



# **2006 Annual Report**



South Washington Watershed District Board of Managers

- Jack Lavold, President
- Dennis Hanna, Vice-President
- Brian Johnson, Vice-President
- Don Pereira, Secretary
- Mike Pouliot, Treasurer

## **TABLE OF CONTENTS**

<b>1. INTRODUCTION.....</b>	<b>- 1 -</b>
<b>2. FINANCIAL REPORT .....</b>	<b>- 2 -</b>
<b>2.1. 2006 Audit.....</b>	<b>- 2 -</b>
<b>2.2. 2006 Budget .....</b>	<b>- 2 -</b>
<b>2.3. 2007 Budget .....</b>	<b>- 4 -</b>
<b>3. ANNUAL ACTIVITY REPORT.....</b>	<b>- 5 -</b>
<b>3.1. Board Members.....</b>	<b>- 5 -</b>
<b>3.2. Employees and Consultants .....</b>	<b>- 6 -</b>
<b>3.3. 2006 Annual Work Plan .....</b>	<b>- 7 -</b>
<b>3.4. 2007 Projected Work Plan .....</b>	<b>- 9 -</b>
<b>3.5. Local Plan Implementation Evaluation .....</b>	<b>- 12 -</b>
<b>3.6. Biannual Solicitation.....</b>	<b>- 12 -</b>
<b>3.7. Wetland Banking .....</b>	<b>- 12 -</b>
<b>Appendix A .....</b>	<b>A</b>

## **1. 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, "Water Planning and Project Implementation," 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. 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.

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 2006.

## 2. Financial Report

### 2.1. 2006 Audit

2.1.1. A complete copy of the 2006 Audit is included Appendix A of this report. The following tables illustrate the funds and approved levies for 2006 and 2007.

### 2.2. 2006 Budget

2.2.1. In 2006 the SWWD budgeted to continue acquisition of land for the Central Draw Overflow. In 2004 the SWWD implemented a stormwater utility fee for the majority of project revenue. 2006 was the third year of stormwater utility fee collection for the SWWD. The utility was implemented to provide the SWWD with sub-watershed financing authority. Sub-watershed financing is used to the implementation of the watershed overflow project which splits the cost 75% sub-watershed and 25% entire watershed. The SWWD works with the Cities each year to update stormwater utility parcel information for consistency between City and Watershed utility charges. Washington County is the collection agent through property tax collections. The fee is listed on property tax statements as a special assessment.

2006	Fund/Project/Task	Total
<b>Projects</b>		
310	Lake Assessments/Strategic Plans	\$ 16,000.00
311	Greenways	\$ 54,240.00
312	Infiltration	\$ 58,800.00
313	Regional Facilities	\$ 855,800.00
315	Groundwater Protection and Monitoring	\$ 75,000.00
317	Watershed Hydrologic and Hydraulic modeling & mapping	\$ 39,000.00
322	Overflow	\$ 1,000,000.00
319	East Mississippi	\$ -
<b>PROGRAMS</b>		
200	Surface Water Monitoring	\$ 92,290.00
201	Infiltration	\$ 82,800.00
203	Information and Education	\$ 28,000.00
205	Watershed Plan & Rules update	\$ 51,500.00
206	Development reviews	\$ 61,800.00
210	Stormwater Utility Administration	\$ 45,000.00
<b>General</b>		
101	General	\$ 182,107.30
<b>Total</b>		
		\$ 2,642,338.80

**Budget Summary:**

<b>BREAKDOWN</b>	<b>2005</b>	<b>2006</b>	Change from Previous Year (+/-):
Projects:	\$ 2,014,982.00	\$ 2,098,840.00	4%
Programs:	\$ 365,480.00	\$ 361,390.00	-1%
Administrative:	\$ 168,550.00	\$ 182,108.00	7%

Year	Budget	Change from Previous Year (+/-)
Projected 2008	\$2,832,020.00	3%
Projected 2007	\$2,749,534.00	4%
Proposed 2006	\$2,642,338.00	4%
2005	\$2,549,012.00	-6%
2004	\$2,716,083.00	10%
2003	\$2,447,826.00	39%
2002	\$1,488,400.00	10%
2001	\$1,338,800.00	0%

## 2.3. 2007 Budget

- 2.3.1. A summary of the 2007 budget is included below. The budget format has changed from previous years in anticipation of the implementation of the updated Watershed Management Plan. The SWWD continues to collect the majority of the revenue through the stormwater utility fee. The SWWD anticipates the planning, design and construction of the Watershed Overflow in the next few years. Implementation of stormwater conveyance systems, which include Military Road box culvert, CD-P85/86 connection and County Road #19 stabilization, will continue throughout 2007.

### 2007

Management Area		Total
1	Flood Plain Management	\$ -
2	Stormwater Runoff Rate and Volume	\$ 1,854,000.00
3	Water Quality	\$ 170,000.00
4	Wetlands	\$ 15,000.00
5	Natural Resources and Recreation	\$ 100,000.00
6	Groundwater	\$ 90,000.00
7	Erosion and Sediment Control	\$ 40,000.00
8	Education	\$ 70,000.00
9	Long Range Work Plan and Financing	\$ 15,000.00
10	Data Management	\$ 147,000.00
11	General	\$ 248,534.00
<b>Total</b>		<b>\$ 2,749,534.00</b>

### Budget Summary:

Year	Budget	Change from Previous Year
Projected 2008	\$2,832,020.00	3%
Proposed 2007	\$2,749,534.00	3.9%
2006	\$2,642,338.00	3.5%
2005	\$2,534,581.00	-6%
2004	\$2,716,083.00	10%
2003	\$2,447,826.00	39%
2002	\$1,488,400.00	10%
2001	\$1,338,800.00	0%
2000	\$1,341,717.00	21%

### 3. Annual Activity Report

#### 3.1. Board Members

Manager	Position	Term Expires	City/County
Mr. Jack Lavold 6859 Ideal Avenue South Cottage Grove, MN 55016 651-459-8891	President	05/01/2008	Cottage Grove/Washington
Mr. Dennis Hanna, 9301 Grey Cloud Island Dr. St. Paul Park, MN 55071 651-459-2281	Vice-President	05/01/2007	Woodbury/Washington
Mr. Brian Johnson 4353 Dorchester Drive Woodbury, MN 55129 651-458-3739	Vice-President	05/01/2007	Woodbury/Washington
Mr. Don Pereira 8232 River Acres Road Cottage Grove, MN 55016 651-769-0429	Secretary	05/01/2009	Cottage Grove/Washington
Mr. Mike Pouliot 10406 Lancaster Ln. Woodbury, MN 55129 651-459-6228	Treasurer	05/01/2008	Woodbury/Washington

## 3.2. Employees and Consultants

Employees	Position	Address	Telephone	E-mail
Matt Moore	Administrator	Mail: 8301 Valley Creek Road Woodbury, MN 55125 Office: 2301 Tower Drive Woodbury, MN 55125	Phone: 651-714-3729 Fax: 651-714-3721	<a href="mailto:mmoore@ci.woodbury.mn.us">mmoore@ci.woodbury.mn.us</a>
Consultants	Services	Address	Telephone	E-mail/website
Teresa Buhl	Recording Secretary	6175 25 <sup>th</sup> Street North Oakdale, MN 55128	651-770-7379	<a href="mailto:buhltab@comcast.net">buhltab@comcast.net</a>
Jack W. Clinton, P.A.	Attorney	Suite 200 Currell Centre 7616 Currell Blvd. Woodbury, MN 55125	651-264-3077	<a href="mailto:jwclinton@usinternet.com">jwclinton@usinternet.com</a>
HLB Tautges Redpath, Ltd.	Accounting	4810 White Bear Parkway White Bear Lake, MN 55110	651-426-7000	<a href="http://www.hlbtr.com">www.hlbtr.com</a>
BARR Engineering Company	Engineer	4700 West 77 <sup>th</sup> Street Minneapolis, MN 55435-4803	952-832-2600	<a href="http://www.barr.com">www.barr.com</a>
Bonestroo, Rosene, Anderlik & Assoc.	Engineer	2335 West Highway 36 St. Paul, MN 55113	651-636-4600	<a href="http://www.bonestroo.com">www.bonestroo.com</a>
Emmons & Olivier Resources	Engineer	651 Hale Avenue North Oakdale, MN 55128	651-770-8448	<a href="http://www.eorinc.com">www.eorinc.com</a>
HDR Engineering, Inc.	Engineer	6190 Golden Hills Drive Minneapolis, MN 55416	763-591-5400	<a href="http://www.hdrinc.com">www.hdrinc.com</a>
Houston Engineering, Inc.	Engineer	10900 73 <sup>rd</sup> Avenue North, Suite 106 Maple Grove, MN 55369-5400	763-493-4522	<a href="http://www.houstonengineeringinc.com">www.houstonengineeringinc.com</a>
Wenck Associates, Inc.	Engineer	1800 Pioneer Creek Center P.O. Box 249 Maple Plain, MN 55359-0249	763-479-4200	<a href="http://www.wenck.com">www.wenck.com</a>
Howard R. Green Company	Engineer	2550 University Avenue W, Suite 400N St Paul, MN 55114	651-644-4389	<a href="http://www.hrgreen.com">www.hrgreen.com</a>
MSA Professional Services	Engineer	412 Hayward Avenue N Oakdale, MN 55128	608-242-7779	<a href="http://www.msa-ps.com">www.msa-ps.com</a>
Owen Ayres and Associates, Inc.	Engineer	3433 Oakwood Hills Parkway P.O. Box 1590 Eau Claire, WI 54702-1590	715-834-3161	<a href="http://www.AyresAssociates.com">www.AyresAssociates.com</a>
Limno-Tech, Inc.	Engineer	1326 Birch Park Ridge Houlton, WI 54062	715-549-6740	<a href="http://www.limno.com">www.limno.com</a>
Schoell and Madson, Inc.	Engineer	10580 Wayzata Blvd., Suite 1 Minneapolis, MN 55305-1525	952-546-7601	<a href="http://www.schoellmadson.com">www.schoellmadson.com</a>
Washington Conservation District	Technical Services	1380 W Frontage Rd, Hwy 36 Stillwater, MN 55082	651-275-1136	<a href="http://www.mnwcd.org">www.mnwcd.org</a>



### **3.3. 2006 Annual Work Plan**

#### **3.3.1. Lake Assessments**

3.3.1.1.No lake assessments were conducted during 2006.

#### **3.3.2. Greenways**

The SWWD participated with the City of Cottage Grove during the completion of the East Ravine AUAR and master plan for the comprehensive plan update. The City is planning for significant greenway/open space and part of the land use plan. A major portion of the land in the greenway is land purchased by the SWWD for flood control. These areas are being planned as open space available for flood control with compatible land uses.

During this past election year, a county wide open space referendum was passed. SWWD will continue to work in cooperation with the county to fully utilize new opportunities through this referendum.

#### **3.3.3. Infiltration**

Local stormwater management is critical to the quantity and quality of runoff in the watershed. The SWWD works with development projects to implement management practices beyond traditional techniques. These techniques are directed at volume control and water quality enhancement.

The Washington County South Service Center design has incorporated bioretention areas and rain gardens for the majority of the stormwater management on the site. The SWWD has decided to support the project as a demonstration site. The SWWD continues to monitor the activities and performance of the stormwater infiltration trench system installed at the Math and Science Academy in Woodbury.

#### **3.3.4. Regional Facilities**

In January 2002 the SWWD Board issued bonds in the amount of \$5.8 million for the acquisition land to provide the overflow capacity. Acquisition of approximately 200 total acres was completed in 2004. The acquisition of this property will provide the necessary area, and storage volume to provide stormwater management and flood control to the developed portions of the watershed.

With the completion of the East Ravine AUAR/Master Plan, SWWD is working with the City of Cottage Grove to finalize the grade for the regional drainage system. This system will serve both the local and regional needs.

### 3.3.5. Watershed Modeling and Mapping

The West draw sub-watershed is the last of the major sub-watersheds in the South Washington Watershed to be modeled. In cooperation with the Cities of Cottage Grove and Woodbury the SWWD completed modeling of the West Draw. The goal of this project is to develop an existing conditions model, accurately map flood storage areas, evaluate future conditions, establish sub-watershed design criteria and establish intercommunity flow conditions. The resultant model has provided the necessary information for the City of Woodbury to plan future land use and stormwater control. In addition, the model has provided the City of Cottage Grove with additional information regarding future management projects within there boundaries.

As a result of the 2005 October rainfall event, SWWD has been working with the City of Woodbury on several modeling efforts. SWWD has taken the lead on the Wilmes Lake sub-watershed in an effort to take action to reduce future flooding impacts. Plans for new overflow gates in the sub-watershed area have been finalized, with construction to take place in 2007.

### 3.3.6. Overflow

The City of Cottage Grove has undertaken a master planning effort to direct development of the East Ravine area. The East Ravine will be the location of the regional watershed overflow. The SWWD is working with the City of Cottage Grove to plan, design and construct the watershed overflow as an element of the East Ravine development. This system will serve as a combined local and regional drainage system. The route and local capacity will be determined by the City of Cottage Grove; the SWWD will then evaluate the local system with regional flows. It is anticipated that the SWWD will be responsible for final design and implementation of the regional system, which will serve as the local drainage on an annual basis.

Plans for an extension of the monitoring wells around CD-P85/86 basins were established in late 2006. Well extension is essential for monitoring groundwater interactions from increased infiltration from the basins.

### 3.3.7. Watershed Management Plan

The SWWD began the update of the 1997 watershed plan in late 2005. An Agency Draft Review will be completed in February 2007, with the anticipation of a final review and approval for the second half of 2007. A Designs Manual will follow the watershed plan. The manual will provide specifics and consistency across the watershed district in construction and monitoring. The final outcome of both the Watershed Plan and the Designs Manual is the development of updated rules and regulations for the watershed district.

### **3.4. 2007 Projected Work Plan**

#### **3.4.1. Priority Projects**

##### **3.4.1.1. Regional Facilities**

The SWWD will continue to plan and design the regional facilities in cooperation with the City of Cottage Grove and the East Ravine. Further definition of the local and regional drainage system, roles and responsibilities and a final preferred route for the watershed overflow will be among the issues clarified.

##### **3.4.1.2. Watershed Overflow**

In addition to construction of infrastructure within the regional basins which will serve as part of the watershed overflow, the SWWD will continue to coordinate with the City of Cottage Grove on the development of the East Ravine. Stormwater design of the East Ravine neighborhood will provide the corridor and alignment for the SWWD watershed overflow. Future coordination with the City of Cottage Grove will ensure construction of a combine local and regional drainage system.

Restoration projects for the CD-P85 and CD-P86 basins will begin in the spring of 2007. Plans indicate both a woodland and prairie restoration to farm fields and wooded areas surrounding both basins. Plantings for the restoration will continue until 2009.

#### **3.4.2. Priority Programs**

##### **3.4.2.1. Update Plan and Rules**

The SWWD watershed plan and rules will be revised to incorporate updated information, including the East Mississippi watershed area, and define Phase II of the watershed overflow through the East Ravine. Standards for stormwater rate, volume control and flood storage on a sub-watershed basis will provide stormwater control throughout the watershed. A finalized Watershed Management Plan Review should be available in the second half of 2007. Implementation of the revised Watershed Management Plan will also begin in 2007.

##### **3.4.2.2. Information and Education**

The SWWD is supporting the Watershed partners to provide metro wide coverage and information of watershed issues. The Watershed Partners provides an annual report of their activities. The SWWD also developed a web site in 2005 that was launched in March of 2006 [www.swwdmn.org](http://www.swwdmn.org). The website is used to communicate with the advisory committees, provide information to residents of the watershed and increase the identity of the watershed.

The SWWD has partnered with various local government units, other watersheds located within Washington County, and with the Washington Conservation District to create a shared water resources educator position in June of 2006. This position provides Countywide and watershed specific educational materials

#### 3.4.2.3. Monitoring Program

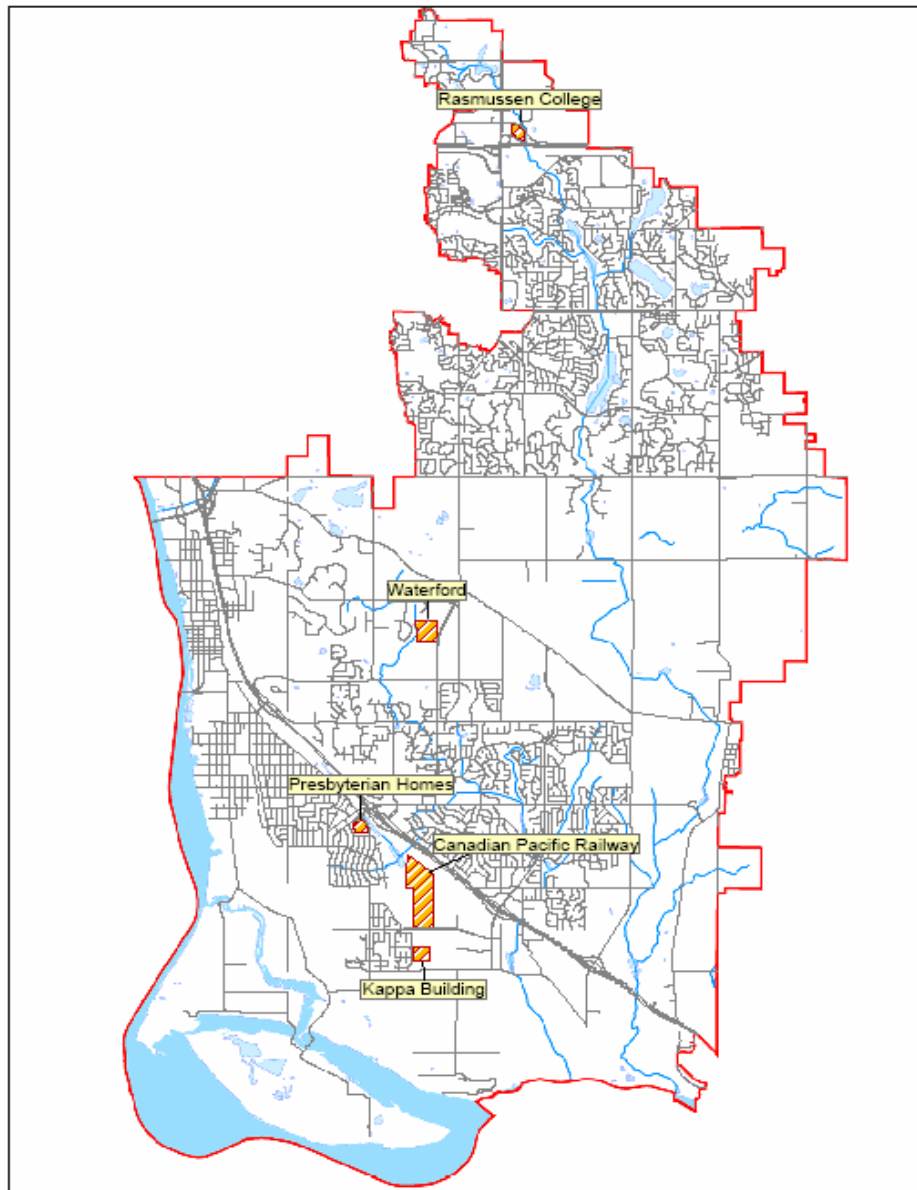
Surface water monitoring is an annual program conducted by the SWWD to evaluate watershed programs and projects. Monitoring stations also provide baseline information for evaluation of future projects.

#### 3.4.2.4. Development Reviews

In conjunction with the 1997 Watershed Plan approval, the SWWD promulgated rules to implement the goals and policies of the plan. However, the SWWD Board has pursued a process to provide comments on projects to be included in the established permit process of the Cities. Since the goal of the SWWD is to NOT duplicate a permit process, the following map illustrates projects reviewed in 2006. The Board is working to strengthen the review process by working more closely with individual cities. Recent changes to local ordinances will provide greater continuity between City and SWWD standards.

### 3.4.3. Project Review Map

## 2006 Development Reviews



### 3.5. Local Plan Implementation Evaluation

3.5.1. Due to the high rate of growth in the watershed, several efforts have been completed by the Cities to plan, model, design and evaluate storm sewer systems. These efforts include sub-watershed evaluations, Alternative Urban Areawide Reviews, lake assessments, and municipal comprehensive plans. In addition, the SWWD has developed a watershed model and design level sub-watershed models provided to the Cities. The SWWD is completing projects to provide Cities with information on hydrology, hydraulics, natural resource management, water resource impacts, and development of performance standards. This information can be used by the Cities in discussions with proposed projects. This approach does not require the SWWD to issue a separate permit for each project. Where conflicts between planned land use and potential impacts to receiving waters occur, the Cities and the SWWD work to reach a compromise. Under this approach, the need for local plans is diminished.

### 3.6. Biannual Solicitation

3.6.1. Consultant (Accounting, Legal and Engineering) services were solicited in 2005 for the calendar years 2006-2007. A copy of the information is included.

### 3.7. Wetland Banking

3.7.1. The SWWD is not the Wetland Conservation Act local government unit. The status of wetland banking within the watershed is not a primary role of the SWWD.

# **Appendix A**

## 2006 South Washington Watershed Audit