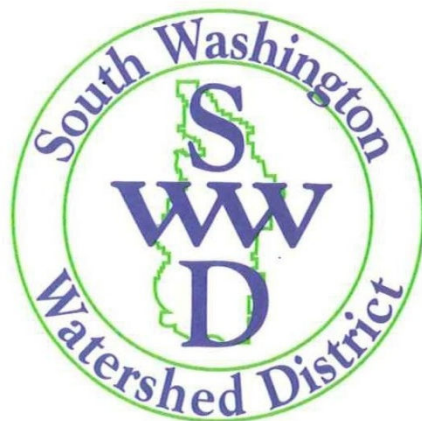


2009 Annual Report



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Board of Managers

2009-2010

Manager	Position	Term Expires	City/County
Mr. Jack Lavold 6859 Ideal Avenue South Cottage Grove, MN 55016 651-459-8891	President	05/01/2011	Cottage Grove/Washington
Mr. Dennis Hanna, 9301 Grey Cloud Island Dr. St. Paul Park, MN 55071 651-459-2281	Vice-President	05/01/2010	Grey Cloud Island/Washington
Mr. Brian Johnson 4353 Dorchester Drive Woodbury, MN 55129 651-458-3739	Vice-President	05/01/2010	Woodbury/Washington
Mr. Don Pereira 8232 River Acres Road Cottage Grove, MN 55016 651-769-0429	Secretary	05/01/2012	Cottage Grove/Washington
Mr. Mike Madigan 2366 Hidden Lake Cove Woodbury, MN 55125 651-702-0488	Treasurer	05/01/2011	Woodbury/Washington

Introduction

The Cottage Grove Ravine Watershed Management Organization (WMO) was formed in 1984 to manage the resources of the watershed. This WMO was based on a joint powers agreement among the five cities in the watershed. A draft watershed management plan for the WMO was completed in April 1988; however, this plan was never approved or adopted by the WMO.

The WMO was later disbanded, and, in 1993, the Cottage Grove Ravine Watershed District was formed as the 42nd watershed district in Minnesota. The watershed district changed its name to the South Washington Watershed District (SWWD) in 1995. The SWWD was formed under, and operates in accordance with, Minnesota Statutes, Chapter 103B, "Metropolitan Surface Water Management Act", and Chapter 103D, "Watershed Districts."

The SWWD completed development of the watershed plan in 1996, approval of the plan was granted by the State Board of Water and Soil Resources in 1997, and later amended in 2002. Since that time the SWWD has focused its efforts on determining potential flood risk and developing a comprehensive flood relief system. The proposed system is designed in two phases; 1) reduce potential flood damages for existing developed areas of the watershed; 2) develop a comprehensive solution that provides stormwater management and flood control with capacity for the planned growth included in the 2000 comprehensive land use plans.

In April 2003, the SWWD petitioned the Minnesota Board of Water and Soil Resources to enlarge the boundary and include the East Mississippi Water Management Organization. The East Mississippi Water Management Organization included all or portions of Grey Cloud Island Township, Cottage Grove, Woodbury, St. Paul Park, and Newport. The enlargement was completed as a part of recommendations from the Washington County Water Governance Study (1999). The enlargement petition was approved on May 28, 2003 by the Board of Water and Soil Resources (BWSR).

SWWD updated the Watershed Management Plan (WMP) through 2007, with BWSR approval in September of 2007, and SWWD Board adoption in November 2007. The updated plan lays out guidance on the management of water and natural resources through the year 2017. The WMP complies with Minnesota Rules Chapter 8410, "Metropolitan Area Local Water Management," (May 27, 1992), the Metropolitan Surface Water Management Act, and Minnesota Statute 103D.

This report has been prepared in accordance with Minnesota Rules Chapter 8410.0150, Annual Reporting Requirements. Content of this report pertain to the calendar year 2009.

2009 Financial Report

The 2009 audit report is in Appendix A. Revenue and program expenditure summaries 2008-2010 are presented below.

Revenue

Revenue Source	2008	2009	Projected 2010
Ad Valorem Levi	\$ 620,565.00	\$ 722,222.00	\$ 687,361.20
Stormwater Utility			
25% Area	\$ 973,750.00	\$ 1,059,750.00	\$ 1,274,200.00
75% Area	\$ 1,361,250.00	\$ 1,229,250.00	\$ 1,095,600.00
E. Mississippi	\$ 0.00	\$ 0.00	\$ 257,200.00
Total Revenue	\$ 2,955,565.00	\$ 3,011,222.00	\$ 3,314,361.20

Program Expenditures

Program Area	2008 Budget	2008 Actual	2009 Budget	2009 Actual	2010 Budget
1.0 Floodplain Management	*	\$ 0.00	\$ 85,000	\$ 0.00	\$ 85,000
2.0 Stormwater Management	\$ 1,945,000	\$ 21,945.00	\$ 1,869,000	\$ 673,880.22	\$ 1,273,000
3.0 Water Quality	\$ 242,429	\$ 50,000.00	\$ 224,058	\$ 64,885.49	\$ 160,000
4.0 Wetlands	*	\$ 0.00	\$ 20,000	\$ 0.00	\$ 85,000
5.0 Natural Resources	\$ 100,000	\$ 2,255	\$ 100,000	\$ 2,220.00	\$ 20,400
6.0 Groundwater	\$ 85,000	\$ 0.00	\$ 100,000	\$ 51,952.00	\$ 105,000
7.0 Erosion and Sediment Control	\$ 24,952	\$ 0.00	\$ 23,095	\$ 4,177.00	\$ 13,575
8.0 Education	\$ 62,381	\$ 29,715.00	\$ 48,114	\$ 31,100.58	\$ 55,182
9.0 Long RangeWork Plan/Finance	\$ 18,714	\$ 22,768.00	\$ 29,510	\$ 3,380.59	\$ 386,400
10.0 Data Management	\$ 249,524	\$ 211,941.00	\$ 279,059	\$ 201,412.41	\$ 247,836
11.0 General	\$ 227,565	\$ 236,417.00	\$ 233,387	\$ 209,767.08	\$ 233,004
12.0 Debt Service	\$ 549,000	\$ 628,869.00	\$ 549,000	\$ 541,041.25	\$ 535,000
Total Budget	\$3,504,565.00	\$1,203,910.00	\$3,560,223.00	\$1,783,816.62	\$3,199,397.00

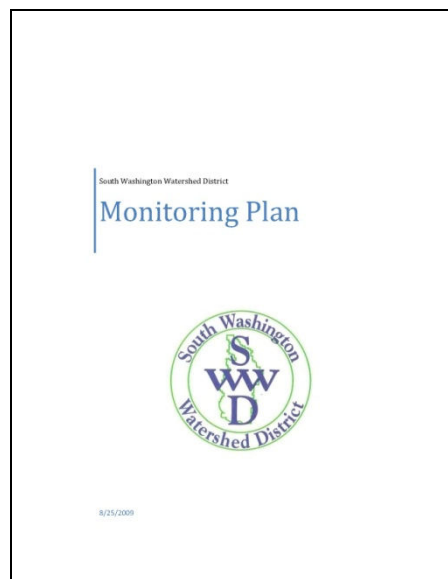
2009 Activity Report

Floodplain Management

- SWWD monitored potential floodplain impacts from projects as part of its development review process. Multiple projects within the floodplain were reviewed, none of which decreased floodplain storage.
- The SWWD has continued collaboration with the City of Woodbury to address flooding issues on Wilmes Lake. The City has established a fund to assist homeowners to flood proof properties that are at risk from flooding. The SWWD provided both technical and financial support to this program. The SWWD has completed design of control structures for detention of stormwater upstream of Wilmes Lake and is exploring opportunities to complete installation as part of a larger project in order to reduce costs. Construction should be completed in 2010.
- SWWD provided the District's modeling data for the FEMA FIRM map update and worked with Municipalities to review and comment on updates. Staff continues to work with Municipalities in reconciling the new FIRM maps with District and Municipal data.

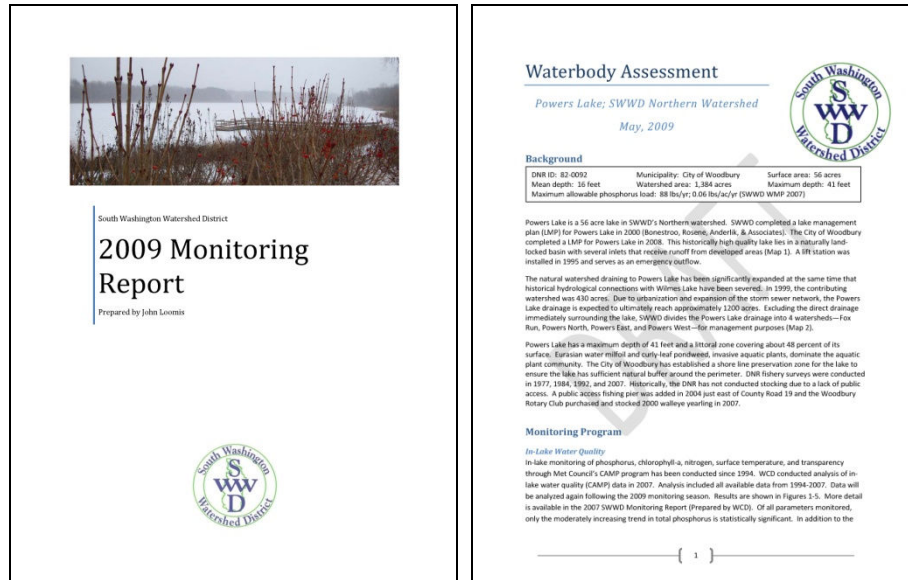
Stormwater Runoff Rate and Volume

- SWWD ensures compliance with rate and volume requirements by coordinating development reviews with Municipalities that have adopted a local surface water management plan and updated official controls. Staff conducts full development reviews of projects in Municipalities that have yet to adopt their plan and update controls.
- SWWD staff formalized District monitoring programs through creation of a Monitoring Plan. The Plan provides a framework for managing resources on a regional level and provides rationale for the District's various monitoring programs and sites.



- SWWD continued to operate an extensive stormwater monitoring network. Data collected as part of the program is used to identify trends in stormwater runoff. The monitoring report is available on the SWWD website at www.swwdmn.org. District consultants also conduct periodic verification of the District-wide hydrological model during which extensive analysis of runoff volumes and rates is performed.

Staff also completed an assessment of data and modeling available within the Powers Lake watershed to assess status of programs in place to protect the Lake and make suggestions for further action.



- SWWD provided financial support for a large detention facility on site of a former gravel pit in Woodbury. The facility will accommodate runoff from a large area and help provide relief for Bailey Lake, CD-P85 and CD-P86 regional infiltration basins, and the Central Draw Overflow when complete.



- SWWD provided funding to the City of Cottage Grove to dredge pond ED-P6 and repair ongoing erosion problems. The maintenance activities were to sustain and improve performance of the City's drainage network.



Water Quality

- SWWD's cost share program continued in 2009 with 36 residential and 3 commercial projects approved for funding. In all, completion of all projects approved in 2009 will result in estimated reductions of 18.28 lbs of phosphorus, 39.1 lbs of nitrogen, and 2,153 lbs of sediment in stormwater runoff.



- The SWWD Board of Managers approved funding to assist Cottage Grove in retrofitting their de-icing equipment. New equipment will enable the City to use less material and achieve better results. In addition to funding the equipment upgrade, SWWD will begin collecting flow data and chloride samples from two smaller subwatersheds where the equipment is being used. Data will be used to document decreases in annual chloride load and assess the benefit of funding future de-icing equipment upgrades.



Wetlands

- SWWD staff conducted development reviews to ensure compliance with SWWD wetland standards and participated as part of the Washington County Technical Evaluation Panel (TEP) to evaluate wetland impacts of proposed projects.

Natural Resources

- SWWD continued maintenance of prairie restoration areas at CD-P86. Maintenance included mowing and selective spraying for invasive weeds and over seeding of sparse areas.



Groundwater

- SWWD staff worked with Washington County and the Minnesota Department of Health to set the framework for a groundwater quality regional assessment program. The program consists of collecting seasonal water quality samples from wells existing around the CD-P85 and CD-P86

regional infiltration basins starting in 2010. Collected data will be used to monitor groundwater quality and serve as an indicator of potential impacts resulting from use of regional infiltration facilities. Effectiveness of the program will be assessed annually and opportunities for expansion will be explored.

Erosion and Sediment Control

- SWWD standards require projects to meet NPDES requirements for erosion and sediment control. SWWD standards also require Municipalities to identify an inspector and conduct regular inspections. In addition to City inspections, SWWD staff conducts four inspections annually to ensure that the City inspection programs are promoting compliance as intended. SWWD works with City staff to enforce compliance on issues identified in inspections.



Education

- Again in 2009, SWWD participated in the East Metro Water Resource Education Program (EMWREP). The EMWREP annual report is in Appendix B.

Long Range Work Planning and Finance

- SWWD laid the framework to collect stormwater utility fees in the East Mississippi management unit in 2010. It is the first time the fee will be charged to East Mississippi properties. Revenue will be used to fund water quality projects only within the East Mississippi.
- Washington County in cooperation with the Cities of Afton, Cottage Grove, Hastings and Denmark Township to dissolve the Lower St. Croix Water Management Organization and consolidate the area with the Valley Branch Watershed District and the SWWD. An addition of approximately 6 square miles to the SWWD was approved by the Minnesota Board of Water and Soil Resources in December, 2010. The SWWD will begin updating the watershed management plan to include the additional area.

Data Management

- SWWD staff began collecting all SWWD monitoring data from the Washington Conservation District. Data is being reformatted to a common format and will be uploaded to one database in 2010. The database will serve as the basis for accessing monitoring data through the SWWD website.

- SWWD is working with a consultant and graphic designer to update and enhance the SWWD website. Enhancements include an interactive mapping utility, enhanced development review tracking utility, cost share project tracking utility, and the ability to access SWWD monitoring data. The new website should be implemented in 2010.

General

- The SWWD maintains a general fund for daily operations of the district. General fund operations include, staff, managers, office expenses, insurance, audit and legal services.

Debt Service

- The SWWD maintains a debt service fund for the purpose of retiring current debt. In 2002 the SWWD issued general obligation bonds for the purchase to property. The property provided the necessary downstream capacity for existing flood control conditions. Debt was issued on a 15 year term.

2010 Workplan

Floodplain Management

Floodplain management is an integral element of stormwater management in the South Washington Watershed. The watershed exhibits many large depressions in the landscape that are land locked. Preservation of locally identified floodplains provides adequate storage and flood protection for future development. Federal Emergency Management Agency recently completed a floodplain restudy of Washington County.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$0.00*	\$85,000	\$85,000	\$170,000

* 2008 dollars included in other management areas.

2010 Work Plan

(1) Floodplain Management		\$85,000.00	
Hydrologic Modeling	Professional Services	Capital Outlay	\$85,000.00
Project Management	\$10,000.00		
Data Collection	\$10,000.00	\$22,500.00	
Model Development			
Calibration	\$15,000.00		
Assessment and Evaluation	\$15,000.00		
Reporting	\$12,500.00		

Management Area Goal

Opportunistically manage floodplains for multiple, non-development uses.

2010 Action Items

- Maintain adequate floodplain protection in newly developing areas.
- Ensure correct floodplain freeboard for newly built structures in developing areas.
- Provide assistance to County, Cities and Townships with application of updated FIRM's.
- Secure updated aerial photography from Washington County.
- Provide general assistance to watershed residents regarding floodplain information.

Stormwater Runoff Rate and Volume

A primary focus of the SWWD since creation in 1993 has been the management of stormwater runoff. Since the Northern Watershed is essentially land locked, the watershed is volume sensitive, therefore additions of stormwater runoff volumes due to development requires rigorous management. The major component of this management area is the planning, design and construction of the watershed overflow. The overflow will provide overflow capacity for excess runoff during extreme hydrologic events from the northern watershed to the Mississippi River.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$1,945,000*	\$1,869,000	\$1,273,000	\$5,683,000

* 2008 dollars included funds for flood damage reduction programs.

2010 Work Plan

(2) Storm Water Runoff Rate and Volume (SWW)	Professional Services	Capital Outlay	
			\$1,015,800.00
Flood Damage Reduction			\$152,000.00
FDR Grant Program		\$100,000.00	
Project Management	\$5,000.00		
Legal	\$4,500.00		
Modeling/Mapping/Protection			
Project Management	\$5,000.00		
Data Collection	\$7,500.00		
Model Development Calibration	\$15,000.00		
Assesment and Evaluation	\$7,500.00		
Reporting	\$7,500.00		
Overflow Design			\$94,400.00
Project Management	\$5,000.00		
Data Collection	\$10,000.00		
Feasibility/Preliminary Design	\$25,000.00		
Final Design	\$25,000.00		
Final Plans and Specs	\$15,000.00		
Legal	\$14,400.00		
Watershed Overflow Implementation Fund			\$679,400.00
Project Management	\$10,000.00		
Data Collection	\$10,000.00		
Appraisal	\$10,000.00		
Survey	\$10,000.00		
Legal	\$14,400.00		
Land Acquisition		\$300,000.00	

Implementation Fund		\$325,000.00	
Hydrologic Modeling			\$90,000.00
Project Management	\$7,500.00		
Data Collection	\$15,000.00		
Model Development Calibration	\$20,000.00		
Assesment and Evaluation	\$20,000.00		
Meetings/Correspondance	\$7,500.00		
Reporting	\$20,000.00		
(2) Storm Water Runoff Rate and Volume (EMW)			\$257,200.00
Newport Ravine Stabilization			\$232,200.00
Project Management	\$2,500.00		
Data Collection	\$2,500.00		
Appraisal	\$10,000.00		
Survey	\$10,000.00		
Legal	\$7,200.00		
Land Acquisition		\$100,000.00	
Implementation Fund		\$100,000.00	
Hydrologic Modeling			\$25,000.00
Project Management	\$2,500.00		
Data Collection	\$5,000.00		
Model Development Calibration	\$5,000.00		
Assesment and Evaluation	\$5,000.00		
Meetings/Correspondance	\$2,500.00		
Reporting	\$5,000.00		

Management Area Goal

Minimize existing and future potential damages to property, public safety, and water resources due to flood events.

2010 Action Items

- Continue planning and begin design of the watershed overflow project.
- Maintain implementation fund for the watershed overflow project.
- Provide support to flood damage reduction programs in the SWW.
- Maintain and update watershed models to provide best available information to guide SWWD programs and projects.
- Work cooperatively with the City of Newport to stabilize the North Ravine located in the EMW.

Water Quality

Water quality improvement is the main focus of the SWWD 2007 watershed management plan. The SWWD has established water quality standards and rules to reduce pollutant loading and improve water quality throughout the watershed. The overall goal of work under this fund is to identify water quality impacts and implement projects to correct impacts. Over time this strategic approach will meet future TMDL requirements.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$242,429	\$224,058	\$160,000	\$734,838

2010 Work Plan

(3) Water Quality	Professional Services	Capital Outlay	\$268,351.00
Loading Assessment			\$60,000.00
Project Management	\$5,000.00		
Data Collection	\$15,000.00		
Model Development Calibration	\$15,000.00		
Assesment and Evaluation	\$15,000.00		
Reporting	\$10,000.00		
Water Quality Cost Share Program			\$86,200.00
Cost share to projects		\$70,000.00	
Rain Barrels			
Project Management	\$3,600.00		
Assesment and Evaluation	\$3,600.00		
Final Design	\$3,600.00		
Reporting	\$1,800.00		
Legal	\$3,600.00		
Lake Assessment (TMDL/Impaired Waters/Non-Degradation)			\$100,000.00
Project Management	\$5,000.00		
Data Collection	\$7,500.00		
Watershed Evaluation	\$7,500.00		
Modeling Water Quality Physical/Chemical	\$30,000.00		
Lake Biological Assessment	\$10,000.00		
Feasible Remedial Alternatives Analysis	\$20,000.00		

Lake Management Plan/Report				
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	\$20,000.00			
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Management Area Goal

Maintain, or where practical improve, the water quality of wetlands and water bodies within the District.

2010 Action Items

- Continue water quality BMP cost share program.
- Develop watershed water quality model based on sub-watersheds.
- Further define loading assessments on a watershed and water body scale.
- Establish accounting of stormwater BMP's for TMDL implementation

Wetlands

Provide for management of the watersheds wetland resources. The SWWD works with the Washington Conservation District and Local Government Units to effectively management the Districts wetland resources. The SWWD provides assistance with the Wetland Conservation Act and has established standards for management of the wetlands, including water quality, water quantity, buffers, and mitigation of impacts.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$0.00*	\$20,000	\$85,000	\$105,000

* 2008 dollars included in other management areas.

2010 Work Plan

(4) Wetlands	Professional Services	Capital Outlay	
Wetland Assessment			\$85,000.00
Project Management	\$10,000.00		
Data Collection	\$25,000.00		
Model Development			
Calibration	\$12,500.00		
Assessment and Evaluation	\$25,000.00		
Reporting	\$12,500.00		

Management Area Goal

Manage the quantity and quality of wetlands within the watershed for their best function in a rapidly urbanizing environment.

2010 Action Items

- Support Local Government Units with implementation of the Wetland Conservation Act.
- Apply wetland standards across the watershed to ensure future functions and values of wetland resources.

Natural Resources

This management area provides for the improvements to the natural resource of the watershed. The SWWD has developed a greenway plan to establish a multi-use green corridor through the watershed. This corridor utilizes planned green space by the Municipalities and natural features protected from development.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$100,000	\$100,000	\$20,400	\$220,400

2010 Work Plan

(5) Natural Resources and Recreation	Professional Services	Capital Outlay		\$20,400.00
Greenway Implementation			\$20,400.00	
Construction				
Site Monitoring	\$2,700.00			
Project Management	\$2,700.00			
Maintenance		\$10,000.00		
Replacement		\$5,000.00		

Management Area Goal

Participate in conservation or creation of key natural areas with respect to habitat, wildlife, or recreation.

2010 Action Items

- Manage CD-P86 prairie restoration established in 2007 and 2008.
- Pursue grant opportunities for further restoration work in CD-P86 focused on non-cropped areas.

Groundwater

In cooperation with Washington County, the SWWD provides management of groundwater resources as identified in the County Groundwater Plan. The SWWD's focus is on regional groundwater quality and potential impacts from stormwater management practices. The SWWD will continue to evaluate potential impacts from regional stormwater infiltration. Support to the County and Municipalities relating to other groundwater issues is also provided.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$85,000	\$100,000	\$105,000	\$290,000

2010 Work Plan

(6) Groundwater	Professional Services	Capital Outlay	\$105,000.00
Groundwater Monitoring - quality			\$105,000.00
Project Management	\$10,000.00		
Data Collection	\$15,000.00	\$40,000.00	
Model Development Calibration	\$15,000.00		
Assesment and Evaluation	\$15,000.00		
Reporting	\$10,000.00		

Management Area Goals

Pursue a sustainable balance between surface water management, land use activities, and groundwater integrity.

2010 Action Items

- Work with the County and MDH to evaluate the potential impacts of regional stormwater infiltration.
- Coordinate with Washington County through groundwater planning.

Erosion and Sediment Control

Erosion of soil presents one of the greatest threats to water quality. The SWWD implements an annual program to provide assistance to Municipalities that increases compliance with existing local state and national permits. Soil erosion and resultant deposition of sediment carries with it many pollutants delivered directed to the water resource. The SWWD has a role in controlling erosion and helping to prevent degradation of the water body.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$24,952	\$23,095	\$13,575	\$64,622

2010 Work Plan

(7) Erosion and Sediment Control	Professional Services	Capital Outlay	
NPDES Phase II Construction Site Inspections			\$10,800.00
Project Management	\$3,600.00		
Data Collection	\$5,400.00		
Reporting	\$1,800.00		
			\$13,575.40

Management Area Goals

Facilitate erosion control and reduce impacts to wetlands and water bodies from sedimentation.

2010 Action Items

- Continue coordinated effort with the WCD and Municipalities to increase permit compliance on construction sites.
- Provide assistance to municipalities to correct erosion problems.
- Work with the City of Newport on stabilization of the Newport Ravines.
- Work with the WCD on stabilization of ravines tributary to the Mississippi River.

Education

The SWWD must provide an education program for Municipal Officials and residents of the watershed through the watershed management plan. The SWWD Board believes that County wide and Regional efforts are more effective educational programs than localized efforts. The SWWD is a member of the East Metro Water Resources Education Program and other regional efforts to provide annual education programming in the watershed. In addition these programs fulfill educational requirements places on the SWWD through its MS4 permit.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$62,381	\$48,114	\$55,182	\$170,000

2010 Work Plan

(8) Education				\$55,181.50
Education Local			\$4,800.00	
SWWD specific program	\$1,800.00	\$3,000.00		
Public Input			\$2,800.00	
CAC	\$1,800.00	\$1,000.00		
Education			\$2,500.00	
Website Modifications	\$2,500.00			
Shared Education Position			\$25,000.00	
Washington County Education	\$0.00	\$25,000.00		
Education			\$8,800.00	
Metro Watershed Partners	\$0.00	\$3,500.00		
Blue Thumb	\$0.00	\$1,800.00		
Project NEMO	\$0.00	\$3,500.00		

Management Area Goals

Heighten the awareness of key constituencies within the District, sufficient to modify behavior to improve the recognition and implementation of District policies, programs and activities.

2010 Action Items

- Maintain membership in the EMWREP.
- Provide local education opportunities in cooperation with Municipalities and other local organizations.
- Continue improvements to SWWD website and utilize as a primary information outlet.

Long Range Work Planning and Finance

The SWWD Board stressed implementation during development of the current 10 year plan adopted in 2007. As a result the SWWD established this management area to provide overall management of the watershed and focus effort and resources on implementation. This management area provides the short and long range work plan and funding authorities for the SWWD implementation. Through annual evaluation and work planning, the SWWD is provide flexibility to adapt or refocus as a result of changing environments or regulations.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$18,714	\$29,510	\$386,400	\$434,624

2010 Work Plan

(9) Long Range Work Planning and Financing	Professional Services	Capital Outlay		\$386,400.00
Coordinated CIP			\$363,600.00	
Project Management	\$5,000.00			
Data Collection	\$5,000.00			
Model Development Calibration	\$10,000.00			
Assessment and Evaluation	\$10,000.00			
Meetings/Correspondence	\$5,000.00			
Feasibility/Preliminary Design	\$10,000.00			
Final Design	\$10,000.00	\$300,000.00		
Reporting	\$5,000.00			
Legal	\$3,600.00			
Plan Amendment			\$11,700.00	
Project Management	\$1,800.00			
Data Collection	\$1,800.00			
Assessment and Evaluation	\$2,700.00			
Reporting	\$1,800.00			
Legal	\$3,600.00			
Design Manual			\$11,700.00	
Project Management	\$1,800.00			
Data Collection	\$1,800.00			
Assessment and Evaluation	\$2,700.00			
Reporting	\$1,800.00			
Legal	\$3,600.00			

Management Area Goals

Utilize District funds to initiate or support long range work plan projects which reduce flooding or otherwise benefit key District resources.

2010 Action Items

- Begin implementation of Coordinated Capital Improvement Program focused on water quality improvements.
- Provide short and long range planning and implementation for the SWWD.
- Maintain an updated and current watershed plan to reduce future planning costs.
- Update SWWD rules to current standards.

Data Management

A primary role of the 2007 SWWD watershed management plan is to help guide decisions of the Board of Managers. A key element is the use of scientific data to assist the Managers in making decisions based on best available information. The SWWD maintains extensive data through studies, reports, monitoring, information and internal operations.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$249,524	\$279,059	\$247,836	\$776,419

2010 Work Plan

(10) Data Management	Professional Services	Capital Outlay	
Web Site			\$2,500.00
Project Management	\$1,250.00		
Data Collection	\$1,250.00		
Assessment and Evaluation	\$0.00		
Reporting	\$0.00		
Stormwater Utility Administration			\$35,300.00
Annual Setup	\$5,000.00		
Rate Calculations	\$7,500.00		
Assessment and Evaluation Review, support, corrections, adjustments	\$2,500.00	\$2,500.00	
Legal	\$1,800.00		
Washington County Administrative Fee		\$15,000.00	
Washington County Surveyor		\$1,000.00	
Surface Water Monitoring Program			\$135,067.30
MS1-North Tributary to Wilmes Lake		\$6,829	
MS2-N Tributary to Bailey Lake		\$6,829	
Wilmes Lake Outlet		\$9,072	
Central Ravine		\$9,072	
100th Street		\$6,829	
St. Paul Park		\$9,072	
Newport		\$9,072	
Waterbody Assess-Powers		\$13,659	
Colby Lake West Tributary		\$9,072	
Lake Levels		\$2,100	
Flow--7 Locations		\$26,794	
In Lake Water Quality		\$5,865	
Groundwater		\$7,804	
Report		\$5,000	
Capital Equipment Costs		\$8,000	
Surface Water Monitoring Program			\$9,900.00
Project Management	\$900.00		
Data Collection	\$3,600.00		
Assessment and Evaluation	\$3,600.00		

Reporting	\$1,800.00		
Development Reviews			\$14,400.00
Correspondence	\$2,700.00		
Plan review	\$4,500.00		
Meetings	\$1,800.00		
Project Management	\$900.00		
Site Review	\$4,500.00		

Management Area Goals

Collect and manage data in a manner which maximizes the availability to and use by constituents of the District.

2010 Action Items

- Maintain and update the stormwater utility information annually.
- Maintain and operate an annual monitoring network that provides water resource information vital to SWWD programs and projects.
- Provide development review services to Municipalities.

General

Not specifically mentioned in the 2007 SWWD Watershed Management Plan as a management area, general is included in the SWWD annual budget as an accounting fund. The general fund provides the necessary revenue for daily operation of the SWWD. General fund revenue is levied district wide under MS 103D.905 and is capped at \$250,000. General fund revenue is also collected through MS103B.241 taxing authority available to metropolitan watershed districts.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$227,565	\$233,387	\$233,004	\$691,256

2010 Work Plan

(11) General				\$233,003.40
Salaries/Benefits				\$ 125,305.50
Manager Per Diem/Expenses				\$ 22,500.00
Administration/Office				
Office Rent				\$ 22,643.00
Employee Expenses				\$ 4,200.00
Employee Training				\$ 3,500.00
Office Equipment				\$ 12,334.90
Office Supplies				\$ 1,320.00
Legal Notices				\$ 1,500.00
Dues				\$ 4,500.00
Insurance and bond				\$ 11,500.00
Accounting				
payroll				\$ 1,920.00
monthly accounting				\$ 2,800.00
audit				\$ 12,500.00
Legal				\$ 6,480.00

Management Area Goals

2010 Action Items

- Maintain adequate funding for SWWD daily operation.
- Provide for annual staff and manager training opportunities.
- Ensure adequate protection against legal actions towards the SWWD.

Debt Service

Not specifically mentioned in the 2007 SWWD Watershed Management Plan as a management area, debt service is included in the SWWD annual budget as an accounting fund. In 2002 the SWWD issued \$5.8 million in General Obligation Bonds for the purchase of real property as described in the 1997 watershed plan. The SWWD completed acquisition of 150± acres for increased downstream stormwater system capacity, flood control and stormwater management. Bonds were issued with a 15-year pay off, and refinanced in 2007.

Budget History

Year	2008	2009	2010	3-yr total
Budget	\$549,000	\$549,000	\$535,000	\$1,633,000

2010 Work Plan

(12) Debt Service				\$535,000.00
Debt Service			\$535,000.00	

Management Area Goals

Sound financial planning for future infrastructure needs.

2010 Action Items

- Maintain adequate funding for debt service.

Appendix A 2009 Audit



**MS4 STORMWATER POLLUTION PREVENTION PROGRAM:
East Metro Water Resource Education Program Annual Report (2009)**

Background: The East Metro Water Resource Education Program (EMWREP) is a comprehensive water resource education and outreach program for the east metro area of St. Paul, MN. Members of EMWREP in 2009 included Brown’s Creek, Comfort Lake-Forest Lake, Ramsey-Washington Metro, Rice Creek, South Washington, and Valley Branch Watershed Districts, Lower and Middle St. Croix Watershed Management Organizations, the cities of Cottage Grove, Dellwood, Forest Lake, Lake Elmo, Stillwater, and Willernie, West Lakeland Township, Washington County and the Washington Conservation District. The EMWREP region covers all of Washington County as well as a small portion of Anoka, Chisago and Ramsey Counties.

The mission of EMWREP is to improve the quality of local surface and groundwater resources through education and outreach about non-point source water pollution. By using the six minimum control measures in the Stormwater Pollution Prevention Program (SWPPP) as a structure for the education program, EMWREP is able to help partners meet MS4 permit requirements.

Program Components: The EMWREP education plan was revised in 2009 to include the following six activities:

1. **General Education Campaign:** Articles in newspapers and newsletters, displays and presentations at community events, and collaborative work with other groups.
2. **Blue Thumb Program:** Collaboration with Blue Thumb program partners, website (www.BlueThumb.org), workshops, neighborhood parties and presentations for community groups.
3. **Stormwater U:** Workshops and field sessions for engineers, planners, public works staff and other municipal and agency employees.
4. **MS4 Toolkit:** Completed in June 2009, the kit includes materials for educating a variety of audiences about water resources – www.cleanwatermn.org/MS4toolkit.
5. **NEMO:** Presentations and workshops for elected officials and decision makers.
6. **Commercial Outreach:** New in 2009 - EMWREP is working with the Minnesota Pollution Control Agency, the Metro Association of Conservation Districts and local watershed agencies to develop an outreach program for businesses.

**MS4 Permit requirements for the Stormwater Pollution Prevention Program:
Requirement (a) – Public Education Program**

EMWREP activities used to meet requirements:

- 1) General Education Campaign
- 2) Blue Thumb Program
- 3) Commercial Outreach Program

Requirement (b) - An program that addresses the six minimum control measures

1. Public Education and Outreach

- General Education Campaign
- Blue Thumb Program
- Commercial Outreach Program

2. Public Participation

- General Education Campaign
- Blue Thumb Program

3. Illicit Discharge Detection and Elimination

- MS4 Toolkit

4. Construction Site Storm Water Runoff Control

- Stormwater U
- MS4 Toolkit

5. Post Construction Storm Water Management

- Stormwater U
- NEMO
- MS4 Toolkit
- Commercial Outreach Program

6. Pollution Prevention and Good Housekeeping in Municipal Operations

- MS4 Toolkit

Requirement (c) - For each minimum control measure, list: 1) Audience, 2) Educational goals, 3) Activities used to reach goals, 4) Activity implementation plans, and 5) Available performance measures

* See East Metro Water Resource Education Plan. Individual program areas specify audience, goals, activities and performance measures.

Requirement (d) - Coordination with other local stormwater education programs

The East Metro Water Resource Education Program had 17 partners in 2008. EMWREP also coordinates with several other public agencies, collaboratives, non-profits and citizen groups in the metro area.

Requirement (e) - One public meeting per year

EMWREP partners held individual public meetings.

2009 Program Activities and Highlights:

Public Education: In 2009, the EMWREP educator continued to write weekly columns about water resource issues, which were published in several local newspapers. EMWREP’s educator also contributed newsletter articles for thirty cities in the area, as well as the Washington County newsletter. For the third year, EMWREP partners coordinated a joint booth at the Washington County Fair. EMWREP also participated in the Children’s Water Festival as well as several local community events for children and adults.

As a member of the Metro WaterShed Partners steering committee, EMWREP helped to coordinate media campaign activities, which included 261 ads on Channel 45 TV during the summer, 221 ads on cable television in the fall, 12 billboards in June, 18 public service announcements on MPR, and a partnership with Saints Baseball that included multi-media coverage throughout the season. The WaterShed Partners also had a prominent booth in the Minnesota DNR building at the Minnesota State Fair.



Fifth grade students search pond water for aquatic invertebrates at the OH Anderson Elementary Field Day in Mahtomedi in May 2009.



Blue Thumb: EMWREP has continued to use the Blue Thumb – Planting for Clean Water program to promote partner BMP (best management practice) programs and has been active in developing the Blue Thumb partnership and its shared website, www.BlueThumb.org.

EMWREP organized six Blue Thumb introductory workshops during the spring in Cottage Grove, Denmark Township, Forest Lake, Lake Elmo and Stillwater with 130 attendees in total. A three-part series on Blue Thumb, raingardens and shoreline plantings was held in Lake St. Croix Beach as well, with an additional 18 participants. EMWREP also attended dozens of community events, coordinated several neighborhood parties and gave many presentations. In part due to this outreach, EMWREP partners approved or installed nearly 130 water quality improvement projects on privately owned land in Washington County in 2009.

The 62 Blue Thumb program partners including cities, watersheds, non-profits and businesses, put in more than 2000 hours of work to promote, design and install native gardens, raingardens and shoreline plantings in the Twin Cities



This raingarden in Mahtomedi was just one of dozens planted in Washington County in 2009.



Blue Thumb partners collaborated on an exhibit at the U of M Arboretum in 2009.



A demonstration raingarden at the State Fair Eco Experience was viewed by 350,000 people.

area. In addition to a spring media blitz that included magazine ads, a 20-minute radio interview on WCCO, and several large events, partners also added a virtual project tour to the website and hired a professional photographer to take photos of demonstration gardens around the area.

The Blue Thumb website received more than 23,000 visits in 2009, which was an 11% increase from 2008. The program was also a part of the Eco Experience at the Minnesota State Fair, which was visited by 350,000 people.

Stormwater U: During 2009, EMWREP continued its Stormwater Pond Management series in conjunction with Ramsey-Washington Metro Watershed District and University of Minnesota Extension. A workshop on stormwater pond excavation was held in May in North St. Paul, with 56 participants.



Todd Hubmer discusses how to map a stormwater pond to prepare for sediment excavation at the May 6 workshop.

MS4 Toolkit: In June 2009, EMWREP completed the MS4 Education Toolkit, which is now available online at www.cleanwatermn.org/MS4toolkit. In addition to the on-line materials, there are toolkits available with sample materials at MPCA regional offices, the Washington Conservation District office and through WaterShed Partners.

The website is divided into categories based on the six minimum control measures for the SWPPP and within each category, there are also sections for different topics and audiences. Many of the print materials in the kit are on-line in both pdf and editable versions, giving EMWREP partners and other MS4 communities the ability to add their logos and contact information and modify content to reflect local conditions and issues.



In addition to on-line resources, there are toolkits with sample materials at the MPCA regional office and through the WCD and WaterShed Partners.

Some of the new and exciting educational materials created for the MS4 Toolkit project include:

- **Two training videos for parks and public works staff**, addressing raingarden maintenance and stormwater pollution prevention in parks maintenance. The videos are part of training packets that also include posters, wallet cards and PowerPoint presentations.
- **Blue Thumb Guide to Year-Round Yard Care**, a 25-pg color manual that provides guidance for residential lawn and yard care.

- **Illicit Discharge Detection and Elimination education materials**, including posters, mailers and utility bill inserts.
- **Dozens of newsletter articles** on a variety of topics related to stormwater and water resources.

In addition to educational materials, the MS4 Toolkit provides guidance on using these materials as effectively as possible. There is information about community based social marketing and how to conduct a focus group, as well as tips for using the materials in the kit to address specific stormwater issues within a community. Each section of the kit also includes surveys that can be used to evaluate the impact of outreach efforts.

EMWREP will continue to provide basic website maintenance for the MS4 toolkit and to occasionally add new materials to the kit as they are developed. With new materials now available, EMWREP will now focus on using these materials to help partners reach target audiences in their communities.



EMWREP partners can use the two training videos from the MS4 Toolkit for their public works staff.

NEMO: In 2009, NEMO teamed up with a group of local and state agencies, including the Minnesota and Wisconsin DNR's, Northland NEMO, Middle St. Croix WMO, Washington Conservation District and the National Park Service to bring attention to issues facing the St. Croix and to educate local decision makers about how they can help to protect the river.



The Watershed Game was specifically designed to help local decision makers learn about best management practices and pollutant loading.

A March 31 workshop at the Stillwater Library had 65 participants, while a second workshop at the Science Museum on April 28 had another 30 attendees. Perhaps the largest success was *A view from the river: A guided tour of the St. Croix Valley's land and water resources*, which was held on June 17 with 104 local decision makers and more than 20 presenters and instructors. During the 4.5-hour workshop, participants rotated through three activities. At the Watershed Game, they used a large game board to role play how to decrease water pollution in the watershed using best management practices. In another exercise, instructors highlighted points of interest along the route from Hudson to the Kinnickinnic, providing background information and suggestions for action. Along with the Watershed Game and the guided view of the river, staff and researchers from the Minnesota DNR, National Park Service and St. Croix Watershed Research Station presented information about fisheries, mussels and aquatic bugs in the St. Croix Basin.

Commercial Outreach: EMWREP has begun working with the MPCA, the Metro Association of Conservation Districts and local watershed agencies to develop educational materials and outreach strategies for local businesses. During the fall, EMWREP added a new section to the WaterShed Partners “Minnesota Water – Let’s Keep it Clean” website that is specifically geared toward business owners and managers. The new content can be found at www.CleanWaterMN.org by clicking on “Businesses.” There is information on Low Impact Development, parking lot and grounds maintenance and other topics of interest, as well as local case studies.

In 2010, the next step will be to conduct focus group sessions with representatives from local businesses to identify incentives or programs that might motivate them to install BMPs on their property. These sessions will also be used to review the outreach materials already developed and to craft an outreach message that will be compelling for commercial property owners.



The goal of the commercial outreach program is to have more businesses adopt best management practices that benefit water quality.



**Minnesota Pollution Control Agency
NPDES/SDS Small MS4 Report Form**



The purpose of this report is to contribute information to an evaluation of the NPDES small municipal separate storm sewer system (MS4) permit program. Consistent with 40 CFR §122.37 the U.S. Environmental Protection Agency is assessing the status of the program nation-wide. A “no” answer to a question does not necessarily mean noncompliance with your permit or with the federal regulations. In order to establish the range of variability in the program it is necessary to ask questions along a fairly broad performance continuum. Your permitting authority may use some of this information as one component of a compliance evaluation.

1. MS4 Information

South Washington Watershed District _____

Name of MS4 _____

Matt _____ Moore _____ Administrator _____

Name of Contact Person (First) (Last) (Title)

(651) 714-3729 _____ mmoore@ci.woodbury.mn.us _____

Telephone (including area code) Email

2302 Tower Dr _____

Mailing Address _____

Woodbury _____ MN _____ 55125 _____

City State ZIP code

What size population does your MS4 serve? 80,000

What is the reporting period for this report? (mm/dd/yyyy) From 01/01/2009 to 12/31/2009

2. Water Quality Priorities

A. Does your MS4 discharge to waters listed as impaired on a state 303(d) list? Yes No

B. If yes, identify each impaired water, the impairment, whether a TMDL has been approved by EPA for each, and whether the TMDL assigns a wasteload allocation to your MS4. Use a new line for each impairment, and attach additional pages as necessary.

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

C. What specific sources contributing to the impairment(s) are you targeting in your stormwater program?

D. Do you discharge to any high-quality waters (e.g., Tier 2, Tier 3, outstanding natural resource waters, or other state or federal designation)? Yes No

E. Are you implementing additional specific provisions to ensure their continued integrity? Yes No

3. Public Education and Public Participation

- A. Is your public education program targeting specific pollutants and sources of those pollutants? Yes No
 B. If yes, what are the specific sources and/or pollutants addressed by your public education program?

Non point pollutant sources

- C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Annual reductions of 18.28 lbs TP, 39.1 lbs Nitrogen, and 2,153 lbs TSS.

- D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? Yes No

4. Construction

- A. Do you have an ordinance or other regulatory mechanism stipulating:
 Erosion and sediment control requirements? Yes No
 Other construction waste control requirements? Yes No
 Requirement to submit construction plans for review? Yes No
 MS4 enforcement authority? Yes No

- B. Do you have written procedures for:
 Reviewing construction plans? Yes No
 Performing inspections? Yes No
 Responding to violations? Yes No

- C. Identify the number of active construction sites ≥ 1 acre in operation in your jurisdiction at any time during the reporting period. ~ 20

- D. How many of the sites identified in 4.C did you inspect during this reporting period? 5

- E. Describe, on average, the frequency with which your program conducts construction site inspections.
4 times annually of sites being actively worked at time of inspection

- F. Do you prioritize certain construction sites for more frequent inspections? Yes No
 If Yes, based on what criteria? Inspection grades of C or lower trigger follow up inspections.

- G. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

<input type="checkbox"/> Yes	Notice of violation	# <u>0</u>	No Authority <input type="checkbox"/>
<input type="checkbox"/> Yes	Administrative fines	# _____	No Authority <input checked="" type="checkbox"/>
<input type="checkbox"/> Yes	Stop Work Orders	# _____	No Authority <input checked="" type="checkbox"/>
<input type="checkbox"/> Yes	Civil penalties	# <u>0</u>	No Authority <input type="checkbox"/>
<input type="checkbox"/> Yes	Criminal actions	# <u>0</u>	No Authority <input type="checkbox"/>
<input type="checkbox"/> Yes	Administrative orders	# _____	No Authority <input checked="" type="checkbox"/>
<input type="checkbox"/> Yes	Other _____	# _____	

- H. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? Yes No

- I. What are the 3 most common types of violations documented during this reporting period?
Silt fence maintenance, stabilization of bare soils, stabilization of stockpiles

- J. How often do municipal employees receive training on the construction program? annually

5. Illicit Discharge Elimination

- A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? Yes No
- B. Have you completed a map of all storm drain pipes and other conveyances in the storm sewer system? Yes No
- C. Identify the number of outfalls in your storm sewer system. 3
- D. Do you have documented procedures, including frequency, for screening outfalls? Yes No
- E. Of the outfalls identified in 5.C, how many were screened for dry weather discharges during this reporting period? 3
- F. Of the outfalls identified in 5.C, how many have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 3
- G. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.
bi monthly during growing season
- H. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? Yes No
- I. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? Yes No
- J. During this reporting period, how many illicit discharges/illegal connections have you discovered? 0
- K. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? na
- L. How often do municipal employees receive training on the illicit discharge program? Annually

6. Stormwater Management for Municipal Operations

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
 - All public parks, ball fields, other recreational facilities and other open spaces Yes No
 - All municipal construction activities, including those disturbing less than 1 acre Yes No
 - All municipal turf grass/landscape management activities Yes No
 - All municipal vehicle fueling, operation and maintenance activities Yes No
 - All municipal maintenance yards Yes No
 - All municipal waste handling and disposal areas Yes No
 - Other _____
- B. Are stormwater inspections conducted at these facilities? Yes No
- C. If Yes, at what frequency are inspections conducted? No sites active
- D. List activities for which operating procedures or management practices specific to stormwater management have been developed (e.g., road repairs, catch basin cleaning).
na--no applicable activities
- E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? Yes No
- F. If Yes, which activities and/or facilities receive most frequent inspections? _____
- G. Do all municipal employees and contractors overseeing planning and implementation of stormwater-related activities receive comprehensive training on stormwater management? Yes No
- H. If yes, do you also provide regular updates and refreshers? Yes No
- I. If so, how frequently and/or under what circumstances? annually for SWWD employees

7. Long-term (Post-Construction) Stormwater Measures

- A. Do you have an ordinance or other regulatory mechanism to require:
- | | | |
|--|---|-----------------------------|
| Site plan reviews for stormwater/water quality of all new and re-development projects? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Long-term operation and maintenance of stormwater management controls? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Retrofitting to incorporate long-term stormwater management controls? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. If you have retrofit requirements, what are the circumstances/criteria?
Development and Design standards that are applicable to redevelopment and public improvement
- C. What are your criteria for determining which new/re-development stormwater plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.) projects disturbing greater than 1 acre
- D. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? Yes No
- E. Do these performance or design standards require that pre-development hydrology be met for:
- | | | |
|----------------------|---|--|
| Flow volumes | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Peak discharge rates | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Discharge frequency | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Flow duration | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
- F. Please provide the URL/reference where all post-construction stormwater management standards can be found, or e-mail to MS4PermitProgram.PCA@state.mn.us an electronic copy of the ordinance or other regulatory mechanism as specified in Part V.G.5 of the permit.
<http://www.swwdmn.org/gettingstarted.htm>
- G. How many development and redevelopment project plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection? 13
- H. How many of the plans identified in 7.G were approved? 13
- I. How many privately owned permanent stormwater management practices/facilities were inspected during the reporting period? 0
- J. How many of the practices/facilities identified in I were found to have inadequate maintenance? na
- K. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections?
na
- L. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? Yes No
- M. How many formal enforcement actions (i.e., more than a verbal or written warning) were taken for failure to adequately operate and/or maintain stormwater management practices? 0
- N. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? Yes No
- O. Do all municipal departments and/or staff (as relevant) have access to this tracking system? Yes No
- P. How often do municipal employees receive training on the post-construction program? annually

8. Program Resources

- A. What was the annual expenditure to implement MS4 permit requirements this reporting period? \$80,000
- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit? \$52,900

C. This year what is/are your source(s) of funding for the stormwater program, and annual revenue (amount or percentage) derived from each?

Source: Property taxes Amount \$ _____ OR % 100

Source: _____ Amount \$ _____ OR % _____

Source: _____ Amount \$ _____ OR % _____

D. How many FTEs does your municipality devote to the stormwater program (specifically for implementing the stormwater program; not municipal employees with other primary responsibilities)? 1

E. Do you share program implementation responsibilities with any other entities? Yes No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
Municipalities	Municipal Ops; Enforcement/Inspections; Education	Seasonal inspections of active sites
EMWREP	Education	Review of annual report and approval of funding
Washington County	Municipal Ops; Enforcement/Inspections; Education	Seasonal inspections of active sites

9. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your stormwater management program, how long have you been tracking them, and at what frequency? These are not measurable goals for individual management practices or tasks, but large-scale or long-term metrics for the overall program, such as macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
Regional Assessment Monitoring Locations	2000	Contin flow, Periodic water quality	10
Citizen Assisted Monitoring Program	1994	twice monthly during growing season	7

B. What environmental quality trends have you documented over the duration of your stormwater program? Reports or summaries can be attached electronically, or provide the URL to where they may be found on the Web.
 2009 monitoring report, when complete, will be available at http://www.swwdmn.org/data_monitoring.htm

10. Additional Information

In the space below, please include any additional information on the performance of your MS4 program. If providing clarification to any of the questions on this form, please provide the question number (e.g., 2C) in your response.

www.swwdmn.org

Certification Statement and Signature

I certify that all information provided in this report is, to the best of my knowledge and belief, true, accurate and complete. Yes

Federal regulations require this application to be signed as follows: **For a municipal, State, Federal, or other public facility:** by either a principal executive or ranking elected official.

Matt Moore, Administrator
Name of Certifying Official, Title

Date (mm/dd/yyyy)

Submit



Published September 25 2009

New regional water fee questioned

St. Paul Park property owners will see a new fee on their county tax bills for 2010, according to Matt Moore, administrator for the South Washington Watershed District.

By: Toni Lambert, South Washington County Bulletin

St. Paul Park property owners will see a new fee on their county tax bills for 2010, according to Matt Moore, administrator for the South Washington Watershed District.

The fee — approximately \$35 — will allow the district to move forward on three projects that involve water quality, drainage and erosion, Moore said. Those projects are the North Ravine in Newport, the Cottage Grove Clear Channel Pond and the Grey Cloud Island first fill culvert.

Moore told the St. Paul Park City Council this is the first time city property owners are being assessed by the watershed district, but council members Steve Hunstad and Tim Jones questioned why since none of the projects is located within city boundaries.

Moore said property owners in Newport, Grey Cloud Island Township and small areas of Cottage Grove and Woodbury — all members of the watershed district — will also be assessed.

"We're already charging a city stormwater management fee," said Hunstad. "We're taking care of most of our stormwater problems. The Clear Channel Pond is in Cottage Grove. Why aren't they paying for it?"

Moore said the watershed gets involved where there is cross-country overflow. "The new fee is for regional projects," he said.

"Why can't we figure how much comes from each city and collect accordingly from those cities?" Hunstad asked.

The watershed board is working on a funding formula, Moore said.

"The funds to deal with the Clear Channel Pond project are coming mostly coming from St. Paul Park, Newport and Grey Cloud Island because of where it's geographically located," said council member Tim Jones. "But the runoff that causes problems comes from the ridge in Cottage Grove. So basically, the water comes from outside our city and we get to manage it because it lands in our back yard."

Dennis Hanna, the St. Paul Park representative on the watershed board, who was present at the council meeting, told members the new fee is for water that overflows into more than one area.

Hunstad pointed out that the city's stormwater management plan includes ponding basins and overland management.

"In the beginning, St. Paul Park, Newport and Grey Cloud Island formed the East Mississippi Watershed District," Hanna said. "But there was no staff and nothing got done. In 2003, the EMWD merged with the South Washington and Lower St. Croix districts to form the South Washington Watershed District.

"The residents of the two smaller towns and the township were happy to merge, but didn't want to pay for projects in Woodbury and Cottage Grove," he said. "So it was decided that property owners in the former EMWD would finance their own projects and Woodbury and Cottage Grove would support their projects.

"This is the first time you'll be paying anything," Hanna said.

The Clear Channel Pond runs along the west side of Highway 61 just south of 70th Street, Moore explained. Water comes through culverts under the highway into the pond. If the pond overflows, the water goes overland through St. Paul Park to the river.

"The watershed district is looking at building a holding pond upriver to alleviate and control the rate of flow into the Clear Channel Pond," Moore said, "but we're still evaluating the project, which has been estimated to cost \$1 million."

The watershed district is working with Newport on erosion in the North Ravine, Moore said. The ravine is located off Sterling Avenue and Bailey Road, just west of the city's public works building. "The plan is to armor the ravine with rocks to control erosion and to build a pond at the bottom of the ravine to control the rate of discharge toward Highway 61.

The third project is to aid Grey Cloud Island Township to install a culvert under the first fill to allow river water to flow through the Grey Cloud channel and "hopefully restore the water quality," Moore said.

The new watershed assessment will be levied until the projects are completed, Moore said. "Right now, we anticipate they will run at a minimum for 10 years."

All three projects are expected to begin in mid-2010, after plan amendments have been reviewed and approved by the state Board of Water and Soil Resources, he said.

The next watershed board meeting is Oct. 6.

Tags: local news, saint paul park, communities, news, watershed, fee

South Washington County
Bulletin

Published December 03 2009

Plows become more eco-friendly

New computers regulate road salt distribution

By: Jon Avise, South Washington County Bulletin

They're big and they're sturdy — at first glance, Cottage Grove's fleet of plow trucks looks more like public works workhorses than pieces of high-tech machinery.

But more than \$50,000 in funds from the South Washington Watershed District is changing that, helping the city install a computer-based road salt distribution system in its dozen plow trucks. That, says a public works official, will save the city money and keep the potentially environmentally harmful salt from washing away into area ponds and wetlands.

The computer systems — at a cost of about \$24,000 to the city, \$75,000 in total — sense ground speed and road temperature, delivering just the right dosage of ice-melting road salt to slick streets and eliminating piles of the white stuff at intersections.

"We're not looking to compromise public safety," said city engineer Jennifer Levitt. "The key thing is we still want to put out the right amount of salt, we want the same results with the least amount of salt (usage) possible."

The trucks also feature GPS systems that will help public works evaluate and possibly rework the city's plow routes.

Since 2001, Cottage Grove's plows have applied an average of 5,200 tons of sand and salt per year to the city's 168 miles of roadway, according to statistics provided by public works. Cottage Grove Public Works has moved to phase out the use of sand — except in extremely low temperatures, when salt loses its effectiveness — saying the substance does little to improve road conditions and is expensive to clean up.

Levitt said last week the city estimates the new salt distribution systems will reduce the city's salt usage by 5 to 10 percent — valuable, considering the wintertime necessity cost the city \$56.40 per ton this year.

"The cost of salt has gone way up," said public works streets foreman Gary Orloff. The in-plow computers will be "better for runoff, water quality, and salt usage."

Plow drivers will manage the computer system with a single joystick, an easier task than dealing with the series of levers and buttons that controlled the release of salt and sand in the past, Orloff said.

The computer system will sense road temperature — applying more the colder the surface — and vehicle speed — slowing the spread of salt from the truck bed as a plow slows at an intersection to allow for an even distribution.

It's more scientific, by a long shot, Orloff said, than how plow drivers were applying salt and sand in the past.

"It was a sight thing," he said. Now, plow drivers "can keep an eye on the road more than what you're doing in the truck."

Tags: local news, cottage grove, news, snowplows, environment

Executive Summary

SWWD's monitoring programs are organized based on a Regional Assessment approach. By following a regional assessment approach, monitoring is focused on key crossings and checkpoints throughout the District. Data from those monitoring locations is used to identify regional issues for further investigation. In addition to monitoring at Regional Assessment Locations, SWWD conducts subwatershed assessment monitoring, participates in the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP), and limited monitoring of groundwater levels.

In 2009, SWWD operated 8 Regional Assessment Locations, 5 Subwatershed Assessment Locations, participated in the CAMP program which monitored 7 lakes, conducted additional stormwater monitoring in watersheds of 2 lakes, monitored surface elevation on 2 additional lakes, and continued long term monitoring of groundwater levels near the District's regional infiltration facilities. Data was analyzed and compared to past data, which in some cases goes back to 1994. This executive summary provides an overview of major findings from the 2009 monitoring data. The body of the 2009 Monitoring Report presents the data collected and provides more discussion.

Regional Assessment Locations were generally monitored from early April through October. Some sites—MS2, 100th Street, and Wilmes Lake Outlet—display consistently good water quality. MS2 effectively serves as watershed outlet for the majority of the Northern major subwatershed of the District. Data collected at MS2 indicates that the Northern major subwatershed, though mostly developed, currently transmits low runoff or pollutants. Likewise, the 100th St site effectively serves as the watershed outlet for the West Draw and Central Draw major subwatersheds and transmits low runoff and pollutants. Wilmes Lake Outlet met state water quality standards throughout the monitoring season; however, data indicates a high phosphorus load leaving the lake and flowing to Colby Lake.

Other Regional Assessment Locations—Newport, St. Paul Park, Central Ravine, and MS1—display flashy hydrographs indicating rapid transmission of even small storm events and high concentrations of pollutants. 2009 results for Newport and St. Paul Park, both within the East Mississippi major subwatershed, are consistent with past years and indicate total phosphorus loading in excess of SWWD loading standards for the Mississippi River and several instances of heavy metal concentrations in excess of state water quality standards. Results from the Central Ravine site, monitored for the first time in 2009, indicate poor water quality in the District with consistently high concentrations of heavy metals. MS1, transmitting the lowest runoff volume since monitoring began in 2000 and meeting SWWD phosphorus loading standards for the first time, still exceeded state water quality standards for E. coli, chloride, and heavy metals.

SWWD Lakes are held to two sets of standards. First, impairment status is determined based on state eutrophication standards. Second, SWWD sets interim goals for all shallow lakes in the District. District rules and standards are set to achieve SWWD's interim goals. SWWD's overall goal with respect to lakes is to manage the watershed to improve water quality and correct impairments. For Powers Lake, the

District's only deep lake, SWWD sets goals that exceed state standards with the goal of protecting the priority water body.

All SWWD lakes are eutrophic except Markgrafs which is hyper-eutrophic. Light attenuation in most lake is dominated by algae which are nevertheless limited by some factor other than available phosphorus. Exceptions, however, include Markgrafs Lake which is dominated by non algal turbidity and Ravine Lake which may be dominated by blue green algae and should be monitored for outbreaks. Water quality in some lakes—Armstrong, Ravine, and Wilmes—has shown improvement, though the trends are weak in some cases. Armstrong Lake met state eutrophication standards and exceeded SWWD water quality goals. Ravine Lake continued its trend of increasing water quality with an overall grade of B. Ravine Lake scored an overall grade of F in the first year of CAMP monitoring in 1998. Wilmes appears to be exhibiting minor water quality improvements in addition to high water level fluctuations. The lake reached its lowest recorded elevation since monitoring began in addition to reaching the ordinary high water elevation on multiple occasions.

Water quality of other District Lakes—La, Markgrafs, and Powers—declined in 2009, while Colby remained the same. La Lake, a closed basin, continued trends in declining surface elevation likely resulting in observed declines in water quality. Markgrafs Lake exhibited continued degradation far exceeding both state eutrophication standards and SWWD water quality goals. All three eutrophication parameters at Markgrafs Lake were the poorest since monitoring began. Powers Lake, considered a priority water body by SWWD, also continues to exhibit a prolonged declining trend in water quality reaching the highest recorded mean growing season phosphorus levels in 2009. Further, stormwater monitoring within the Powers Lake watershed indicates routine phosphorus loading in excess of SWWD loading standards for the lake. There was no notable change in water quality in Colby Lake, a historically poor water quality lake which has been graded D or F every year since monitoring began in 1994. Limited stormwater monitoring in the Colby Lake watershed indicates potential heavy metal and chloride issues that will continue to be monitored in 2010.