Easement Operating Agreement (REOA)

The final REOA was signed by all parties in 2023, and MWMO commenced its district administrator duties. The agreement includes \$10,711,931 in grant funding for MWMO’s enhancements to the District System at Upper Harbor. Between now and 2030, as future professional services are hired or capital projects begin construction, they will be reported within the Capital Project Grants section of this report.

The REOA was established to assure the successful implementation of a district system that supports connected habitat, privately owned public places, and surface stormwater (HPS) throughout the 14 redevelopment projects that encompass the 50-acre site.

The MWMO’s planning staff now serve as the Upper Harbor Terminal site’s district administrator. They are responsible for carrying out the legal agreement (REOA) that is guiding the holistic management of habitat, public spaces, and surface stormwater within the Upper Harbor District System. (See the budget line items for Upper Harbor Terminal District Stormwater 60-Percent and 90-Percent Design in the “Capital Project Grants” section of this report for the budget being managed by the district administrator.)

Table 11. Planning Implementation

Implementation Table	2022	2023	2024
Planning Budget	\$100,000	\$80,000	\$100,000
10-Year Watershed Management Plan (2021-2031)	\$13,400	\$7,000	--
DEI Planning	--	\$50,000	--
Phase 1: Climate Action Framework	--	\$20,000	--

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

Planning	2019	2020	2021	2022	2023
Planning Initiatives Started	5	5	3	1	2
CIP Projects Started, Resulting from Planning	1	1	--	3	--
Policy Changes Approved, Resulting from Planning	--	--	1	2	1

New Partnership Agreements Resulting from Planning	1	3	1	--	1
Statutory Requirements Completed to Maintain WMP Relevance	2	--	--	1	--

2024 Workplan

In 2024, the MWMO will continue or begin work on the following initiatives:

10-Year Watershed Management Plan (2021-2031)

In 2024, the MWMO's completed guidance on MWMO standards and our member cities' MRCCA ordinances will be posted on our website. Staff will continue developing plans for future operations and maintenance of capital projects in the watershed, diversity, equity, and inclusion within the MWMO, and a climate action framework for the MWMO.

Towerside District Stormwater Administration

In 2024, staff will continue transferring all administrative duties over to the owners of the Towerside District Stormwater System. Staff will be holding a series of meetings with Oppidan, the organization named in the Stormwater Management Declaration and Easement Agreement (SMDEA) as the next district administrator of the Towerside District Stormwater System.

Upper Harbor Terminal

In 2024, as parcels redevelop, MWMO planning staff will continue to work with the City of Minneapolis, the Upper Harbor Terminal development team, the Minneapolis Park and Recreation Board, and neighborhood representatives to develop a shared public/private district system that manages habitat, privately owned public spaces, and surface stormwater (HPS).

Upper Harbor Terminal Reciprocal Easement Operating Agreement

The MWMO's planning staff will continue to serve the Upper Harbor Terminal site's district administrator through 2030. They will be responsible for carrying out the reciprocal easement operating agreement (REOA) that is guiding the holistic management of habitat, public spaces, and surface stormwater (HPS) within the Upper Harbor District System.

In addition, as a part of the Upper Harbor Terminal REOA, parties agreed that the MWMO may work individually with each parcel owner as their parcel redevelops to identify areas within the project where the community can contribute specific design ideas on public places within the project.



Figure 7. A row of old log boom foundations are visible in the Mississippi River due to low water levels from the ongoing drought on Oct. 11, 2023.

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 inside and outside MWMO boundaries.

2023 Implementation

The MWMO completed the following Watershed Assessment activities in 2023:

Bottineau Field Park Feasibility Study

The Minneapolis Park and Recreation Board (MPRB) is working on design concepts for the Bottineau Field Park Improvements Project in Northeast Minneapolis. Recreation improvements will include upgrades to walking paths, sports courts, play equipment, a new splash pad, and potentially a new skate park. MWMO and MPRB staff had discussed bringing habitat restoration and low-impact stormwater management features to Bottineau Field Park, above and beyond the minimum required stormwater management criteria. The feasibility study assessed the opportunities for stormwater capture and reuse within the park to supply irrigation, tree trenches and other BMPs, as well as critical habitat needs in and around the park, and how to integrate habitat within the current and future planned park upgrades.

East Phillips Feasibility Study

MWMO staff are leading a feasibility study in partnership with Hennepin County, the Minneapolis Park and Recreation Board, and the City of Minneapolis to identify water resource and habitat improvements within the East Phillips Neighborhood of Minneapolis. The impetus of this study is a series of transportation and park projects within close proximity that are planned for implementation within the next five years.

Sylvan Hills Park Feasibility Study

In collaboration with the City of Fridley, the MWMO administered a feasibility study exploring alternatives to maximize water quality, flooding, and habitat benefits in conjunction with the planned 2024 renovation of Sylvan Hills Park. The park is identified in the five-year Capital Improvement Program list of the MWMO's Watershed Management Plan. The study entailed review of existing watershed modeling data, identification of design alternatives, cost-benefit evaluation, and recommendations for implementation leading to final design.

Towerside District Stormwater Phase II 30-Percent Design

In 2023, MPRB worked with Wall Companies and the MWMO to identify the specific land area needed to meet MWMO's connected design for habitat, surface stormwater, and integrated public spaces (HPS) while also satisfying their land dedication requirements. Land dedicated through this process will provide the area needed for the district system.

Watershed-Scale H&H and Water Quality Modeling

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 are used to help the MWMO and its member communities better understand the functioning of our stormwater systems and prioritize the placement and design of future capital projects. The MWMO is divided into multiple project areas for this effort. In 2024, the development of an H&H model was initiated for the highly urbanized 3,146-acre 35W South area in Minneapolis; however, no invoices were submitted in 2023.

Table 13. Watershed Assessment Implementation

Implementation Table	2022	2023	2024
Watershed Assessments Budget	\$200,000	\$300,000	\$200,000
East Phillips Feasibility Study	\$15,740	\$140,690	--
Sylvan Hills Park Study	\$34,600	\$33,400	--
Watershed-Scale H&H Modeling	--	--	\$227,528

2024 Workplan

In 2024, the MWMO will continue or begin work on the following initiatives:

Towerside District Stormwater Phase II 30-Percent Design

In 2024, the MWMO will continue to work with partners at Towerside to advance a district system design that will enhance and connect habitat, public places, and surface stormwater on the 15-acre site.

Completed projects in the southeast corner of the site are currently being served by interim stormwater facilities. The project will need to move ahead with a 60-percent design that provides a permanent stormwater solution that manages stormwater for the entire site, including new additional surface parking and potential redevelopment at the United Crushers elevator site.



Figure 8. The Lowry Avenue Bridge frames the downtown Minneapolis skyline on Oct. 25, 2023.

Financial Information

Policy

During the plan development in 1997-2000, the MWMO board 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 ([Minnesota Statutes 275.066](#)) and, in 2001, became the first joint powers WMO in Minnesota 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](#), also referred to as 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 intent to use funds raised in the most effective and efficient manner possible. The MWMO completed an update to its comprehensive plan in 2011

that changed the way projects are selected for inclusion in the capital improvement plan (CIP). This was amended in May 2015, with a minor CIP schedule update occurring in September 2016. In 2021, the MWMO finished a major update of its 10-year Watershed Management Plan. The updated plan was approved by the Board of Water and Soil Resources in 2021 and approved by the MWMO Board of Commissioners on January 11, 2022.

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. Anyone wishing to partner with the MWMO should 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 forecast levy and amended CIP at the July board meeting.
- Select proposed projects for the next fiscal year at the September board meeting.
- Submit a preliminary levy to counties by September 30 for Truth in Taxation statements.
- Make the updated CIP final and approve a final levy at the November board meeting.
- Submit a plan amendment, if needed, to the Minnesota Board of Water and Soil Resources.
- Submit final levy documents to Anoka, Hennepin and Ramsey Counties by December 15.

Table 14. MWMO Budget

2023 Budget	
Projects Grants and Program Operations	\$4,440,000
Capital Asset Replacement Fund	\$200,000
Administration	\$2,211,000
Subtotal Budget	\$6,851,000
Contingency (Uncollected Levy)	\$120,000
Total Budget	\$6,971,000
Project Grants and Program Operations	\$4,440,000
<i>Projects Grants</i>	<i>\$3,715,000</i>
Riverfront Grants:	\$1,650,000
<i>Upper Harbor Terminal.....</i>	<i>\$1,475,000</i>
<i>Xcel Operations Center</i>	<i>\$175,000</i>
Green Zone Grants:	\$765,000
<i>Juxtaposition Arts Expansion.....</i>	<i>\$175,000</i>
<i>Edison / Safe Routes to Schools.....</i>	<i>\$40,000</i>
<i>NorthPoint Wellness Center</i>	<i>\$300,000</i>
<i>Spark Y Activation</i>	<i>\$250,000</i>
Opportunity Sites Grants:	\$1,300,000
<i>Green Fourth</i>	<i>\$5,000</i>
<i>Columbia Heights Snowmelt.....</i>	<i>\$120,000</i>
<i>Northern Columbia Golf Course</i>	<i>\$615,000</i>
<i>Hoyer Heights Tree Trenches</i>	<i>\$40,000</i>
<i>Downton East Greening</i>	<i>\$500,000</i>
<i>5th Street Manhole Design</i>	<i>\$25,000</i>
<i>Program Operations</i>	<i>\$725,000</i>
Communications and Outreach	\$135,000
Planning and Watershed Assessments	\$200,000
Monitoring and Research	\$215,000
Stewardship Grant Fund	\$175,000
<i>Capital Asset Replacement Fund</i>	<i>\$200,000</i>

Administration	\$2,211,000
Salaries, PERA and Payroll Taxes	\$1,425,000
Employee Benefits	\$200,000
Insurance	\$60,000
Service Providers — Legal, Finance, IT, Auditor, HR, Organizational	\$275,000
Facilities Costs	\$120,000
Staff Training and Reimbursements	\$85,000
Supplies and Miscellaneous	\$46,000

Line items in the 2023 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 2023 audit, visit mwmo.org or contact the MWMO's 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 2023.

Table 15. Certification of Apportioned Levies

District 072 - Middle Mississippi River Watershed Management Organization
Certification of Apportioned Levies
Payable 2023

(1) <i>Payable 2023 Property Tax Levy</i> <u>\$6,971,000</u>			
County	(2) Payable 2022 Taxable Net Tax Capacity	(3) Net Tax Capacity Percent Distribution	(4) Apportioned Payable 2023 Levy (1x3)
ANOKA COUNTY	\$23,678,294	5.7777%	\$402,763
HENNEPIN COUNTY	\$403,093,485	93.6588%	\$6,528.955
RAMSEY COUNTY	\$2,238,774	0.5635%	\$39,282
WATERSHED TOTAL	\$429,010,553	100.0000%	\$6,971,000

