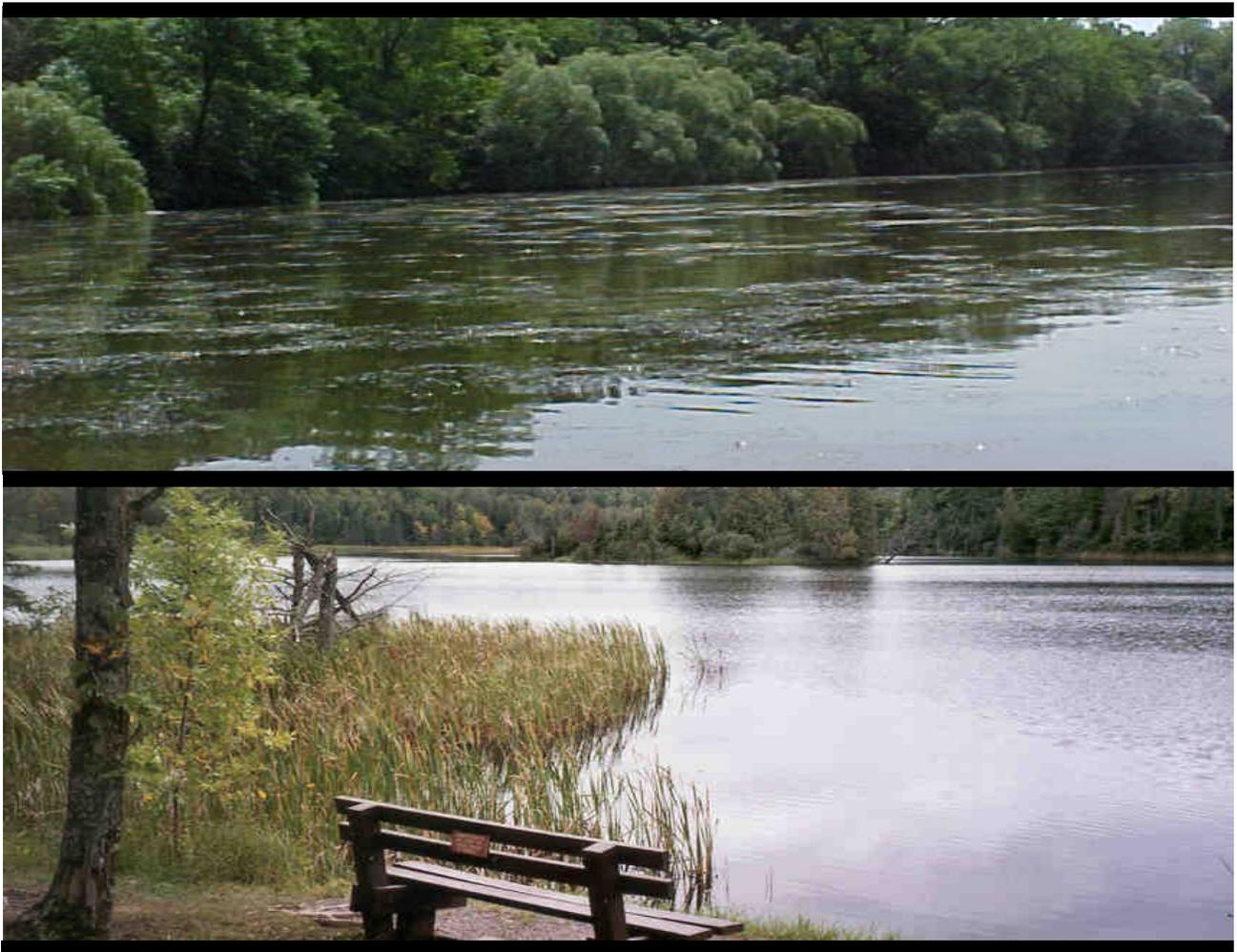




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MANAGEMENT  
ORGANIZATION

# Annual Activity & Financial Report 2012



MWMO Watershed Bulletin: 2013-2

## Annual Activity & Fiscal Responsibility Report 2012

### Contributing Authors:

Kari Oquist, Water Resources Specialist

Udai Singh, Water Resources Manager

Dan Kalmon, Planner and Program Manager

Lorrie Stromme, Program Coordinator

Jenny Winkelman, Education and Outreach Manager

Douglas Snyder, Executive Director



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Views of the Mississippi River. *Photographs by B. Jastram, Mississippi Watershed Management Organization.*



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WATERSHED  
MANAGEMENT  
ORGANIZATION

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2522 Marshall Street NE  
Minneapolis, Minnesota 55418

(612) 465-8780  
(612) 465 8785 fax

[www.mwmo.org](http://www.mwmo.org)

# Annual Activity & Financial Report 2012

## **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 Certified Financial Audit Report (CFAR) is attached as a separate document. 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:

- Financial 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 major program areas. Each program is described by goal and strategy from past work to future work. Due to its size, the Monitoring Report is a separate document. A short summary is found in this document.

The workplan description is delivered at a program 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 program needs are driven by annual budget processes of the watershed and its members.

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

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# Annual Activity and Financial Report 2012

## Organizational Summary

### Formation and History

The MWMO encompasses 13, 602 acres (31.5 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 storm sewer drainage, but was never approved by the Board of Water and Soil Resources (BWSR) or the MWMO Commission.

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

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

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

The MWMO is one of several entities that has developed plans to address critical watershed issues within the MWMO. The MWMO believes coordination of these plans and the entities that drafted them are imperative to successful watershed management. The complex network of private and public (federal, state, regional, municipal, and local) agencies involved in water and natural resource management and land-use planning and development

must work together to achieve mutual goals. To put financial and human resources to best use, land use and environmental policies, projects, and programs stemming from those agencies must be implemented in a complementary, non-duplicative manner.

In April 2011, the cities of Minneapolis, St. Paul, Lauderdale, the City of Saint Anthony Village, and the Minneapolis Park and Recreation Board entered into a revised joint and cooperative agreement (JCA). These entities now form the MWMO.

In 2011 Six Cities Watershed Management Organization was dissolved. The cities of Columbia Heights, Fridley and Hilltop became members of the MWMO in 2012.

## **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 2012 Services and Operations**

- |  |              |
|--|--------------|
| ▪ Number of Employees including seasonal and interns | 13           |
| ▪ Number of FTEs                                     | 10           |
| ▪ FTE Average Length of Service                      | 5 years      |
| ▪ FTE Turnover Rate                                  | 10 %         |
| ▪ Total Operating Revenue                            | 1,038,354.82 |
| ▪ Total Capital Improvements & Program Revenue       | 3,844,826.52 |
- 
- Completed construction of new MWMO Headquarters
  - Conducted four trainings and voluntary certification for public and private contractors, maintenance professionals and supervisors in best practices for winter and summer turfgrass maintenance (171 participants).
  - Ongoing staff participation in Stormwater Steering Committee, Metropolitan Council Livable Communities Advisory Committee, Watershed Partners, Envirothon, Regional Sustainability Research Advisory Group, Mississippi River Partnership, Regional monitoring group, South Metro Total Maximum Daily Loads (TMDL), *E. coli* TMDL, Twin Cities Metropolitan Area Chloride Project and many others
  - Entered into 33 Stewardship Fund Grant agreements (25 Mini, 5 Planning, and 3 Action)
  - Hosted a Grand Opening for the MWMO's Headquarters with over 700 people attending

## **Board of Commissioners**

The governing body of the MWMO is its commission, which consists of five (5) 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 (JCA). These statutes and articles together lay out the appointment process and powers of the Board of Commissioners of the MMWO. A summary of key points follows.

- Notices of all vacancies and appointments shall be published at least fifteen (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 (1) commissioner to represent the member to the commission. Each commissioner shall serve until his or her successor is appointed.

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

## **Commissioners**

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

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

### ***Commissioner Scott Vreeland, Minneapolis Park and Recreation Board, Vice-chair***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

### ***Commissioner Karen Gill-Gerbig, City of Lauderdale, Treasurer***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

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

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

### ***Commissioner Matt Hass, City of Saint Paul***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

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

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

***Commissioner Jim Saefke, City of Fridley***

2522 Marshall Street NE, Minneapolis, MN 55418,-3329  
612-465-8780 x 201

**Alternate Commissioners**

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

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

***Alternate Commissioner Annie Young, Minneapolis Park and Recreation Board***

2117 West River Road, Minneapolis, MN 55411-2227  
612-230-6400

***Alternate Commissioner Diane Hofstede, City of Minneapolis***

350 South 5th Street, Room 307, Minneapolis, MN 55415  
612-673-2203

***Karlyn Eckman, City of Saint Paul***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

***Alternate Commissioner Linda Johnson, City of Hilltop***

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

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

2522 Marshall Street NE, Minneapolis, MN 55418-3329  
612-465-8780 x 201

## **Citizen Advisory Committee**

The MWMO Citizen Advisory Committee (CAC) meets at the request of the MWMO Board of Commissioners to assist in managing the water resources of the MWMO. The scope of responsibilities for the CAC include: reviewing funding proposals (Stewardship Fund Grants, Capital Improvement Projects, etc), reviewing the MWMO's annual capital budget, and participating in planning for the watershed. Other responsibilities may be assigned to the CAC by the Board of Commissioners as needed. The CAC provides review and feedback in the form of recommendations to the MWMO 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<sup>th</sup>. Appointments are for one year and are renewable annually. Up to two at-large positions may be filled by residents outside of the MWMO boundaries. All CAC members may be contacted through the MWMO office at:

2522 Marshall Street NE  
Minneapolis, MN 55418-3329  
612-465-8780 x 204

### **CAC Positions**

#### **Lauderdale (one):**

*Open*

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

Dan Miller

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

Lorin Hatch

#### **Minneapolis Communities (five):**

North: *Open*

Northeast: Perry Dean

Downtown: Charlene Brooks

South: Craig Larson

Southwest: *Open*

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

P. Victor Grambsch (Minneapolis)

Jim Rosenberg (Minneapolis)

Michele Ross (Minneapolis)

Mark Apfelbacher (Minneapolis)

## Staff

The MWMO Board of Commissioners first hired staff in September of 2002. Until that time, limited staffing had been provided by City of Minneapolis Environmental Services staff. The Board of Commissioners first established, and now maintains, personnel policies and structures to attract and retain qualified and competent personnel.

This is accomplished by encouraging continual performance improvement through a well-administered training, salary, and performance-review program, establishing and maintaining salary levels (which are comparable to salaries paid by similar employers with similar needs), providing equal pay for equal work, complying with all governmental requirements and regulations, and by providing flexibility to respond to economic and competition fluctuations while implementing goals of the watershed. In addition to the full-time employees above, the MWMO hires part-time regular and seasonal employees and interns as needed to complete its annual work plan.

### 2012 MWMO Staff

#### Executive Director

Douglas Snyder  
dsnyder@mwmo.org  
612-465-8780, extension 205

#### Education and Outreach Manager

Jenny Winkelman  
jwinkelman@mwmo.org  
612-465-8780, extension 202

#### Program and Planning Manager

Dan Kalmon  
dkalmon@mwmo.org  
612-465-8780, extension 203

#### Education and Outreach Specialist

Erica Sniegowski  
esniegowski@mwmo.org  
612-465-8780, extension 206

#### Program Coordinator

Lorrie Stromme  
lstromme@mwmo.org  
612-465-8780, extension 210

#### Education and Outreach Assistant

Zoua Her  
zher@mwmo.org  
612-465-8780, extension 208

#### Office Administrator

Zhenya Stone  
zstone@mwmo.org  
612-465-8780, extension 201

#### Education and Outreach Assistant

Michaela Neu  
mneu@mwmo.org  
612-465-8780, extension 208

**Water Resources Manager**

Udai Singh  
 usingh@mwmo.org  
 612-465-8780, extension 213

**Environmental Specialist**

Freya Rowland  
 frowland@mwmo.org  
 612-465-8780, extension 214

**Water Resources Specialist**

Kari Oquist  
 koquist@mwmo.org  
 612-465-8780, extension 204

**Intern**

David Kalmon  
 djkalmon@mwmo.org  
 612-465-8780, extension 201

**Environmental Specialist**

Brian Jastram  
 bjastram@mwmo.org  
 612-465-8780, extension 207

**Consultants**

In accordance with Minnesota Statutes, section 103B.227, subdivision 5, the MWMO sends out requests for proposals for legal, professional and technical (engineering), and consultant services at least once every two years (i.e., December of even numbered years). At its annual business meeting in January, the Board of Commissioners reviews a list of approved consultants and modifies it as necessary in the interim.

## Approved List of MWMO Providers for 2012

***Accounting***

HLB Tautges Redpath, Ltd.  
 651-426-7000  
 4810 White Bear Parkway  
 White Bear Lake, MN 55110

***Annual Fiscal Audit***

HLB Tautges Redpath, Ltd.  
 651-426-7000  
 4810 White Bear Parkway  
 White Bear Lake, MN 55110

***Engineering***

Ayres Associates  
 651-484-5415  
 3550 Lexington Avenue North  
 Suite 210  
 Shoreview, MN 55126

Barr Engineering  
 952-832-2600  
 4700 West 77th Street  
 Minneapolis, MN 55435-4803

Stantec (formerly Bonestroo)  
 651-636-4600  
 2335 West Highway 36  
 St. Paul, MN 55113

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

Emmons & Olivier Resources  
 651-203-6001  
 651 Hale Avenue North  
 Oakdale, MN 55128

HDR  
763-591-5400  
701 Xenia Avenue South  
Suite 600  
Minneapolis, MN 55416

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

LHB  
612-338-2029  
250 Third Avenue North  
Suite 450  
Minneapolis, MN 55401

Mead & Hunt  
952-941-5619  
7900 78th Street West  
Suite 370  
Minneapolis, MN 55439

TKDA  
444 Cedar Street, Suite 1500  
Saint Paul, MN 55101

URS  
600 Montgomery Street  
26th Floor  
San Francisco, CA 94111

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

Westwood  
952-906-7419  
7599 Anagram Drive  
Eden Prairie, MN 55344

WSB & Associates, Inc.  
763-541-4800  
701 Xenia Avenue South, Suite  
300  
Minneapolis, MN 55416

### ***Financial***

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

### ***Legal***

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

### ***Investing and Finance***

Ehlers and Associates  
651-697-8553  
3060 Centre Pointe Drive  
Roseville, MN 55113-1105

### ***Technology Provider***

All Covered  
5900 Baker Road, Suite 200  
Minnetonka, MN 55345

### ***Other Service Providers***

Soozin Hirsmugel  
621 E 32<sup>nd</sup> Street  
Minneapolis Minnesota 55407

Alliance for Sustainability  
1521 University Avenue SE  
Minneapolis, Minnesota 55414

Ruth Murphy  
442 Summit Avenue  
Saint Paul, Minnesota 55102

Minneapolis Television  
Network  
125 Main Street SE  
Minneapolis Minnesota 55414

The Design Company  
26 East Exchange Street, No.  
315  
Saint Paul, Minnesota 55101

Digital Motion, LLC  
651-592-3129  
PO Box 600336  
Saint Paul, MN 55106

Fortin Consulting  
763-478-3606  
215 Hamel Road  
Hamel, MN 55340

Ivy Public Relations  
612-584-9767  
1130 Juliet Ave.  
Saint Paul, MN 55105

MMC Associates  
651-647-6816  
1312 Portland Avenue  
Saint Paul, MN 55104

Maria Golner  
515 S. Lexington Parkway No. 106  
Saint Paul, Minnesota 55116

Saint Anthony Falls Laboratory  
University of Minnesota  
(612) 624-4363  
2 Third Ave SE  
Minneapolis MN 55414

WAM Enterprises, Inc.  
952-920-9492  
5207 Grandview Lane  
Edina, MN 55436

## Achievements and Work Plan

### Capital Improvements

#### *Purpose*

The intent of the Capital Improvement Program (CIP) is to support the Mississippi Watershed Management Organization's (MWMO's) goals and policies through the implementation of structural remedies for water management problems when feasible, economical, and necessary. The MWMO recognizes that not all water management problems can be resolved by preventative actions alone. When water quality and quantity problems cannot be resolved by preventative actions alone and require implementation of structural solutions to remedy negative impacts, the MWMO will undertake such projects as necessary to fix the problem.

#### *Objectives*

Projects meeting the following objectives may be selected for implementation (they are not listed in priority order). Project sites may occur in a wide variety of land use settings and (re)development conditions, for example: park land, residential, transportation, commercial and industrial and institutional land. Although it is desirable to meet as many of the criteria listed as possible, projects do not have to meet all of them to make a positive contribution to improved water quantity and quality within the watershed.

- Improve the quality of water entering the Mississippi River by reducing pollutants and contaminants
- Protect, improve and restore ecological systems and functions of the water-related resources in the MWMO
- Reduce existing and potential flooding
- Reduce the volume and slow the rate of water leaving the land
- Demonstrate new water management techniques and share the results
- Protect and improve the natural viewsheds to and from the Mississippi River corridor and enhance historical and cultural features related to water resources
- Participate in efforts to mitigate and remediate contaminated sites impacting water resources
- Collaborate with other watershed management organizations to prevent redundancy and solve trans-boundary water issues
- Involve the public in project decision-making and planning
- Support and integrate capital projects with other MWMO programs
- Create, maintain and update a prioritized list of current and possible projects
- Leverage funds from other sources to implement projects
- Effectively and efficiently solve water issues through capital project implementation
- The MWMO's efforts will focus on preventative measures to improve water quality, but will undertake capital projects, i.e. structural or engineered solutions, when necessary.



**Figure 1.** Heritage Park Stormwater Conveyance  
*Photograph by J Lee*

### ***Use of Funds***

The MWMO may fund all or a portion of project costs germane to water and water-related land resource improvements, including, but not limited to: engineering, legal, survey, investigative, study, design and development, other consultant costs, and permits.

The funds may not be used to pay the administrative and staff costs of other units of government. MWMO CIP funds cannot be used to fund routine administration, operation, and maintenance activities. The MWMO considers these in-kind contributions of project partners to our project funds. The funds may not be used to reimburse expenses incurred prior to MWMO Board of Commissioner's approval of a project and execution of an agreement between the MWMO and the other parties to the project.

Reimbursement for administrative and staff expenses of non-governmental agencies may be made using MWMO CIP funds, subject to the discretion of the Board of Commissioners of the MWMO.

### ***2012 Program Implementation***

The MWMO completed, entered into, or continued agreements in 2012 or allocated capital funds for the following capital projects:

#### ***Bridal Veil Creek Retrofits: Water Quality Improvements***

A feasibility study was completed for the highly urbanized Bridal Veil Creek subwatershed. The study identified 77 of the most cost-effective opportunities to retrofit the stormwater conveyance system to improve water quality, reduce runoff volumes, and manage discharge rates. A multi-jurisdictional task force identified potential Central Corridor Stormwater and Green Infrastructure projects.

#### ***EcoVillage: Water Quality Improvements***

MWMO partnered with a community developer and the Hawthorne neighborhood to identify implementable features of the EcoVillage Stormwater Management Plan for the Hawthorne EcoVillage, a four-square-block residential area in North Minneapolis. The MWMO Green Team helped to maintain rain gardens in boulevards in the public right-of-way in front of the residences of several EcoVillage property owners. The housing developer continued to seek funding for its project, including stormwater features.

#### ***Minneapolis Northeast Green Campus, Phase I***

A feasibility study was completed for Phase I of this collaborative process to manage and reuse stormwater at Edison High School, Jackson Square Park, and a City of Minneapolis flood-mitigation basin. Phase I captures, re-routes, and reuses runoff from the Edison High School gym roof and the school parking lot – in 2013.

### ***Riverside Avenue: Water Quality Improvements***

The City of Minneapolis reconstruction of Riverside Avenue provides an opportunity to incorporate stormwater filtration and infiltration systems in an urban right-of-way. In 2012, the City installed the Riverside Triangle project to help manage stormwater on Riverside Avenue.

### ***Seward Commons: Water Quality Improvements***

The intent of this project along the Hiawatha Light Rail line in South Minneapolis is to install stormwater infrastructure (filtration and reuse systems) in public right-of-way as part of the Seward Commons redevelopment project. A stormwater diagnostic and feasibility study was done in 2011. The stormwater components are likely to be installed in 2013 or 2014.

### ***City of Saint Anthony Village Regional Stormwater Treatment System***

The focus of this project is to improve the runoff quality conveyed from the City of Saint Anthony Village through the City of Minneapolis to the Mississippi River. The City of Saint Anthony Village's goal is to implement filtration and particle-settling treatment methods to improve water quality. A feasibility study was done in 2011 and modified in 2012. The project will be installed in 2013.

### ***MPRB Central Riverfront Shoreline Restoration***

Shoreline restoration projects are planned for land owned by the Minneapolis Park & Recreation Board within the Critical Area on the Mississippi River.

### ***MPRB Scherer Park Stormwater Improvements***

This Minneapolis Park & Recreation Board project will include shoreline restoration and the development of wetlands and biohavens along the Mississippi riverfront. This is one of MPRB's RiverFirst projects on the Upper River in Minneapolis.

### ***MWMO Stormwater Treatment Demonstration***

MWMO's new facility demonstrates best management practices including: infiltration, filtration, and reuse methods of managing stormwater. The upland BMPs were completed in 2012. The riverbank restoration and bioengineering projects are scheduled to be completed in 2013.

Implementation Table	2011	2012	2013
CIP Budget	\$1,900,000	\$3,000,000	\$2,950,000
Hennepin County Interchange Project	—	—	—
Columbia Heights Jackson Pond WQ Project	—	—	—
Minneapolis: NE Green Campus, Phase I	—	—	—
MPRB Sculpture Garden Renovation	—	—	—
MPRB 26 <sup>th</sup> Ave. N Stormwater Improvements	—	—	—
Minneapolis Public Works Bassett Creek Tunnel Improvements	—	—	—
MWMO Grace Center Regional Flood and WQ Improvements	—	—	—
MWMO Riverbank Restoration WQ and Habitat	—	—	—
Riverside Avenue Project	—	—	—
Seward Commons (aka Franklin Ave.)	—	—	—
Saint Anthony Village Regional Treatment	—	—	—
EcoVillage	—	—	—
MPRB Central Riverfront Shoreline Restoration	—	\$ 100,000	—
MWMO Stormwater Treatment Demonstration	—	\$ 550,000	—
MPRB Scherer Park Stormwater Improvements	—	\$ 960,000	—
Bridal Veil Creek Subwatershed Water Quality Retrofits	—	\$ 100,000	—

### ***2013 Workplan***

In 2013, MWMO staff will work to implement the capital projects identified in the budget chart above, such as the Saint Anthony regional stormwater treatment project, the Hennepin County Interchange stormwater reuse project, Phase I of the NE Green Campus project, and the Jackson Pond renovation project in Columbia Heights. Staff will also collaborate with member organizations to identify priority stormwater projects for MWMO's future five-year capital improvement project schedule.

## Education and Outreach

### *Purpose*

To achieve enhanced water and land resource management in the watershed through both public participation and public education. The MWMO will organize and conduct educational campaigns and support the work of others to arrange and guide educational efforts to promote responsible stewardship of water and natural resources by the watershed community.



**Figure 2.** Community outreach by 2012 Mississippi River Green Team Members  
*Photograph by M Neu*

### *Objectives*

- Provide services and products to inform and educate the watershed community-- using tools such as trainings, presentations, events, websites, press releases, newsletters and events
- Create and support opportunities for public participation and involvement (such as restoration, monitoring, river clean-ups, reviewing plans, and participating in political processes)
- Work with staff from both the private and public sectors to prevent runoff and pollution at worksites and during routine maintenance activities (such as landscaping and snow/ice removal)
- Collaborate with other professionals and networks to leverage Hmong Resource Fair funding and increase the reach and effectiveness of watershed education (such as Watershed Partners, media campaigns, etc.)
- Inform and educate land-use decision-makers about the relationship between land-use and natural resource protection/conservation
- Integrate outreach and education into MWMO projects and programs to increase their effectiveness and to support the needs of staff, the board and committees
- Evaluate program effectiveness on an ongoing basis and modify strategies accordingly

### *2012 Program Implementation*

***A View From the Big River: a Workshop About Water Quality and Land Use.*** Aboard a riverboat, 48 policymakers, elected and appointed public officials and community leaders learned about 1) the relationship between land-use decisions and water quality, 2) tools and resources, and 3) questions to ask when reviewing plans and making decisions and policies that impact water and natural resources. Together with the University of Minnesota and University of Minnesota Extension a *Knowledge Attitudes and Practices (KAP)* study was conducted to evaluate that learning objectives were met; identify the needs, bridges and barriers to action; and interests of participants for future programming.

**Training and Voluntary Certification: 1) Turfgrass Maintenance and 2) Winter Maintenance with Reduced Environmental Impacts.** A total of 171 winter and summer maintenance professionals, property owners, supervisors in the public and private sectors attended four trainings held in 2012 (two of each class).

These trainings are a part of a voluntary maintenance certification program through the Minnesota Pollution Control Agency and were subsidized by PCA/EPA 319 grants.

**Community Cleanups for Water Quality** engages the public in sweeping sweep curb lines, and collecting and measuring the amount of pollution prevented from entering the stormwater conveyance system. In 2012, this effort was expanded to the City of Minneapolis where the Mississippi River Green Team, in coordination with the Freshwater Society, swept the equivalent of one city block three times during the summer. Over 280 pounds of debris was removed, which was sent to a lab for analysis. They also reported clogged storm drains to the city and failing erosion control at a construction site.

**Implementing Water Education Plan for Southeast Asian Community.** Based on a needs assessment and water education plan developed in 2008, the MWMO continued to implement parts of this plan to reach the Southeast Asian community with information and opportunities to exercise stewardship of natural resources. Activities in 2012 included: leading a dragon boat race team at the annual Dragon Festival, offering a guided river hike at Coon Rapids Dam with a bilingual leader, reaching out to the community and helping them make nontoxic cleaners at the annual Hmong Resource Fair, and continuing to distribute, upload to the internet, and show *Dej Tus Kab Ke –Nature of Water*, a DVD about the urban water cycle in five languages (Hmong, Lao, Khmer, Viet, and English).

**The Mississippi River Green Team (MRGT)**, a two-year, conservation-focused youth employment program for 14-17 year-olds from North and Northeast Minneapolis completed its fifth year. In 2012, the 19 MRGT members planted over 1000 plants in Minneapolis, removed hundreds of pounds of invasive plants from city parks, initiated a dragonfly monitoring protocol on the river and recorded two new species in Hennepin County. The MWMO partners with the Minneapolis Park and Recreation Board to hold this program.

**Community Outreach** took place at 13 different neighborhood-initiated events, and resulted in residents making over 700 bottles of nontoxic cleaners to use at home. By training the Mississippi River Green Team to staff the table at events, the MWMO is able to be present at nearly all events, which are held in the evenings and on weekends. To support the continued use of nontoxic cleaners, refill stations are located in three locations in the watershed.

The **Metro Children's Water Festival**, a day-long learning event about water for fourth graders, was attended by four classes from Stevenson's Elementary School in Fridley. This school was chosen by a lottery system, as only a limited number of classes from each of seven counties were invited. The MWMO covers the costs of busing for schools in the MWMO's member cities and staff assists in planning and conducting the event in September.

Social media platforms of **Facebook and Twitter** were launched in October to coincide with the MWMO's Grand Opening. By the end of the year, Facebook grew the number of "Likes" from 0 to 46 (refers to how many signed up to see all MWMO posts) and the "Reach" grew from 0 to 696 (refers to posts seen from the Facebook page as well as indirectly through their own networks, includes repeat viewers).

The **MWMO newsletter, *The Drift***, was published at the end of the year: 777 were mailed, 1000 distributed at local dropoff sites, 920 emailed, and it was posted on the MWMO website and Facebook page.

In 2012, the MWMO uploaded all videos (n=23) in all languages to its **YouTube** station, which is linked to the website and Facebook page. There have been over 1700 views of the video *Improved Winter Maintenance: Good Choices for Clean Water*. Most views originate in the United States, but the non-English versions include audiences in Thailand, Laos, Indonesia, France, Canada and Vietnam. Three new videos and one revision were produced in 2012 and have aired on the Internet and local cable television, including one of the MWMO’s Grand Opening and Studio Sessions produced by and of the Mississippi River Green Team.

<b><i>Implementation Table</i></b>	<b><i>2011</i></b>	<b><i>2012</i></b>	<b><i>2013</i></b>
Education and Outreach Program Budget	\$250,000	\$150,000	\$140,000
“Greening Teen Teamworks” (3 yr agreement w Minneapolis Park and Recreation Board)	4,000	4,000	—
Mississippi River Green Team (3 yr agreements, leveraged \$60-70,000/year from Minneapolis Park and Recreation Board)	26,000	40,000	—
Professional workshops and trainings (leveraged \$7,500)	13,300	15,000	—
Documentary about the Mississippi River Green Team	—	3,000	—
Workshops for local officials, policy makers and community leaders	20,000	11,000	—
Training Video about Winter Maintenance for Small Sites (revision)	—	1,400	—
Cable TV Version about Winter Maintenance (for residents)	25,500	—	—
Cable TV Version about Lawn Care (for residents)	—	4,000	—
Community Cleanups for Water Quality (Freshwater Society)	10,000	9,900	—
Neighborhood and Community Outreach	9,100	11,000	—
Outreach to the Southeast Asian Community	6,500	1,500	—
Children’s Water Festival	1,000	1,500	—
Sustainability Conference	—	2,000	—
Communications, public relations, graphics and design	3,400	16,000	—

### ***2013 Workplan***

- Portions of the MWMO’s Education and Interpretive Concept Plan will be executed to enrich the experiences of visitors.
- A minimum of four training classes for professionals with voluntary certification will be held at the MWMO. Two classes each of Turfgrass Maintenance and Winter Maintenance with reduced environmental impacts will be held for public and private sector maintenance professionals, property owners and supervisors.
- The Mississippi River Green Team—a two-year conservation and employment for youth from North and Northeast Minneapolis—will enter its sixth year, with expanded support and partnerships.

- Outreach at community events will continue with the help of the Mississippi River Green Team who staff the MWMO's booth. Meeting with the community where they are at, significantly increases the amount of contact the MWMO has with the general public. Requests for the MWMO to be at local events are still increasing.
- The Water Education Plan for the Southeast Asian community will continue to be implemented. An intern will work at North Mississippi Regional Park to expand their capacity to work with this non-English speaking Hmong community. Dej Tus Kab Ke–Nature of Water DVD will be shown and continue to be distributed.
- Two to three videos about best management practices for residential lawn care for cable television and the internet will be filmed and completed.
- Social media presence will be expanded.
- A workshop or land-based tour for local officials and community leaders will be held in the fall.

For more information about planned education activities, contact the MWMO.

## Emergency

### *Purpose*

Provide a readily-accessible source of funds for member organizations to facilitate a response to immediate threats to water resources in the MWMO's watershed.

### *Objectives*

- Provide financial assistance to member organizations for responding quickly to emergencies that impact water resources
- Promote the creation of emergency response and recovery plans by member organizations to ensure eligibility for emergency response funds



**Figure 3.** Collapsed I-35W Bridge  
*Photograph by B Jastram*

### *2012 Program Implementation*

The MWMO provided matching funds to enable the City of Minneapolis to purchase watercraft and equipment needed to respond more effectively to incidents and spills on the Mississippi River.

<i>Implementation Table</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
Emergency Budget	\$0	\$ 0	\$ 0
302-0000-12-01 Minneapolis Spill Response Grant	—	\$50,000	—

### *2013 Workplan*

There are no projects planned for 2013. If an emergency occurs, the MWMO will consider funding at that time.

## Greening

### *Purpose*

To use vegetation to reduce water volume, sediment, and other pollutants of stormwater in the watershed, thereby protecting and improving surface and groundwater and natural resources.

### *Objectives*

- Treat, reduce the volume of, and slow the rate of precipitation leaving the land
- Reduce the amount, proliferation, and continuity of impervious surfaces
- Mitigate erosion
- Conserve and reuse water
- Increase capacity of the watershed to intercept precipitation and infiltrate and store water
- Lower temperatures and reduce water loss and heat stress associated with drought
- Pilot innovative ideas and techniques for local conditions
- Improve techniques, refine standards and identify limitations
- Create highly visible demonstration sites to inform and educate the watershed community
- Advance the development of water quality standards for landscape and building design
- Learn from and work with other groups and their endeavors
- Modify ordinances and variances
- Identify research questions
- Restore and protect habitat, native plant and animal communities
- Protect, enhance and restore natural areas by planting native species
- Actively seek opportunities to vegetate urban landscape and link green spaces



**Figure 4.** Native vegetation planted along the Mississippi River  
*Photograph by B Jastram*

### *2012 Program Implementation*

In 2010 the MWMO Board voted to fund a rain beam greening demonstration project at Longfellow Station in Minneapolis and included funding in the 2011 budget. This project will be installed in 2013 as a phase of the Longfellow Station development project. The MWMO promoted its Greening Program to Stewardship Fund applicants and other community members whose projects would qualify for funding.

<i>Implementation Table</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
Greening Program Budget	\$0	\$ 0	\$ 0
Hawthorne EcoVillage boulevard garden	\$0	—	—
Northeast Green Campus - Preventing Harm	\$8,000	—	—
Rain Beam at Longfellow Station	—	—	—

***2013 Work Plan***

The MWMO is working with communities to identify innovative greening projects on public property. Opportunities include assisting with a smart-design parking lot at the MPRB-owned Parade Ice Garden and a demonstration stormwater bump-out project on a residential street (via the Stewardship Fund), as well as the installation of the Longfellow Station Rain Beam project.

## Land Conservation

### *Purpose*

To provide for the purchase of property that significantly impacts surface and groundwater, natural resources, and other recreational, historical, and cultural resources related to water.

### *Objectives*

Purchase property in the watershed to:

- preserve and improve historical and cultural resources related to water
- create passive and active recreational opportunities related to water
- protect, enhance and restore habitat, wetlands and sensitive areas (e.g., for groundwater recharge)
- Prioritize land acquisitions based on watershed planning goals, such as restoration opportunities, public access and protection of water and natural resources
- Leverage funding from other sources to purchase property that supports watershed planning goals
- Coordinate, assist, and partner with other watershed organizations, governmental units, non-profit and private entities to purchase property that supports watershed planning goals



**Figure 5.** Mississippi Riverbank Above the Falls

Photograph by D Kalmon

### *2012 Program Implementation*

In 2012, the MWMO granted the Minneapolis Park and Recreation Board matching funds to purchase a parcel of land at 1720 Marshall Street NE in Minneapolis. The land will eventually become part of a regional public park bordering the Upper River in Minneapolis.

<i>Implementation Table</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
Land Conservation Program Budget	\$600,000	\$0	\$300,000
1720 Marshall Street NE in Minneapolis	—	\$202,299	—

### *2013 Work Plan*

The MWMO will meet regularly with the Minneapolis Park & Recreation Board and other partners to strategize about acquiring parcels from willing riverfront property owners to further the goal of linked public green space on the Upper River.

## Monitoring

### *Purpose*

Water Resources Monitoring provides a scientific basis for identifying and evaluating water quality issues and implementing solutions to improve water quality in the watershed. It also provides scientific data to ascertain where and how best management practices (BMPs) can be implemented to effectively achieve water quality goals.

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

### *Objectives*

- Monitor biological, chemical, and physical parameters of water resources in the watershed
- Monitor water quality within the watershed
- Develop a record of baseline data to characterize water quality and identify pollutants that exceed water quality standards
- Assess pollutants for water bodies listed on the Minnesota "impaired water" list for the TMDL process
- Assess the volume and rate of water movement in the watershed
- Develop and agree upon a standardized set of parameters and sample collection, data analysis, and reporting standards with organizations in the watershed
- Develop partnerships and collaborate with other organizations and/or agencies both inside and outside the watershed boundaries to improve water quality in the Mississippi River
- Assess land use impacts on water quality

### *2012 Program Implementation*

In 2012, the Mississippi Watershed Management Organization (MWMO) continued monitoring the Mississippi River for bacteria, monitored water quantity and water quality of the stormwater drainage systems and monitored three wetlands (a.k.a. Kasota Ponds). Staff also began monitoring the Mississippi River at five cross-sections to develop methods to fill hydraulic mixing data gaps in the MWMO's stretch of the Mississippi River.

Water samples were collected for bacteria (*E. coli*) analysis at seven sites on the 14-mile stretch of Mississippi River on a weekly basis from April through October 2012. Water samples were also collected for bacteria analysis from six stormwater locations during baseflow and rain events.



**Figure 6.** B Jastram monitoring a cross-section on the Mississippi River  
*Photograph by F Rowland*

The MWMO continued monitoring water quantity and water quality of the watershed’s stormwater drainage system by monitoring baseflow, snowmelt events and rain events in five stormwater tunnels draining to the Mississippi River. Samples were analyzed for nutrients, sediment, inorganics, organics, and metals analyses. MWMO staff also collected data from stormwater pipe at the boundary of the City of St. Anthony Village and the City of Minneapolis to monitor City of St. Anthony Village stormwater quality. The MWMO also continued monitoring water quality of three wetlands known as Kasota Ponds in St. Paul. Samples were collected for nutrients, sediment, inorganics, and metals analyses.

In 2012, the MWMO began monitoring the Mississippi River (Figure 6) at five locations (cross-sections) in three different reaches to develop methods to fill hydraulic mixing data gaps in the 14-mile stretch of the Mississippi River in the MWMO. Each cross-section was divided into five lateral points equally spaced throughout the width of the river. Water temperature, pH, dissolved oxygen, salinity, and specific conductivity measurements were taken at each point by using a multiparameter sonde. Measurements were taken at three-foot depth increments starting from the water surface to the bottom of the river.

The MWMO continued to cooperate with the Minnesota Pollution Control Agency on the Upper Mississippi River Bacteria TMDL project and the Twin Cities Metro Area Chloride Project.

Details for the monitoring program and data results are provided in the MWMO’s Annual Monitoring Report 2012, which is available on the MWMO’s website at [www.mwmo.org](http://www.mwmo.org). For more detailed information on this program, please contact the MWMO’s Water Resources Manager.

<i><b>Implementation Table</b></i>	<i><b>2011</b></i>	<i><b>2012</b></i>	<i><b>2013</b></i>
Monitoring Program Budget	\$150,000	\$100,000	\$50,000
Capital equipment (truck, boat)	—	\$52,000	—
Minneapolis Illicit Discharge Monitoring	\$5,000	\$3,000	—
Laboratory Analysis	\$66,000	\$61,000	—
Sampling Equipment	\$26,000	\$22,000	—
Real-time Data Management Agreement with SAFL	\$11,000	\$14,000	—

### ***2013 Workplan***

The existing monitoring stations will be continued, and, through coordination with members and state agencies, the MWMO may add additional sites and/or parameters to meet the requirements of National Pollutant Discharge Elimination System (NPDES) permits, TMDLs, and other programmatic needs and regulations. The MWMO will continue sharing collected data through the Annual Monitoring Report and the MPCA Environmental Quality and Information System (EQuIS) database. MWMO will also continue the contract with Saint Anthony Falls Laboratory (SAFL) to assist with maintenance of and database management for the real-time monitoring system. MWMO staff will continue big river transect monitoring on the Mississippi River as phase I for development of big river monitoring methodology applicable to urban areas with numerous stormwater pipe inputs. A detailed work plan is found in the Annual Monitoring Report 2012 at [www.mwmo.org](http://www.mwmo.org).

## Planning

### *Purpose*

Thoughtful planning gives direction for the MWMO's activities, clarifies and integrates the MWMO's goals, responsibilities, and future courses of action, and coordinates implementation of MWMO standards and goals by member organizations.

MWMO planning activities transform the planning requirements of Minnesota Statutes, Chapter 103B from referenced laws into a mission, vision, and goals that are collectively understood and implemented by the MWMO and its member organizations.

### *Objectives*

- Develop and maintain MWMO organizational identity
- Keep the MWMO's Watershed Management Plan (WMP) current to address new circumstances and changing priorities
- Develop plans for new watershed initiatives
- Review and respond to planning-related activities and project proposals within the watershed to assure they are in concert with the MWMO's Comprehensive Watershed Management Plan
- Review and approve local management plans and amendments that impact water and natural resources
- Provide access to information about MWMO goals, priorities, projects, and programs
- Encourage public participation in MWMO planning activities
- Bring together information (i.e. watershed assessments and data, public comment, staff and board reviews) to identify MWMO planning priorities
- Integrate MWMO priorities into programs and projects
- Develop consensus among stakeholders for managing resources in the watershed
- Coordinate a budget establishment process and financial evaluation of MWMO projects and programs
- 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

### *2012 Program Implementation*

The MWMO participated in the Central Corridor Green Infrastructure planning process led by St Paul. The MWMO's sponsorship of this project extended the study into Minneapolis up to Target Field. This project will be completed in September 2013. The MWMO continues to look for a capital improvement project that will exemplify shared stacked green infrastructure in the corridor and overlap with one of the Bridal Veil Creek Retrofit sites identified in 2011. The MWMO updated its JCA and initiated a 2013 plan amendment to add in capital projects from its new member cities of Hilltop, Columbia Heights, and Fridley.

<i>Implementation Table</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
Planning Program Budget	\$200,000	\$50,000	\$0
2011 – 2021 MWMO Plan	\$7,987	—	—
Central Corridor Plan	—	\$63,532	—

### ***2013 Workplan***

The 2013 plan amendment which adds capital projects from new member cities of Hilltop, Columbia Heights, and Fridley will receive final approval by the MWMO Board in July. The MWMO will be starting a 2014 plan amendment in the second quarter to incorporate natural resource characteristics and identify program needs of Hilltop, Columbia Heights, and Fridley into the plan. The MWMO will be reviewing and commenting on the Minneapolis Stormwater Management Program. The Boeser site has been selected by the Central Corridor Green Infrastructure planning process to undergo final advanced design (30% construction design) that will illustrate the potential for shared stacked green infrastructure on site.

## Stewardship Fund

### *Purpose*

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

### *Objectives*

- Supports and promotes local stewardship initiatives, community leadership, and citizen involvement
- Encourages the development and use of innovative designs and stormwater management practices
- Creates demonstration sites to inform and educate the watershed community
- Builds support for MWMO efforts through grassroots initiatives
- Develops partnerships between the MWMO and communities
- Provides resources and information for MWMO programs
- Supports and integrates Stewardship Fund activities with other MWMO programs
- Evaluates the effectiveness of new technologies

### *Background*

The Stewardship Fund was originally funded from 2003—2006, then suspended while it was evaluated and restructured according to the recommendations of an outside consultant. The revised program was adopted by the Board of Commissioners and reopened in 2008.

The Stewardship Fund Grant Program partners with community organizations to protect and improve water quality and natural resources. Supporting community-initiated projects increases the reach and builds capacity for local stewardship. There are three types of grants:

- Mini Grants—for up to \$2,000 each; offered three times a year,
- Planning Grants—for up to \$10,000 each; offered once a year, and
- Action Grants—for up to \$50,000 each; offered once a year.

Proposals are reviewed by the MWMO's staff and Citizen Advisory Committee and approved by the MWMO's Board of Commissioners. Grants are awarded based on a project's ability to:



**Figure 7.** Tamarack Bog rooftop garden at the Minneapolis College of Arts and Design. A Mini Grant paid for the Minnesota native plants and the educational sign.

- **Improve water and natural resources.**

Projects reduce pollution from entering surface and groundwater, prevent flooding, lessen the effects of drought, increase the capacity of the watershed to store water, and/or restore or maintain habitat and native plant communities.

- **Build community understanding, knowledge and stewardship of water and natural resources.**

Projects educate and engage people in the watershed in a way that raises awareness, changes behaviors, and increases local capacity to lead and promote pollution prevention.

*Note:* Stewardship Fund grants may be used to create new external programs but are not intended to sustain ongoing efforts. Projects that take place on private land must benefit and are accessible to the general public.

### ***2012 Program Implementation***

In 2012, the MWMO funded a total of 33 grants (see Summary of Grants Table below). The High Point Center for Printmaking’s project, which captures and infiltrates two thirds of the roof runoff into a series of raingardens, grew from a planning process (2011 Planning Grant) to implementation using a 2012 Action Grant. The City of Fridley, a new MWMO member as of July, was awarded its first Mini Grant in the fall.

<b><i>Summary of Grants</i></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<i>No. awarded (no. proposed)</i>			
<b>Mini Grants</b>	<b>15 (30)</b>	<b>15 (25)</b>	
<i>Spring</i>	5 (10)	7 (10)	
<i>Summer</i>	7 (15)	5 (8)	
<i>Fall</i>	3 (5)	5 (7)	
<b>Planning Grants</b>	<b>7 (9)</b>	<b>5 (8)</b>	
<b>Action Grants</b>	<b>4 (13)</b>	<b>3 (11)</b>	
<b>Total:</b>	<b>26 (52)</b>	<b>33 (44)</b>	

<b><i>Implementation Table</i></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Stewardship Fund Program Budget	\$250,000	\$250,000	\$250,000
Mini Grants (\$50,000 budgeted)	\$29,510	\$27,118	—
Planning Grants (\$50,000 budgeted)	\$53,890	\$48,812	—
Action Grants (\$150,000 budgeted)	\$200,000*	\$58,007	—

\* MWMO Board approved using remaining 2010 money to fund more Action Grants in 2011.

### ***2013 Workplan***

The MWMO will continue to fund Mini Grants, Planning Grants and Action Grants according to the annual Stewardship Fund Grant schedule.

**Water Reuse and Conservation**

***Purpose***

Reduce impacts and demands on our water resources through a combination of water conservation (using less water) and reuse (using water more than once before discharge).

***Objectives***

- Reduce the volume and slow the rate of water leaving the land
- Reduce the concentration of pollutants in stormwater
- Encourage water conservation and reuse whenever opportunities arise
- Provide technical and funding assistance for projects in the watershed
- Provide leadership in the area of stormwater conservation and reuse practices
- Pilot innovative and visible demonstrations to showcase practical applications and techniques
- Advance the development of water conservation and reuse practices for landscape and building design
- Learn from and work with other groups and efforts
- Modify ordinances and variances
- Identify research questions
- Promote integration of building and landscape design
- Assist member organizations in eliminating remaining combined sewer overflows



**Figure 8.** Saint Anthony Village Water Reuse Project  
 Photograph by City of Saint Anthony Village

***2012 Program Implementation***

No projects were scheduled for this program in 2012.

<b><i>Implementation Table</i></b>	<b><i>2011</i></b>	<b><i>2012</i></b>	<b><i>2013</i></b>
Water Reuse and Conservation Program Budget	\$150,000	\$0	\$0
St. Anthony Overseeder	\$8,000	—	—

***2013 Workplan***

Additional projects have not been proposed for this program in 2013.

## Watershed Assessment and Research

### *Purpose*

To develop a scientific base of knowledge that characterizes physical, chemical, cultural, historic, biological, social, economic, organizational, and political resources of the MWMO which will guide planning and management decisions in the watershed.

### *Objectives*

- Provide information needed to set performance standards for the watershed
- Conduct basic research to acquire further knowledge on general water resource issues within and beyond the watershed's boundaries
- Conduct assessments within the watershed to define the ecological, physical, biological, cultural, social, economic, organizational, and political characteristics that comprise the MWMO
- Conduct project-based diagnostic and feasibility studies
- Provide information to support other MWMO projects and programs
- Provide information to inform the prioritization and use of the MWMO's natural, financial and human resources
- Provide watershed information to organizations both inside and outside the MWMO's boundaries



**Figure 7.** Mississippi River Shoreline  
*Photograph by B Jastram*

### *2012 Program Implementation*

The MWMO completed or began the following watershed assessments in 2012:

#### ***Northeast Green Campus: Water Quality, Water Conservation, and Flood Reduction Improvements***

This project is a collaboration among the Minneapolis Public Schools, the Minneapolis Park & Recreation Board, and Minneapolis Public Works. The project adds underground and above-ground storage of stormwater and roof runoff for reuse in irrigating adjacent school athletic fields and a public park. A second feasibility study was completed in 2012 to quantify the water quality and quantity impacts of the first phase of the Northeast Green Campus: the gym roof and the parking lot.

#### ***MWMO Historic Waters Study***

This project was completed in 2012, and results from this study are intended to provide a better understanding of the presettlement hydrology and ecology of the MWMO jurisdictional area and how alterations to the present day urban landscape have affected and are affected by natural features.

#### ***Interchange HERC Stormwater Feasibility Study***

This feasibility study analyzes various stormwater management features at the Interchange intermodal transit hub in downtown Minneapolis. The Interchange will be constructed in 2013-14.

### ***Joint Watershed Research Program***

#### ***Stormwater Harvesting : Accounting of Benefits and Feasibility Analyses***

This project entails development of a novel technique to quantify the real volume reduction and water quality benefits of stormwater harvesting for irrigation. The project evaluates the feasibility of retrofitting stormwater ponds for stormwater reuse instead of installing manufactured storage devices.

#### ***Baseflow Restoration in Minnehaha Creek Watershed with Stormwater Infiltration***

Objectives of the research project are: (1) to investigate the surface water-groundwater interaction and develop the background information necessary to estimate the impact of infiltration on the baseflow of Minnehaha Creek, (2) to determine the direction of groundwater flow and the contribution of various sources of flow to baseflow in Minnehaha Creek, (3) to estimate the impact of increased baseflow that can occur in Minnehaha Creek with implementation of infiltration practices and (4) to determine the approximate cost of implementation.

#### ***Groundwater Recharge: Nicols Fen, Kennealy/Harnack Trout Stream***

This research study is undertaken to answer these research questions: (1) Can the existing wetlands and ponds currently perched above the groundwater table be utilized to infiltrate and recharge groundwater levels and to what extent? (2) What stormwater volume reductions and pollutant removal rates can be achieved through infiltration below perched wetlands? (3) What is the cost/benefit analysis of constructing this or similar groundwater recharge infiltration systems? and (4) Do non-destructive pipe installation processes alter permeable soil characteristics?

<b><i>Implementation Table</i></b>	<b><i>2011</i></b>	<b><i>2012</i></b>	<b><i>2013</i></b>
Watershed Assessment and Research Program Budget	\$100,000	\$0	\$400,000
Bridal Veil Creek Retro-fit Study	\$17,632	—	—
Northeast Green Campus Feasibility Study (Part 1)	\$15,000	—	—
Northeast Green Campus Feasibility Study (Part 2)	—	\$26,000	—
Seward Commons Feasibility Study	\$15,000	—	—
Water Quality Standards Analysis	\$16,000	—	—
MWMO Historic Waters Study	—	\$10,885	—
Interchange HERC Stormwater Feasibility Study	—	\$8,542	—
Jackson Pond Feasibility Study	—	—	—
Boeser Site Stormwater Feasibility Study	—	—	—
Northeast Water Quality, Hydraulic and Hydrological Model	—	—	—
Northeast Retro-fit study	—	—	—
Multidisciplinary Stormwater Planning tool (Pilot)	—	—	—
2014 Plan amendment GIS	—	—	—
Historic Waters Study (New cities)	—	—	—
Natural Resource Inventory MLCCS (New cities)	—	—	—
Functional Wetland Assessment (MNRAM)	—	—	—
Stormwater Harvesting: Benefits and Feasibility Analyses	\$30,000	\$30,000	—
Baseflow Restoration in Minnehaha Creek Watershed	—	\$40,000	—
GW Recharge: Nicols Fen, Kennealy/Harnack Trout Stream	—	—	—

### ***2013 Workplan***

The MWMO plans to initiate the 2013 studies and modeling listed in the implementation table above. Findings from these projects will inform future capital projects as well as provide the background needed to characterize water and natural resources in the cities of Hilltop, Columbia Heights, and Fridley.

## **Financial Information**

### ***Policy***

During plan development (1997-2000), the MWMO acknowledged the limits of its member communities to incur additional financial expenses and therefore developed strategies for new funding mechanisms. The MWMO sought inclusion on the list of Special Taxing Districts (MS Chapter 275.066), and, in 2001, MWMO became the first joint powers WMO to receive levy authority, which is necessary to implement plan goals and objectives. Taxes are levied in accordance with procedures specified in the Joint and Cooperative Agreement (JCA) and Minnesota Statutes 103B. 201 – 103B.255 and the Metropolitan Surface Water Management Act (Act), and are subject to limitations set forth in Minnesota Tax Statutes, the Act, the JCA, and the Watershed Management Plan. It is the Board of Commissioners' policy to use funds it raises in the most effective and efficient manner possible. The MWMO completed an update to its comprehensive plan in 2010 which changed the way projects are selected for inclusion on the CIP

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

### ***Budget***

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

- Seek and receive project proposals from members through May of the prior year
- Submit a draft budget and amended CIP at the July board meeting
- Select proposed projects for the next fiscal year by the September board meeting
- Submit a preliminary budget to counties
- Make the updated CIP final and approve a final budget 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 Hennepin and Ramsey Counties

This process is changing as part of the development of the Comprehensive Watershed Management Plan. A new process will be defined and adopted in 2012. Anyone interested in details of the budget process should contact the MWMO.

For additional financial information go to [www.mwmo.org](http://www.mwmo.org), or contact Douglas Snyder, Executive Director.

**2012 Budget**

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<b>Projects</b>	\$ 3,000,000
<b>Programs</b>	\$ 600,000
<b>Administration</b>	\$ 1,225,000
<b>Subtotal Budget</b>	<b>\$ 4,825,000</b>
<b>Contingency 2% (Uncollected Levy)</b>	\$ 120,000
<b>Total Budget</b>	<b>\$ 4,945,000</b>

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<b>Projects</b>	<b>\$ 3,000,000</b>
Saint Anthony Village Stormwater Treatment	\$ 1,210,000
MWMO Stormwater Treatment Demonstration	\$ 550,000
EcoVillage	\$ 80,000
MPRB Central Riverfront Shoreline Restoration	\$ 100,000
MPRB Scherer Park SW Improvements	\$ 960,000
Bridal Veil Creek Sub-watershed WQ Retrofits	\$ 100,000
<b>Programs</b>	<b>\$ 600,000</b>
Water Conservation	
Education/Information Nonpoint Source Pollution Program	\$ 100,000
Stewardship Grant Fund	\$ 250,000
Planning	\$ 50,000
Watershed Assessments (Research, Hydrologic and Hydraulic Studies)	
Monitoring	\$ 100,000
Greening	
Land Acquisition	
Program Support / Consultants	\$ 100,000
<b>Administration</b>	<b>\$ 1,225,000</b>
Staff Salary and Benefits	\$ 930,000
Commissioner Expenses	\$ 10,000
Rent, Office Administration, Equipment, and Supplies	\$ 100,000
Service Providers - Legal, Engineering, IT, HR, Auditor, Accounting	\$ 125,000
Operating Reserve	\$ 60,000

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## **Appendix A – *The Drift***

See *The Drift* at [www.mwmo.org](http://www.mwmo.org)