

Elm Creek Watershed Management Commission

2011 Annual Activity Report

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This report was prepared
for the Elm Creek Watershed Management Commission
by JASS, Inc.

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Cover photograph: Three Ponds Autumn
Sally Strand, Plymouth

Annual Activity Report. This annual activities report has been prepared by the Elm Creek Watershed Management Commission in accordance with the annual reporting requirements of Minnesota Rules Chapter 8410.0150, Subp. 2 and 3. It summarizes the activities undertaken by the Commission during calendar year 2011.

The Elm Creek Watershed Management Commission was established to protect and manage the natural resources of the Elm Creek watershed. A Board of Commissioners comprised of representatives appointed by the member communities was established as the governing body of the Commission. Its current members are the cities of Champlin, Corcoran, Dayton, Maple Grove, Medina, Plymouth, and Rogers and the Township of Hassan. The table in *Appendix 1* shows the names of the Commissioners appointed to serve in 2011.

Meetings. The Commissioners meet monthly on the second Wednesday at 11:30 a.m. at Maple Grove City Hall, 12800 Arbor Lakes Parkway. These meetings are open to the public and visitors are welcome. Meeting notices, agendas and approved minutes are posted on the Commission's website, www.elmcreekwatershed.org.

Consultants. Also listed in *Appendix 1* are the individuals/firms serving as the Commission's administrative, legal and technical support staff along with the members of the Commission's Technical Advisory Committee (TAC). The Commission has no employees.

The Elm Creek Watershed covers approximately 130.68 square miles and lies wholly within the north central part of Hennepin County, Minnesota. The Crow and Mississippi Rivers demarcate the northern boundary. Although some areas in the north drain to the Crow and Mississippi Rivers, they are within the legal boundaries of the Elm Creek watershed. Table 1 shows the area share of the member communities in the watershed. A map of the watershed can be viewed on the Commission's website.

Table 1:
Area of Members within the Elm Creek Watershed

Local Government Unit	Area (Square Miles)	%age of Watershed
Champlin	3.08	2%
Corcoran	36.09	28%
Dayton	25.06	19%
Hassan	18.17	14%
Maple Grove	26.37	20%
Medina	9.35	7%
Plymouth	4.45	3%
Rogers	8.10	6%

Watershed Management Plan. The Elm Creek Watershed Management Commission adopted its second generation *Comprehensive Watershed Management Plan* on December 8, 2004. The plan is available for viewing at <http://www.elmcreekwatershed.org/mgmtplan.shtml>. In 2008, the Commission adopted a Minor Plan Amendment revising its Water Quality standards.

The second generation Management Plan includes a section that identifies a number of goals and policies that conform to the overall purpose specified in Minnesota Statutes Section 103B.201. These goals and policies were developed to preserve and use natural water storage and retention systems. They address issues related to water quantity, water quality, recreation, fish and wildlife, enhancement of public participation, information and education, and management of the public ditch system, groundwater, shorelands, wetlands, and soil erosion.

Local Watershed Management Plans. Every member community must prepare and adopt its own water management plan. Local plans must comply with MN Statutes, Sec. 103B.235 and MN Rules 8410.0160 and 8410.0170 regarding local plan content and the requirements of the Commission's Watershed Management Plan. The status of member communities' local plans at December 31, 2011, is shown below.

**Table 2:
Status of Local Plans**

Community	Date Submitted	Commission Actions	Status
Champlin	28-Oct-08	10-Jun-09	Approved.
Corcoran	2-Mar-09	10-Jun-09	Approved.
Dayton	7-Feb-07	11-Dec-07	Approved.
Hassan	8-Oct-07	13-Oct-10	Approved.
Maple Grove	30-Sep-08	7-Jan-09	Approved.
Medina	15-Oct-08	12-Aug-09	Approved.
Plymouth	28-Jul-08	01-Dec-08	Approved.
Rogers	17-Apr-06	13-May-09	Approved.

Status of 2011 Objectives. Following is a summary of the work undertaken by the Elm Creek Watershed Management Commission in 2011 to meet the goals, objectives, and projected work plan outlined in its *2010 Annual Report*.

§ *Reviewed local development/redevelopment plans for conformance with the standards outlined in the Commission's second generation Watershed Management Plan.* Projects were reviewed for erosion and sediment control, wetland, floodplain and stormwater management, as well as Department of Natural Resources (DNR) permits. The Commission's technical staff performed 33 project reviews in 2011. A list of each project, its location, and the critical areas reviewed is attached as *Appendix 2*.

§ *Served as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the cities of Champlin and Corcoran and the Township of Hassan.* In 2011 the Commission reviewed 24 plans involving wetlands and received no wetland banking applications. They also participated in five Technical Evaluation Panels (TEPs). Two new potential Wetland Conservation Act violations within the watershed in 2011 were investigated.

§ *Conducted lake and stream monitoring programs to track water quality and quantity conditions.* The Commission began monitoring Elm Creek and its tributaries in 1975 and the lakes in the watershed in 1980. The Commission conducts chemical, physical and biological monitoring of the streams and physical and chemical monitoring of lakes.

§ *Monitored Diamond, Fish, French and Weaver Lakes and the Champlin Mill Pond in cooperation with Three Rivers Park District.* The Park District's 2011 lake sampling results are attached to this report in *Appendix 3a*. Historical trend data is also included.

§ *Funded the monitoring of Dubai, Henry, and Rice Lakes through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP).* Excerpts from the 2011 CAMP report regarding these lakes were not available at this printing. The full report will be available in late summer 2012 and can be requested by contacting Brian Johnson of the Metropolitan Council, brian.johnson@metc.state.mn.us, or (651) 602-8743. *Appendix 3b* shows the Commission's lake monitoring schedule. As the Commission continues to implement its second generation Management Plan, goals for these lakes will be constantly evaluated.

§ *Continued to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS).* Located at the Elm Creek Road crossing in the Elm Creek Park Reserve, the station collects continuous flow data and periodic event and base water quality data. Real time data from the station may be viewed at http://waterdata.usgs.gov/mn/nwis/uv/?site_no=05287890&PARAMeter_cd=00065,00060. Additional stream monitoring data are included in *Appendix 4*.

§ *Promoted river stewardship through the River Watch program.* Under the guidance of the Hennepin County Department of Environmental Services (HCDES), students from West Lutheran High School monitored Site 2 on Elm Creek in a wooded area that is part of a forest reserve in Maple Grove. Kaleidoscope Charter School students monitored Site 4 on Rush Creek near the intersection of 101st Avenue and Lawndale Lane in Maple Grove. Site 17 near the crossing of Elm Creek and Peony Lane in Plymouth was monitored by students from Wayzata High School. *River Watch 2011*, available from HCDES, includes results from all the Hennepin County monitoring sites and can be found on the Hennepin County website at <http://www.co.hennepin.mn.us>, keyword River Watch.

§ *Participated in the Minnesota Wetland Health Evaluation Program (WHEP).* Four wetlands were monitored in the Elm Creek watershed – two in Dayton, one in Corcoran and one in Hassan. More information about the Elm Creek watershed WHEP sites, along with the results from all the Hennepin County monitored sites, is available in *Minnesota Wetland Health Evaluation Program 2011*. The complete report can be requested from mary.karius@co.hennepin.mn.us.

§ *Partnered with the Hennepin County Department of Environmental Services (HCDES) in the Stream Health Evaluation Program (SHEP).* When available, data from the sites in the Elm Creek watershed will be included in the 2011 *Stream Health Evaluation Report*. The report includes results from all the monitored sites and will be available from mary.karius@co.hennepin.mn.us.

§ The Technical Advisory Committee (TAC) met in work session throughout 2011 to update the Commission's Capital Improvement Program and to discuss alternative mechanisms for funding capital projects.

§ *Continued development of the Elm Creek watershed-wide TMDL and Implementation Plan.* Assessment work in the subwatersheds will be completed in approximately two years. Results from the modeling and assessment work will be summarized to describe multi-stressor Wasteload Allocations (WLAs), Load Allocations (LAs) and load reduction goals for various stakeholder groups on a

subwatershed basis. The Implementation plan will address management activities for all the surface waters in the watershed, both impaired and unimpaired. Completion of the TMDL study and Implementation Plan is projected to be December 31, 2014. The Elm Creek project web page is located on the Minnesota Pollution Control Agency (MPCA) website at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/upper-mississippi-river-basin-tmdl-projects/project-elm-creek-watershed-management-organization-watershed-wide-tmdl-protection-implementation-plan.html>

The TMDL has been divided into five phases. Phase I began in the spring of 2009 and continued through the fall of 2010. The goal of Phase I was to characterize the dissolved oxygen (DO) impairment in lower Elm Creek and identify the relative oxygen demand (OD) loading (biological and chemical) from landscape inputs, upstream reaches and internal processes. Phase II began in spring 2010 and carried through fall 2011. Conducted in the Rush Creek subwatershed, the goal of Phase II was to identify the source(s) of the Biological Impairment in Rush Creek, the nutrient impairment in Henry Lake, and the downstream contribution of OD loading to lower Elm Creek. Phase III, extending from spring 2011 to fall 2012, is being conducted in the upper Elm Creek subwatershed and will identify the source(s) of DO impairment in upper and lower Elm Creek and nutrient impairment in Rice and Fish Lakes. A summary of the impairments is included in *Appendix 5*.

The Stakeholder Committee, consisting of representatives from each community in the hydrologic watershed and the agencies that perform water monitoring in the watershed as well as members of the citizenry, met four times in 2011 to review progress on the TMDL project. The final meeting of the year included a survey on civic engagement, which will be the focus of the first meeting in 2012.

A Modeling Subcommittee (MSC) was formed in 2011 to support the Stakeholder Committee by reviewing, evaluating and communicating the model development process throughout the Elm Creek TMDL. The focus of the MSC will be to review, evaluate and communicate the key elements of the model development process. Throughout the TMDL process, a series of watershed and aquatic response models will be developed to describe the relationship between land use and water quality in the Elm Creek watershed. Model outputs will be a primary tool used to identify existing pollutant loads and load reduction goals for watershed communities and stakeholders.

§ *Continued as a member of the West Metro Water Alliance (WMWA).* Developed and presented a series of educational workshops targeting three topics: stormwater volume management to reduce runoff; nutrient management to improve water quality; and integrating TMDLs into city planning and management. A goal of the workshops was to help key decision-makers and their advisors make informed decisions that will protect and improve water quality, sustain property values, and make the most effective use of tax dollars. (*Appendix 6*)

§ Exhibited at the Plymouth Yard and Garden Expo where information to improve water quality was distributed.

§ Approved Commission's membership in Blue Thumb, an educational program of the Rice Creek Watershed District.

§ Co-sponsored a series of Metro Blooms Rain Garden Workshops for residents in Champlin and Plymouth in conjunction with its Education and Public Outreach Program.

§ Awarded a Water Quality Education Grant to the City of Plymouth for a Road Salt Applicators Workshop. (*Appendix 6*)

§ Continued to repopulate and maintain the Commission's website www.elmcreekwatershed.org to provide news to residents of the watershed. The Watershed Management Plan, monthly meeting materials, project reviews, Annual Reports, water monitoring results, watershed-wide TMDL updates and links to other watershed-related information are posted there. In addition, from time to time, news releases are provided to the member cities and their official newspapers for publication.

§ At their May 11, 2011 meeting the Commissioners adopted a 2012 operating budget totaling \$388,358, with total member assessments of \$193,000. (*Appendix 7*)

§ Published an annual report summarizing the Commission's yearly activities and financial reporting. The 2010 Annual Report was approved by the Commission at their April 13, 2011 meeting.

Interest Proposals. The required biennial solicitation for interest proposals for administrative, legal, technical and wetland consulting services was published in the January 3, 2011 edition of the *State Register*. At their February 9, 2011 meeting the Commission approved for 2011-2012 the consultants listed in *Appendix 1*.

Financial Reporting. *Appendix 8* includes the Commission's approved budget for 2011 and a report of actual revenues and expenditures for 2011. The Commission's Joint Powers Agreement provides that each member community contributes toward the annual operating budget based on its share of the total market value of all property within the watershed. The 2011 cost allocations to the members are included in the Operating Budget found in *Appendix 8*.

Of the \$364,650 operating budget approved by the Commission for 2011, revenue of \$35,000 was projected as proceeds from application fees, \$4,000 from partnership revenue, \$77,000 from grant revenue, and \$1,500 from interest income, resulting in assessments to members totaling \$188,000. \$57,150 was projected as coming from reserves.

The Elm Creek Watershed Management Commission maintains a checking account at US Bank for current expenses and rolls uncommitted monies to its account in the 4M Fund, the Minnesota Municipal Money Market Fund.

The 2011 Audit Report prepared by Johnson & Company, Ltd., Certified Public Accountants is found in *Appendix 9*. Amounts paid by the Commission per the 2011 Audit are as follows:

General engineering	\$ 56,762
General administration	101,560
Education	15,246
Programs	38,317
Projects	<u>67,874</u>
Total	\$279,759

General engineering work includes review of local plans, review of development/redevelopment projects, attendance at meetings and other technical services. General administration includes support to technical staff, attendance at meetings, insurance premiums, annual audit, legal counsel, tracking grant opportunities, watershed planning, and other non-engineering services.

Wetland Banking. The Elm Creek Commission does not have a wetland banking program.

2012 Work Plan. The Commission has identified the following activities in 2012.

§ *Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's second generation Watershed Management Plan.*

§ *Serve as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the cities of Champlin and Corcoran.*

§ *Conduct lake and stream monitoring programs to track water quality and quantity conditions.*

§ *Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS).*

§ *Promote river stewardship through the River Watch program. Encourage participation by local school students and their teachers.*

§ *Participate in the Minnesota Wetland Health Evaluation Program (WHEP).*

§ *Partner with the Hennepin County Department of Environmental Services (HCDES) in the Stream Health Evaluation Program (SHEP).*

§ *Complete the draft of an amendment incorporating revisions to the Commission's second generation Watershed Management Plan. Undertake the required agency review and public hearing process. Adopt the amendment.*

§ *Continue development of a watershed-wide TMDL and Implementation Plan. Phase IV will be conducted in the Diamond Creek subwatershed and will identify the source(s) of Nutrient Impairment in Diamond and French Lakes and OD loading to lower Elm Creek. Results from all modeling and assessment work will ultimately be summarized into a multi-stressor, watershed-wide TMDL and Implementation Plan (Phase V).*

§ *Continue as a member of the West Metro Water Alliance (WMWA). Continue to support programs and projects as identified.*

§ *Participate as an exhibitor at Plymouth's Yard and Garden Expo.*

§ *Continue as a member of Blue Thumb and WaterShed Partners.*

§ *Co-sponsor Rain Garden Workshops in conjunction with the Commission's Education and Public Outreach Program.*

§ *Continue to populate and maintain the Commission's website www.elmcreekwatershed.org to provide news to residents of the watershed.*

§ *Begin the third generation Watershed Management Plan development process.*

§ *Adopt a 2013 operating budget.*

§ *Publish an annual activities report summarizing the Commission's yearly activities and financial reporting.*

Appendices

2011 Commissioners

Commissioners and Alternate Commissioners are appointed by the communities they represent and serve at will. Officers are elected annually at the first regular meeting during the month of March and assume office on April 1.

Representing	Position	Name	Address	Telephone/email
Champlin	Secretary	Bill Walraven	216 Lowell Road Champlin, MN 55316	763.421.3206 traderstec@aol.com
	Alternate	Jon Knutson	7800 113 1/2 Avenue N Champlin, MN 5316	763.569.3306 jon.knutson@comcast.net
Corcoran	Commissioner	open		
	Alternate	Ken Kluck	8200 County Road 116 Hamel, MN 55340	763.420.2279
Dayton	Chair	Doug Baines	13000 Overlook Road Dayton, MN 55327	763.323.9506 doug.baines@yahoo.com
	Alternate	Tim McNeil	12260 S Diamond Lake Road Dayton, MN 55327	612.730.9312 tim@timmcneil.com
Hassan	Vice Chair	Robert Ivey	14350 Shadow Wood Dr. Rogers, MN 55374	763.428.7375 rwivey@charter.net
Maple Grove	Commissioner	Joe Trainor	16075 Territorial Road Maple Grove, MN 55369	763.420.4645 joe.trainor@meritain.com
	Alternate	Tiffany Peterson	2520 W Medicine Lake Drive Plymouth, MN 55441	763.425.7697 tppink@yahoo.com
Medina	Commissioner	Liz Weir	1262 Hunter Drive Wayzata, MN 55391	763.473.3226 lizvweir@gmail.com
Plymouth	Treasurer	Fred Moore	1820 Ives Lane Plymouth, MN 55441	612.269.2088 fred@emailmoore.net
Rogers	Commissioner	Kevin Jullie	13315 Oakwood Drive Rogers, MN 55374	763.428.9160 kjullie@srfconsulting.com

2011 Technical Advisory Committee

Members of the Technical Advisory Committee (TAC) are appointed by the member communities they represent. The purpose of the TAC is to review guidelines, standards and policies used to evaluate plats, plans and proposals of the members and make recommendations to the full Commission. The TAC meets at the direction of the Commission.

Representing	Name	Address	Telephone/email
Champlin	Todd Tuominen	City of Champlin 11955 Champlin Drive Champlin, MN 55316	763.923.7120 ttuominen@ci.champlin.mn.us
Corcoran	Kent Torve	Wenck & Associates 90 Mallard Lane Loretto, MN 55357	763.479.4209 ktorve@wenck.com
Dayton	Brad Schleeter	Bonestroo Associates 2335 W 36th St. Paul, MN 55113	651.604.4801 brad.schleeter@bonestroo.com
Hassan	Craig Jochum	Hakanson-Anderson Associates 3601 Thurston Ave Anoka, MN 55303	763.427.5860 CraigJ@hakanson-anderson.com
Maple Grove	Rick Lestina	City of Maple Grove 12800 Arbor Lakes Parkway Maple Grove, MN 55313	763.494.6354 rlestina@ci.maple-grove.mn.us
Medina	Craig Jochum	Hakanson Anderson 3601 Thurston Ave Anoka, MN 55303	763.427.5860 CraigJ@hakanson-anderson.com
Plymouth	Kevin Springob	City of Plymouth 3400 Plymouth Boulevard Plymouth, MN 55447	763.509.5527 kspringob@ci.plymouth.mn.us
Rogers	Todd Hubmer	WSB Associates 701 Xenia Avenue S, Suite 300 Minneapolis, MN 55416	763.287.7182 thubmer@wsbeng.com
HCES	Ali Durgunoğlu James Kujawa	417 N Fifth Street Minneapolis, MN 55401	612.596.1171 Ali.Durgunoglu@co.hennepin.mn.us 612.348.7338 James.Kujawa@co.hennepin.mn.us
Three Rivers Park District	Rich Brasch	12615 County Road 9 Plymouth, MN 55441	763.694.2061 rbrasch@threeriversparkdistrict.org

2011 Staff and Consultants

The required biennial solicitation for interest proposals for administrative, legal, technical and wetland consulting services was published in the January 3, 2011 edition of the *State Register*. At their February 9, 2011 meeting the Commission voted to retain the following consultants for 2011-2012. The Commission has no employees.

	Name	Address	Telephone/email
Technical Services	Ali Durgunoğlu	Hennepin County Env Servs 417 N Fifth St	612.596.1171 ali.durgunoglu@co.hennepin.mn.us
	James Kujawa	Minneapolis, MN 55401	612.348.7338 james.kujawa@co.hennepin.mn.us
	Jeff Weiss	Barr Engineering 4700 West 77th Street Minneapolis, MN 55435	952.832.2706 jweiss@barr.com
Legal Services	Joel Jamnik	Campbell Knutson PA 1380 Corporate Center Curve Eagan, MN 55121	651.645.5000 jjamnik@ck-law.com
Administrative Services	Judie Anderson	JASS 3235 Fernbrook Lane	763.553.1144 judie@jass.biz
	Amy LeMieux	Plymouth, MN 55447	amy@jass.biz
Wetland Consultant	Jeff Weiss	Barr Engineering 4700 West 77th Street Minneapolis, MN 55435	952.832.2706 jweiss@barr.com
Wetland Consultant	Deric Deuschle	SEH, Inc 3535 Vadnais Center Drive St. Paul, MN 55110	651.490.2114 ddeuschle@sehinc.com
Wetland Consultant	Maggie Voth	URS 700 Third Street S. Suite 600 Minneapolis, MN 55415	612.373.6872 maggie.voth@urs.com

2011 Project Reviews

Project No.	Project Name	City	Reviewed for				
			Erosion Control	Stormwater	Floodplain	Wetlands	Gen Permit
2011-001	CSAH13 Brockton Lane at S.Diamond Lake Rd - Ph II	Rogers	X	X		X	
2011-002	Wood Crest 2nd Addition	Plymouth	Received Notice of WCA Decision				
2011-003	Hampton Hills 3rd Addition	Plymouth	Received Notice of WCA Decision				
2011-004	Eastman Nature Center Redevelopmet	Dayton	X	X	X	X	
2011-005	Lord of Life Lutheran Church	Maple Grove	X	X			
2011-006	Whistling Pines Trail	Maple Grove			X	X	
2011-007	Uptown Rogers @101 Hardees	Hassan	X				
2011-008	Liberty Trust Industrial Development	Rogers	X	X		X	
2011-009W	Mitsch Restoration	Corcoran				X	
2011-010	129th Avenue Reconstruction	Rogers	X	X	X	X	
2011-011	Cedarcrest Academy Mass Grading	Maple Grove	X				
2011-012W	Brian and Christina Patnode	Corcoran			X	X	
2011-013	North Hunter Drive Improvements	Medina	X	X	X	X	
2011-014	Fields of Medina	Medina	X	X	X	X	
2011-015	Rush Creek Golf Club	Plymouth	X				
2011-016	ICA Corp	Dayton	X	X			
2011-017	Cedar Pond Estates	Maple Grove	X	X	X		
2011-018	Spring Meadows 2nd Addition	Plymouth	No review required				
2011-019	John Deere Lane extension	Rogers	X				
2011-020	Black Box	Maple Grove	X	X			
2011-021W	Dunkirk Lane Properties	Plymouth	Received Notice of WCA Decision				
2011-022W	Brett Bergeron	Hassan				X	
2011-023W	Balagna Delineation	Corcoran				X	
2011-024	ALDI	Maple Grove	X	X	X		
2011-025	Custom Filtration	Corcoran	X	X	X	X	
2011-026W	Elm Creek Dam Reconstruction	Champlin			X	X	
2011-027W	Corcoran Utility Project	Corcoran	X		X	X	
2011-028W	Highland Subdivision	Corcoran				X	
2011-029	Nature's Crossing	Dayton	X	X			
2011-030	Goodwill parking lot expansion	Maple Grove	X	X			
2011-031	North Ground Storage Reservoir/Pumping Facility	Rogers		X	X		
2011-032	John Hagel	Rogers				X	
2011-033	Carlson/Mayers	Corcoran				X	
2011-034	Hennepin County Ditch 16	Maple Grove	X		X	X	

W denotes wetland project

Elm Creek Watershed Management Commission

Lake Water Quality Summaries

2011

Introduction

Elm Creek Watershed Commission contracted Three Rivers Park District to monitor the trophic conditions for several lakes in 2011. Three Rivers Park District monitored the water quality in Fish Lake, Weaver Lake, Diamond Lake, French Lake, and Mill Pond. These lakes were sampled biweekly from late April through late October. The seasonal and annual changes in water quality parameters were monitored for total phosphorus, soluble reactive phosphorus, total nitrogen, chlorophyll-a, and Secchi depth transparency. To assess changes in water quality trophic conditions, annual growing season averages were calculated for total phosphorus, chlorophyll-a, and Secchi depth transparency using data collected from May through September. The annual average for each trophic assessment parameter was compared to the MPCA state nutrient standards used for determination of recreational use impairment (Table 1). The MPCA's assessment for waterbody impairments are based on a conservative average that is estimated from data collected from June through September. This report is an assessment of overall trophic condition during the time period of primary recreational use (growing season from May through September) and is compared to MPCA state standards as a reference point. Trophic state indices (TSI) were also calculated using growing season means for total phosphorus, chlorophyll-a, and Secchi depth. The trophic state index (TSI values ranging from 0-100) describes the productivity of a lake from oligotrophic to hypereutrophic conditions. An average TSI value is calculated from the estimated TSI values derived for total phosphorus, chlorophyll-a, and Secchi depth.

Table 1: Minnesota Pollution Control Agency lake eutrophication standards for aquatic recreational use assessments.

North Central Hardwood Forest Ecoregion			
Classification	TP µg/L	Chl-a µg/L	Secchi m
Aquatic Recreation Use (Class 2b) Deep Lakes	< 40	< 14	> 1.4
Aquatic Recreation Use (Class 2b) Shallow Lakes	< 60	< 20	> 1.0

Note: **Deep Lakes** are enclosed basins filled or partially filled with fresh water that have a maximum depth > 15 feet.

Shallow Lakes are enclosed basins filled or partially filled with fresh water that have a maximum depth < 15 feet or a littoral zone (area shallow enough to support emergent and submerged vegetation) that is ≥ 80% of the lake surface area.

Fish Lake

Fish Lake has consistently had an average phosphorus concentration above the MPCA “deep lake” impaired water eutrophication standard of 40 µg/L. The average phosphorus concentration for Fish Lake in 2011 was 50.2 µg/L (Figure 1). The highest in-lake phosphorus concentrations coincided with the spring and fall turnover cycles. The process of lake turnover re-suspended nutrients throughout the water column and contributed to high total phosphorus concentrations at the end of April (113.2 µg/L) and at the end of October (115.7 µg/L) (Figure 2). The total phosphorus concentrations have fluctuated between 30.1 and 78.0 µg/L throughout the growing season (May-September) (Figure 2). Overall, there have been variations in total phosphorus concentration since 2001. Currently, the average phosphorus concentration has gradually decreased since 2009.

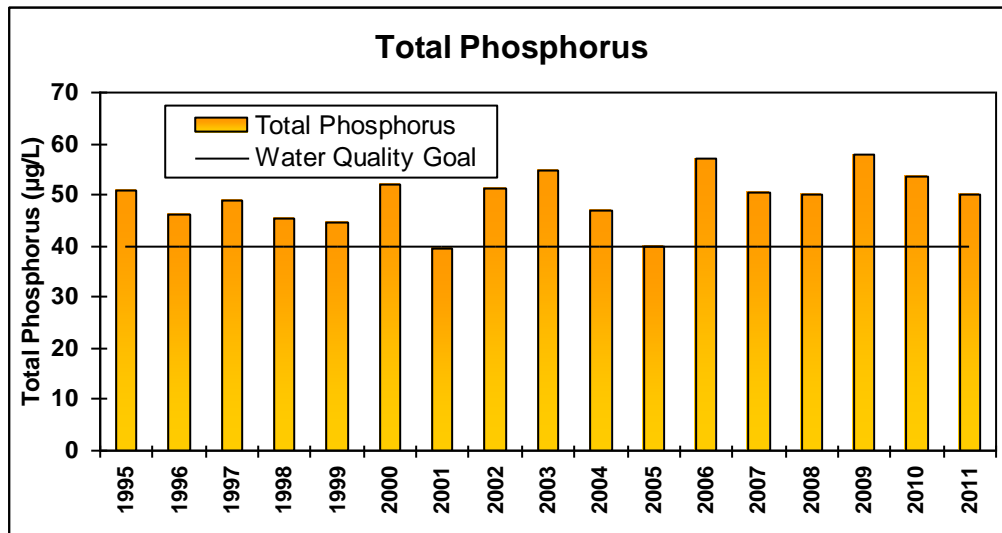


Figure 1. Fish Lake average annual total phosphorus concentrations.

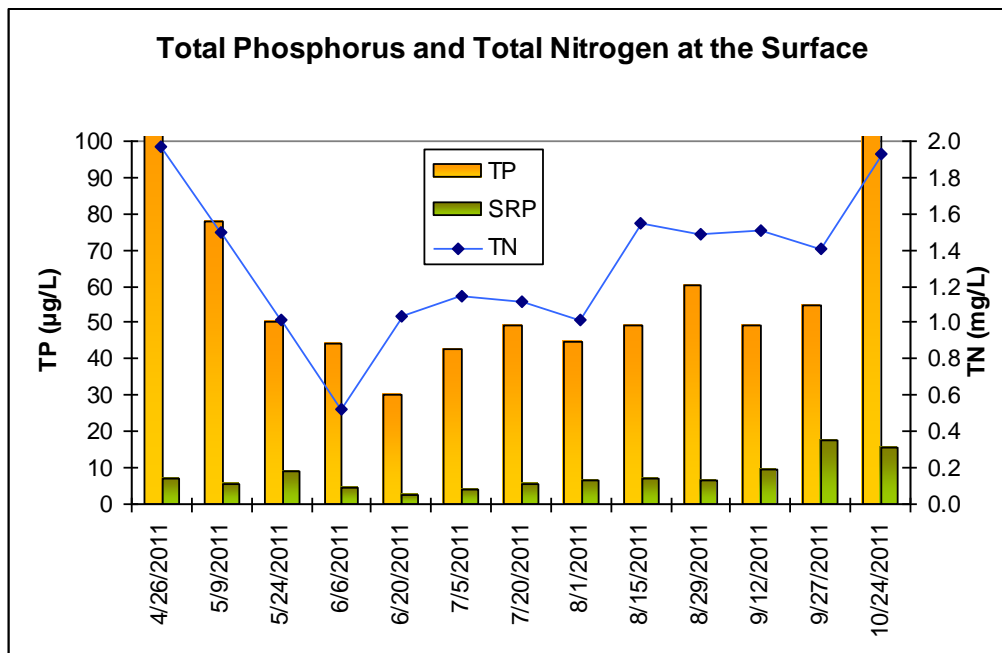


Figure 2. Fish Lake seasonal changes in total phosphorus, soluble reactive phosphorus, and total nitrogen in 2011.

The excessive amount of phosphorus has been conducive for the development of severe algal blooms during the summer. The severity of these algal blooms has often been in response to the changes in phosphorus concentration. Although phosphorus concentrations may influence algal biomass, the impact phosphorus had on the severity of the algal blooms after 2007 does not appear to be as significant. Since 2007, the average chlorophyll-a concentrations have significantly decreased and have been slightly above the MPCA “deep lake” standard of 14 µg/L. In 2011, the average chlorophyll-a concentration was 18.5 µg/L with values ranging from 2.9 to 44.5 µg/L (Figure 3). The decrease in chlorophyll-a concentration has contributed to improved water clarity conditions with secchi depth transparency meeting the MPCA “deep lake” standards. The average Secchi depth transparency in 2011 was 1.88 m (Figure 4) with values ranging from 0.6 m to 4.7 m (Figure 5). The improvements in chlorophyll-a concentrations and Secchi depth transparency has contributed to a trophic state index (58.7) that is at the lower range defining eutrophic conditions. The factors contributing to the improvements in chlorophyll-a concentration and water clarity are currently unknown.

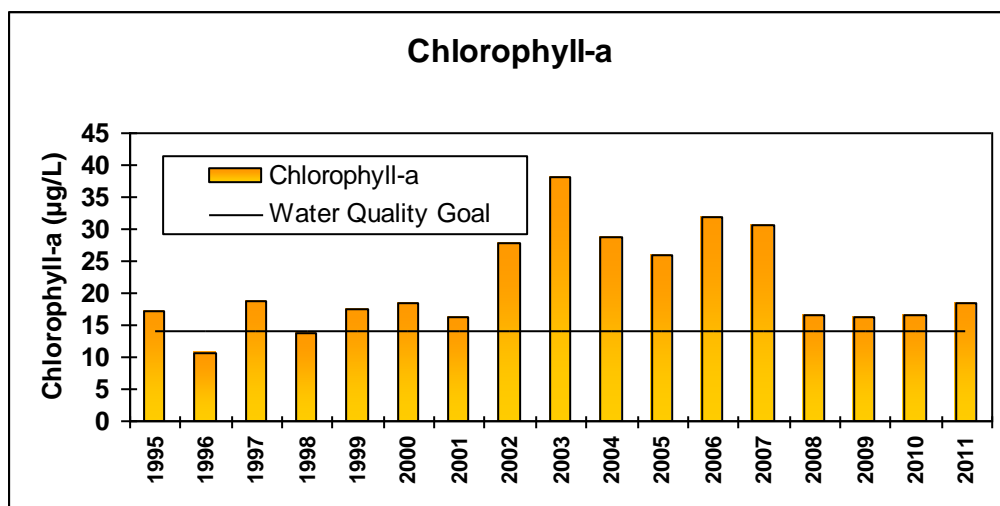


Figure 3. Fish Lake average annual chlorophyll-a concentrations.

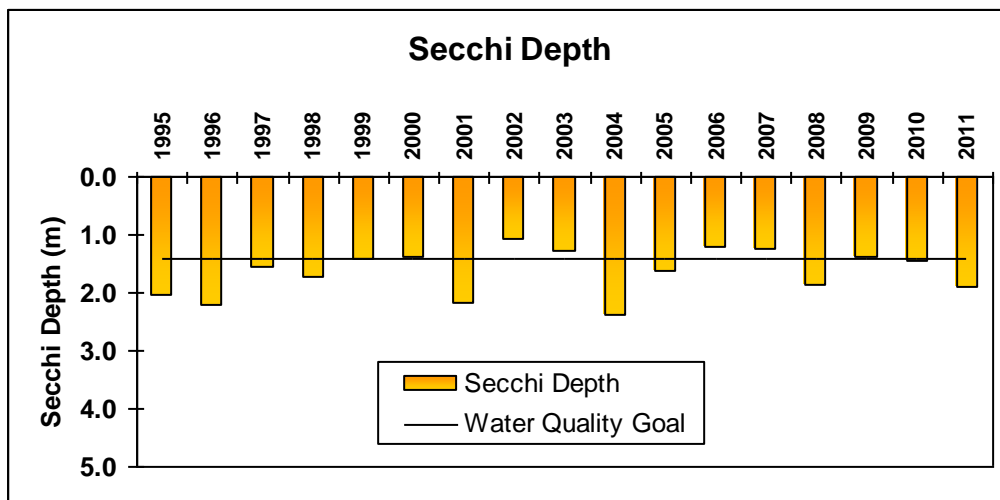


Figure 4. Fish Lake average annual Secchi depth concentrations.

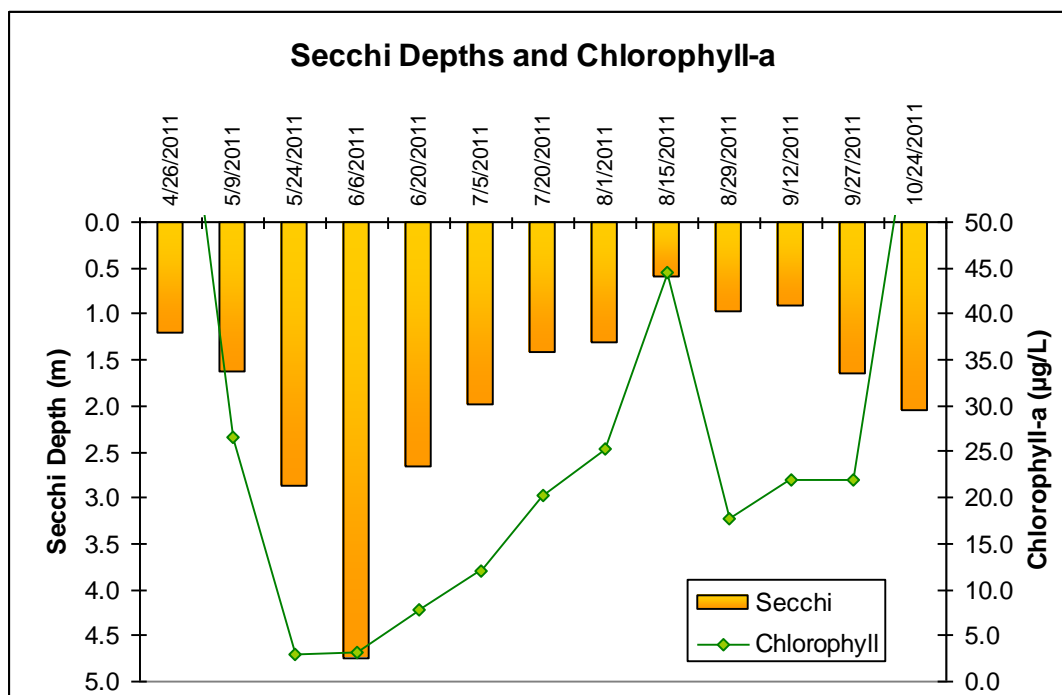


Figure 5. Fish Lake seasonal changes in Secchi depth and chlorophyll-a concentrations in 2011.

Weaver Lake

The Weaver Lake water quality conditions have significantly improved. Prior to 2005, the lake frequently had phosphorus concentrations that were above the MPCA “deep lake” impaired water criteria of 40 µg/L. Since 2005, Weaver Lake has achieved the MPCA “deep lake” standards for total phosphorus. The average phosphorus concentrations from 2005 through 2011 have consistently averaged between 20 to 35 µg/L (Figure 1). The average annual phosphorus concentration in 2011 was 30.4 µg/L (Figure 1) with values ranging from 24.3 to 34.2 µg/L during the 2011 growing season (Figure 2). These concentrations are considerably lower in comparison to other lakes within the ecoregion.

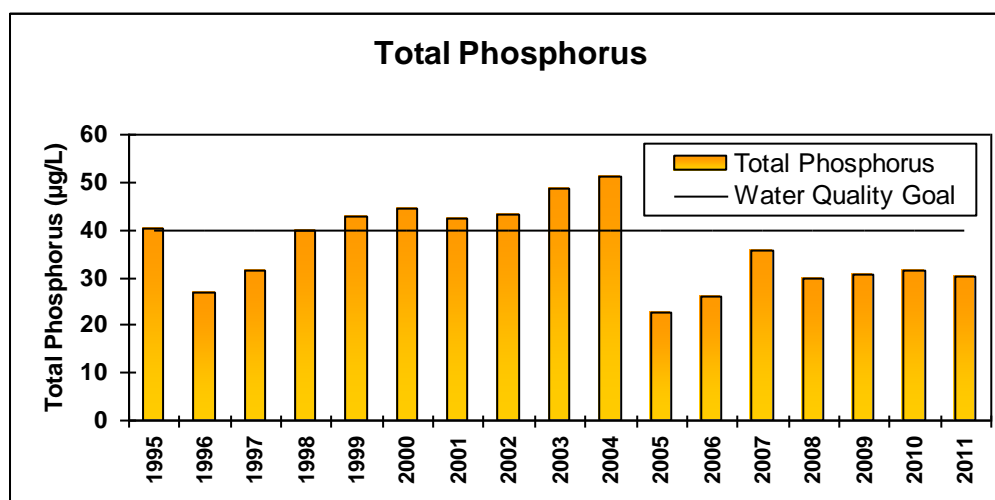


Figure 1. Weaver Lake average annual total phosphorus concentrations.

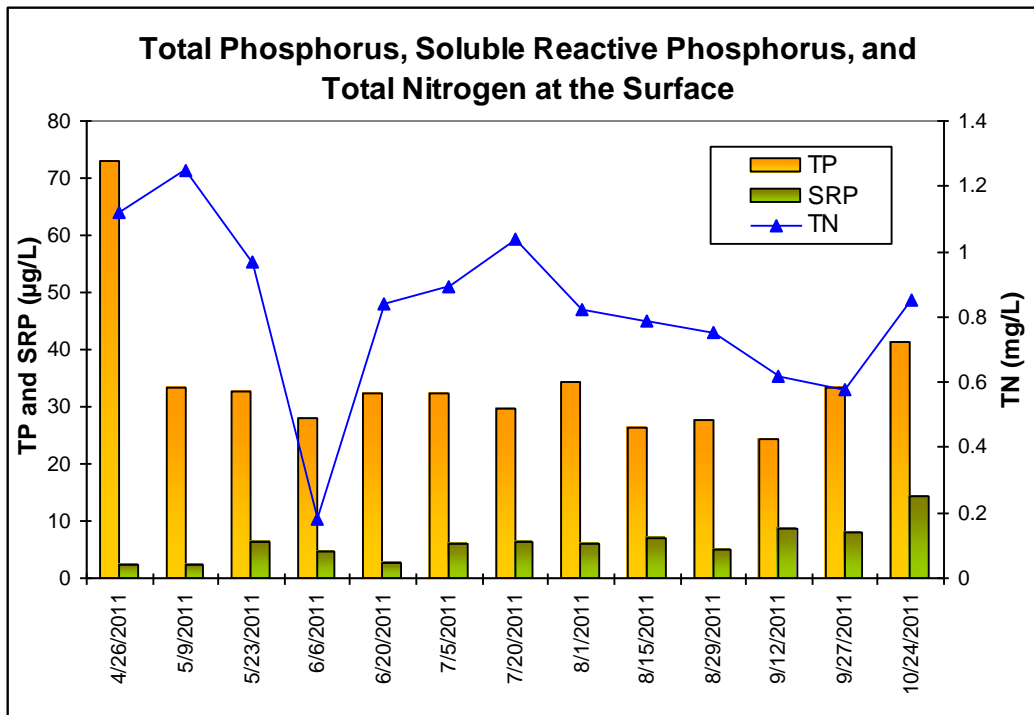


Figure 2. Weaver Lake seasonal changes in total phosphorus, soluble reactive phosphorus, and total nitrogen in 2011.

Weaver Lake has achieved MPCA “deep lake” water quality standards for chlorophyll-a concentration and Secchi depth transparency since 2005. The low phosphorus concentrations have significantly improved water clarity conditions by reducing the frequency of algal blooms. In 2011, the low chlorophyll-a concentrations have corresponded with improvements in water clarity (Secchi depths) (Figures 3 & 4). The average chlorophyll-a concentration was 7.49 µg/L in 2011 (Figure 3). Weaver Lake had an average Secchi depth transparency of 2.41 m (Figure 4) with values ranging from 1.49 to 4.29 meters during the growing season (Figure 5). The low chlorophyll-a concentrations and excellent water clarity conditions suggests that Weaver Lake does not appear to have severe algal blooms that inhibit recreational use. The trophic state index of 52.2 indicates that Weaver Lake water quality conditions are at the lower range of defining eutrophic conditions.

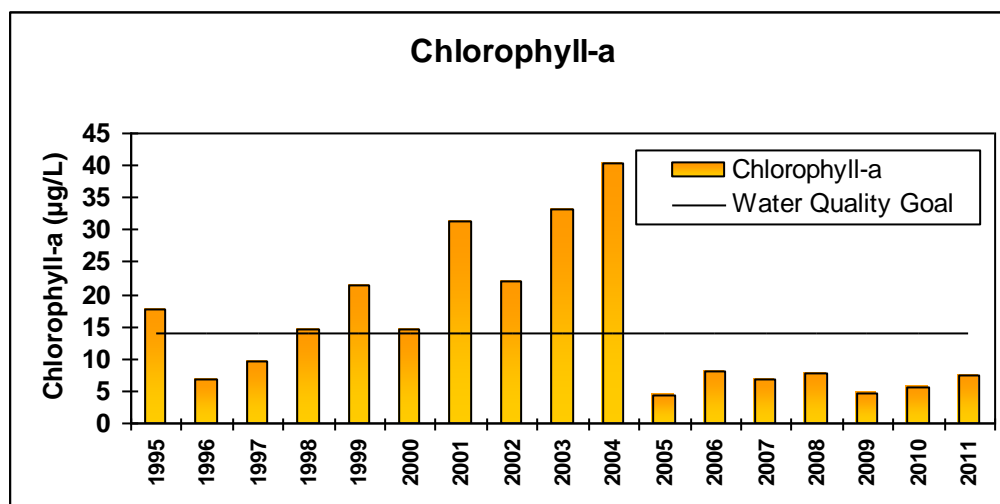


Figure 3. Weaver Lake annual changes in average chlorophyll-a concentrations.

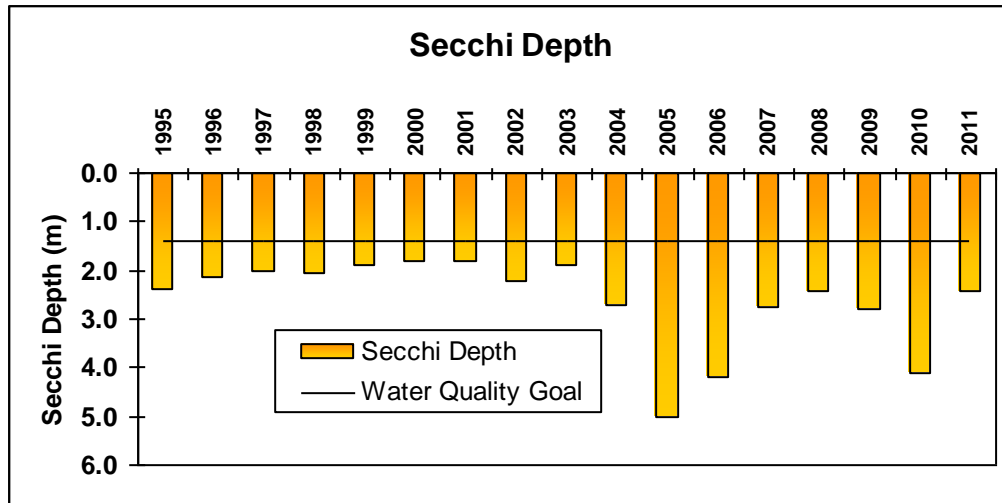


Figure 4. Weaver Lake changes in average annual Secchi depth from 1995 through 2011.

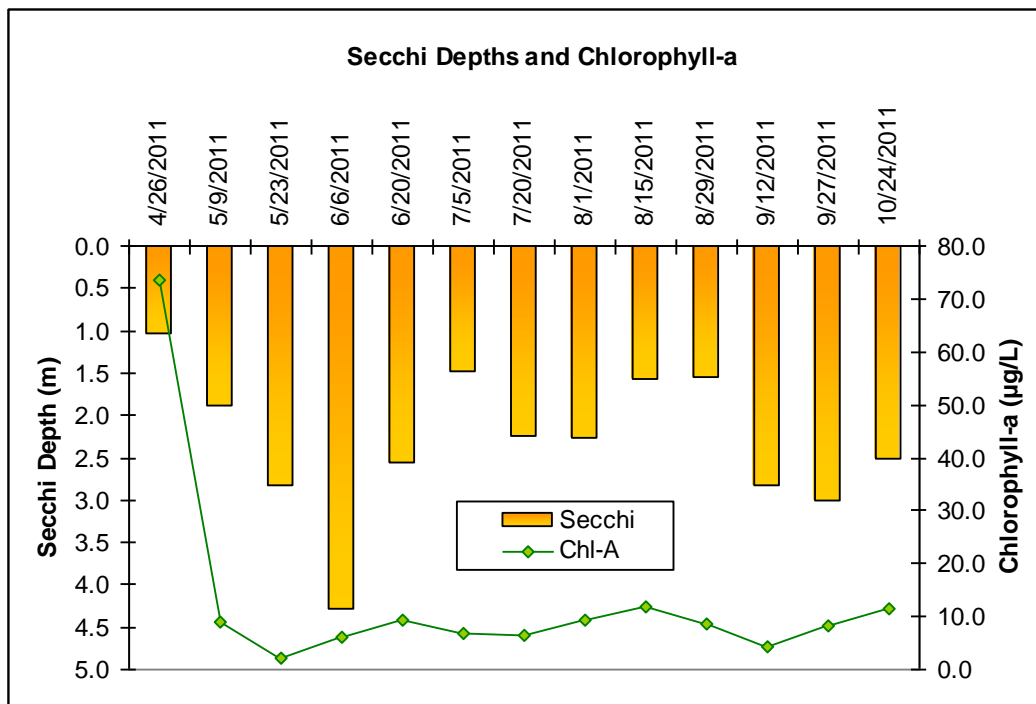


Figure 5. Weaver Lake average annual chlorophyll-a concentrations and Secchi depth transparency.

The improvements in water quality conditions for Weaver Lake correspond with a lake-wide effort to control curlyleaf pondweed. Historically, Weaver Lake has had nuisance growth conditions of curlyleaf pondweed that inhibited recreational use and degraded water quality. Weaver Lake typically developed algal blooms after the senescence of curlyleaf pondweed. In an attempt to control curly leaf pondweed, herbicide applications occurred throughout the littoral area of the lake with fluridone from 2005 through 2007 and with endothall from 2008 and 2009. The herbicide treatments were successful in controlling curlyleaf pondweed in Weaver Lake. There were also noticeable improvements in water quality that corresponded with the first year of treatment in 2005. Management efforts to control curlyleaf pondweed reduced the amount of internal loading associated with senescence.

Diamond Lake

Diamond Lake continues to have impaired water quality conditions for excessive nutrients. Diamond Lake is a “shallow lake” that has a total phosphorus standard of 60 µg/L. The lake has been considered hyper-eutrophic with extremely high phosphorus concentrations ranging from 150 µg/L to 250 µg/L (Figure 1). Despite the excessive phosphorus concentrations, the average total phosphorus concentrations have significantly declined since 2008. The average phosphorus concentration in 2011 was 96.0 µg/L with values ranging between 36.8 µg/L and 191.4 µg/L (Figure 2). These current phosphorus concentrations are similar to other shallow lakes within the ecoregion.

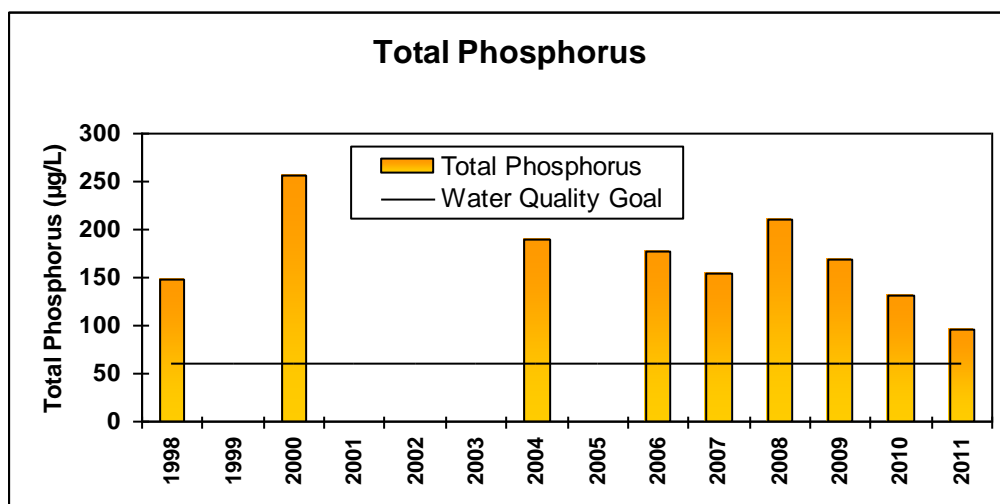


Figure 1. Diamond Lake average annual total phosphorus concentrations from 1998 through 2011.

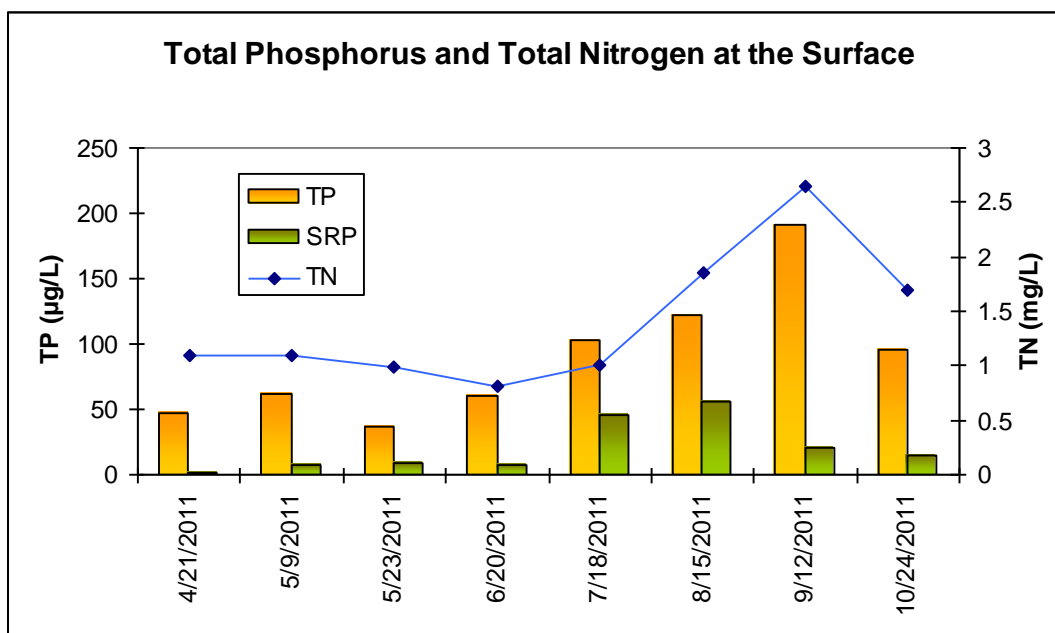


Figure 2. Diamond Lake seasonal changes in total phosphorus, soluble reactive phosphorus, and total nitrogen at the surface in 2011.

The excessive phosphorus concentrations have been conducive for the development of severe algal blooms. Diamond Lake typically has had annual average chlorophyll-a concentrations ranging from 50 to 90 $\mu\text{g/L}$ (Figure 3). Despite the historically high chlorophyll-a concentration, the data suggests that the severity of algal blooms have significantly decreased since 2008. In 2011, the average chlorophyll-a concentration was 16.8 $\mu\text{g/L}$ (Figure 3), which currently meets the MPCA “shallow lake” standard of 20 $\mu\text{g/L}$. There have been water clarity improvements in response to the decreasing chlorophyll-a concentration. Since 2009, Diamond Lake has met the MPCA “shallow lake” Secchi depth standards (Figure 4). Currently, the average secchi depth for Diamond Lake was 1.7 m in 2011 (Figure 4). There was a slight algal bloom during late summer and early fall that resulted in an increase in chlorophyll-a concentration and a decrease in water clarity (Figure 5).

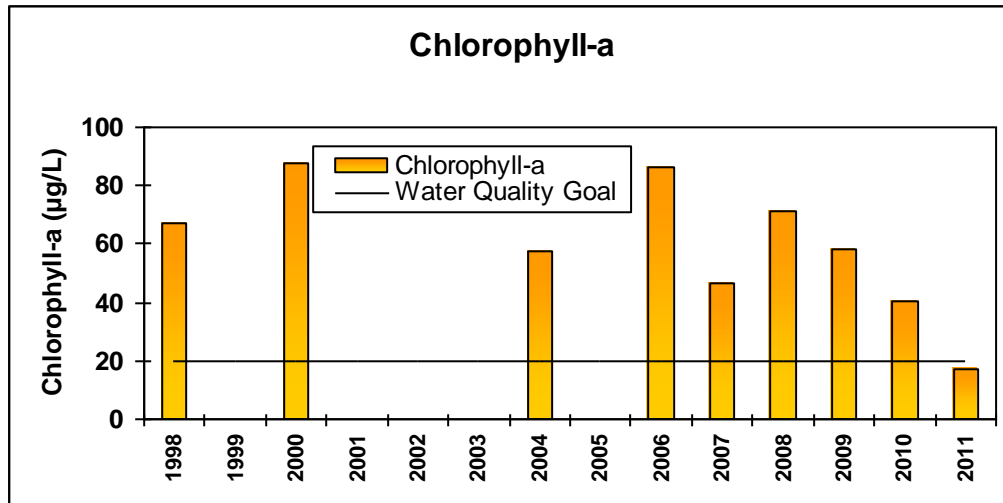


Figure 3. Diamond Lake annual changes in chlorophyll-a concentration from 1998-2011.

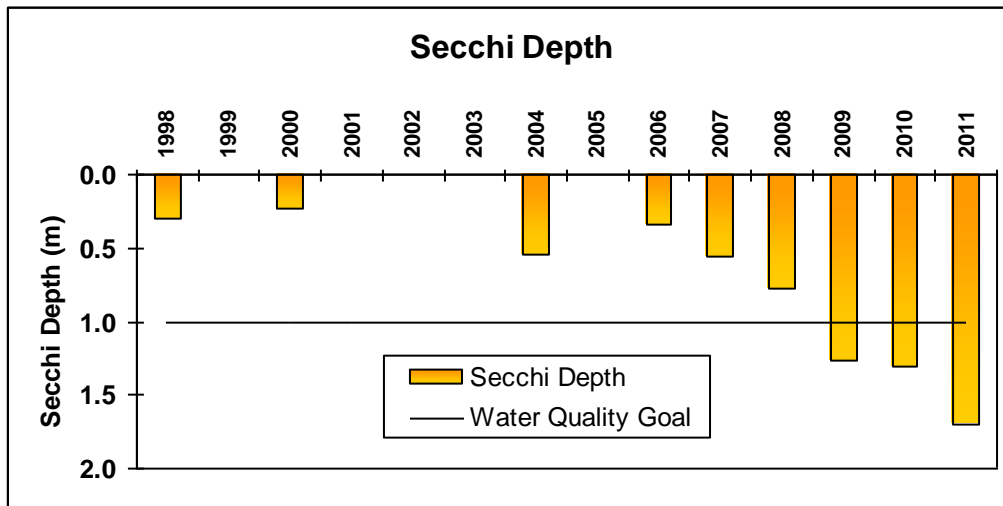


Figure 4. Diamond Lake annual changes in Secchi depth from 1998-2011.

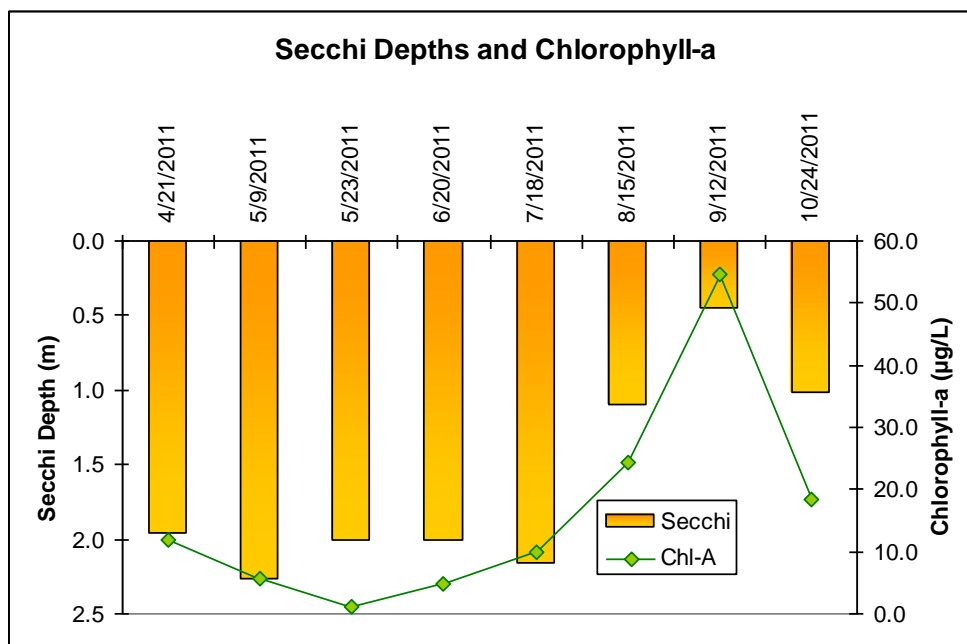


Figure 5. Diamond Lake seasonal changes in chlorophyll-a concentration and Secchi depth in 2011.

There are several factors that contributed to the improvements in water quality conditions. Diamond Lake appears to have shifted from an algal-dominated to a plant-dominated lake. There are several water quality benefits when a shallow lake shifts to the plant-dominated condition. The aquatic plants reduce the potential for nutrient re-suspension by stabilizing in-lake sediments. Consequently, lakes shifting to the plant-dominated condition often have improved water clarity with reduced phosphorus concentrations. An aquatic plant point- intercept survey conducted in the early summer of 2011 indicated an abundant plant community that consisted of coontail (43.8%), small pondweed (52.4%), and elodea (41%). Unfortunately, Diamond Lake also has nuisance growth of curlyleaf pondweed in the spring with a percent frequency of 92.4%. Curlyleaf pondweed senescence has the potential to offset any improvements in water quality. Currently, the native plant community appears to be able to compete with curlyleaf pondweed maintaining the plant-dominated condition. The specific mechanisms causing the shift from the algal-dominated condition to the plant-dominated condition are currently unknown. However, a shift to the plant-dominated condition for similar shallow lakes in the ecoregion has frequently occurred following winter fish kills. Rough fish such as common carp often inhibit the development of an aquatic plant community. There has been winter and summer fish kills observed in Diamond Lake the past several years. This may have provided an opportunity for the native plant community to become established and subsequently improving water quality conditions.

French Lake

French Lake is a shallow lake that has impaired water quality conditions. The lake is extremely eutrophic with phosphorus concentrations above the MPCA “shallow lake” standard of 60 µg/L (Figure 1). The average phosphorus concentration in 2011 was 154.8 µg/L (Figure 1) with values ranging between 62.2 µg/L and 317.5 µg/L (Figure 2). These phosphorus concentrations are conducive for the development of severe algal blooms.

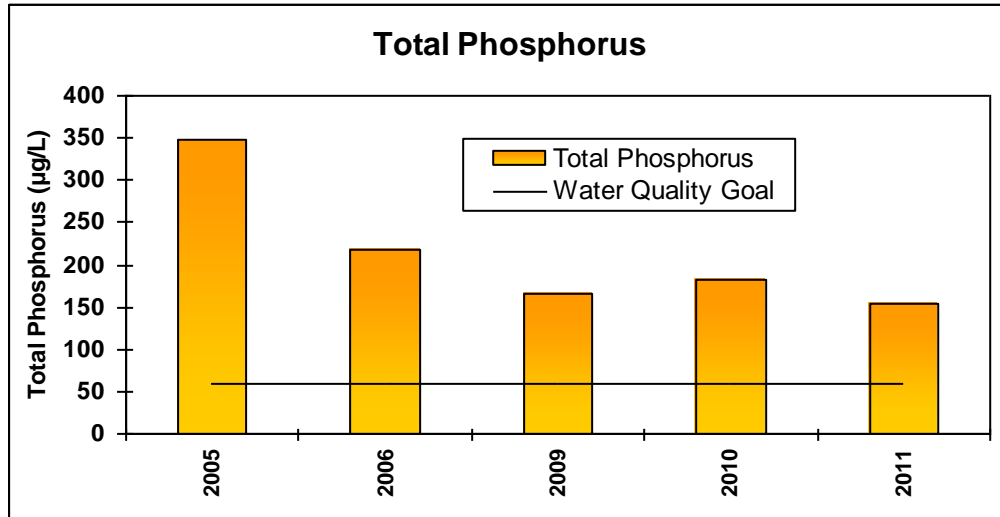


Figure 1. French Lake average annual total phosphorus concentration between 2005- 2011.

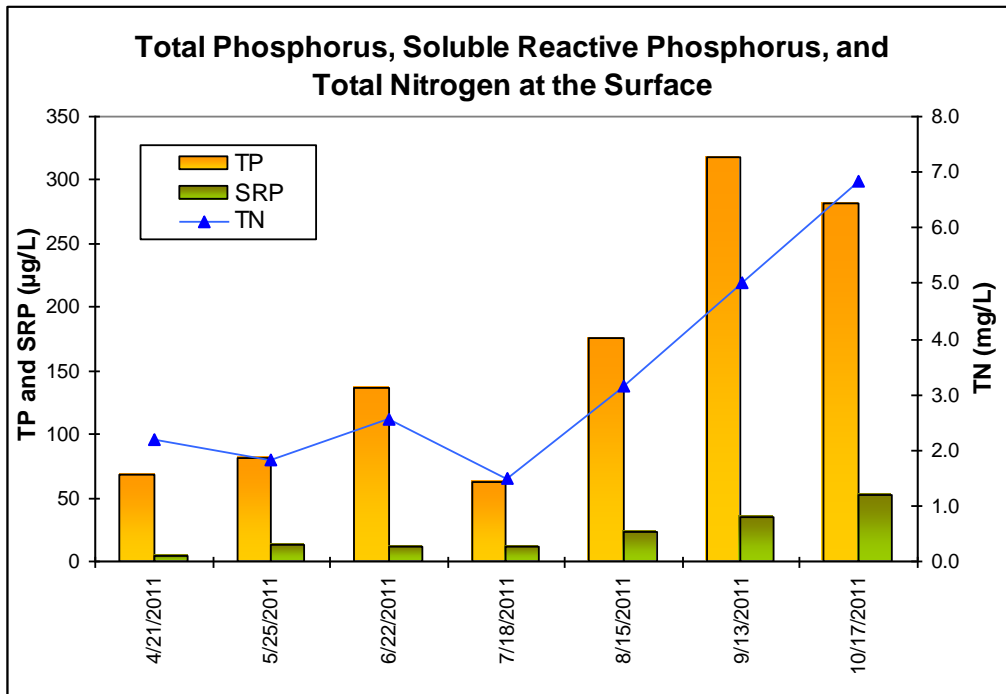


Figure 2. French Lake seasonal changes in total phosphorus, soluble reactive phosphorus, and total nitrogen in 2011.

French Lake has severe algal blooms that reduced water clarity conditions during the summer. In 2011, the average chlorophyll-a concentration was 75.7 $\mu\text{g/L}$ with values ranging from 15 $\mu\text{g/L}$ to 175 $\mu\text{g/L}$ (Figure 3 & 5). These concentrations are considerably lower than chlorophyll-a concentrations observed in 2010 (average of 138.8 $\mu\text{g/L}$). Despite the lower chlorophyll-a concentration, there were no improvements in water clarity. The average Secchi depth transparency in 2011 was 0.6 m (Figure 4) with values ranging from 0.24 to 1.09 (Figure 5). The chlorophyll-a concentration and Secchi depth did not meet the MPCA “shallow lake” water quality standards (Figures 3 & 4). The trophic state index for French Lake was 74.2, which indicates the lake is in a hyper-eutrophic condition. Lakes classified as hyper-eutrophic have severe algal blooms that persist throughout the summer.

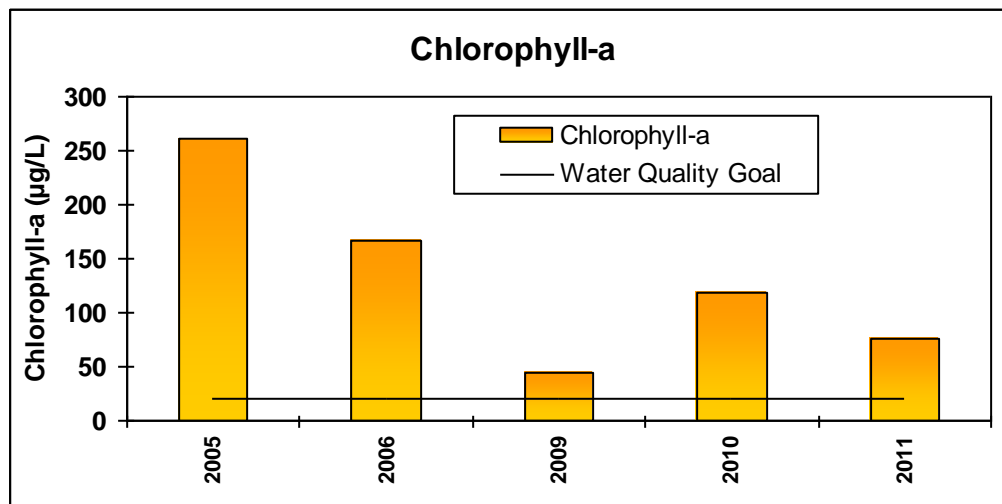


Figure 3. French Lake annual chlorophyll-a concentration from 2005 through 2011.

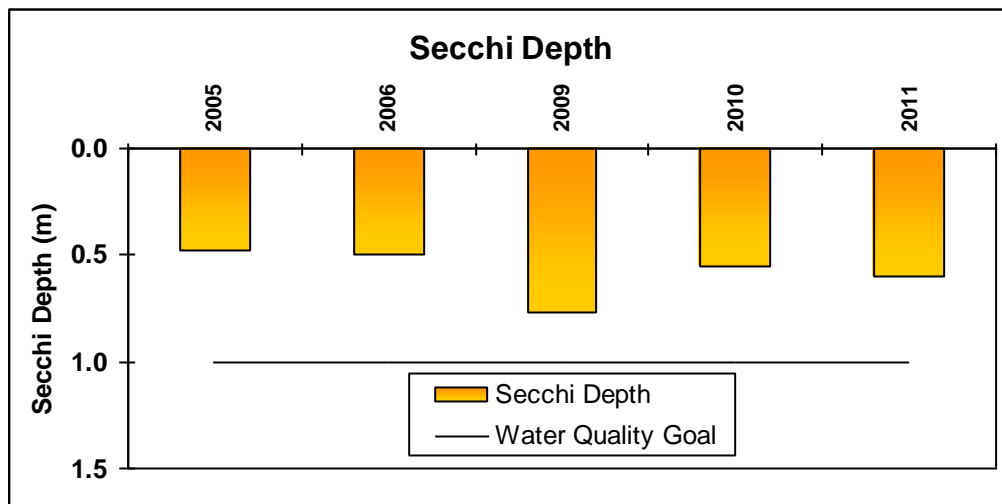


Figure 4. French Lake annual Secchi depths 2005 through 2011.

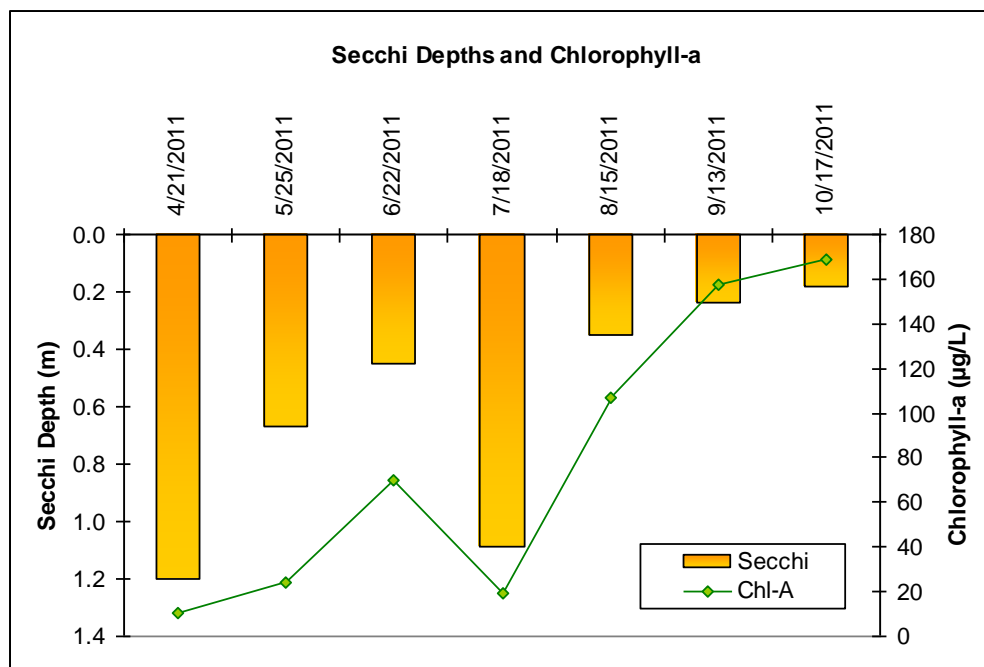


Figure 5. French Lake seasonal changes in chlorophyll-a concentration and Secchi depth from 2005 to 2011.

Mill Pond

Mill Pond is essentially part of the Elm Creek flowage prior to draining to the Mississippi River. Mill Pond is a shallow lake that has hypereutrophic phosphorus concentrations. The average annual phosphorus concentration for Mill Pond was 241.4 µg/L in 2011 with values ranging from 107.4 µg/L to 460.5 µg/L (Figure 1 & 2). These concentrations exceed the MPCA “shallow lake” phosphorus standard of 60 µg/L. These concentrations in Mill Pond are highly indicative of the phosphorus loading exhibited by Elm Creek. Consequently, seasonal changes in phosphorus concentration become dependent upon storm-event run-off volume and loading from Elm Creek.

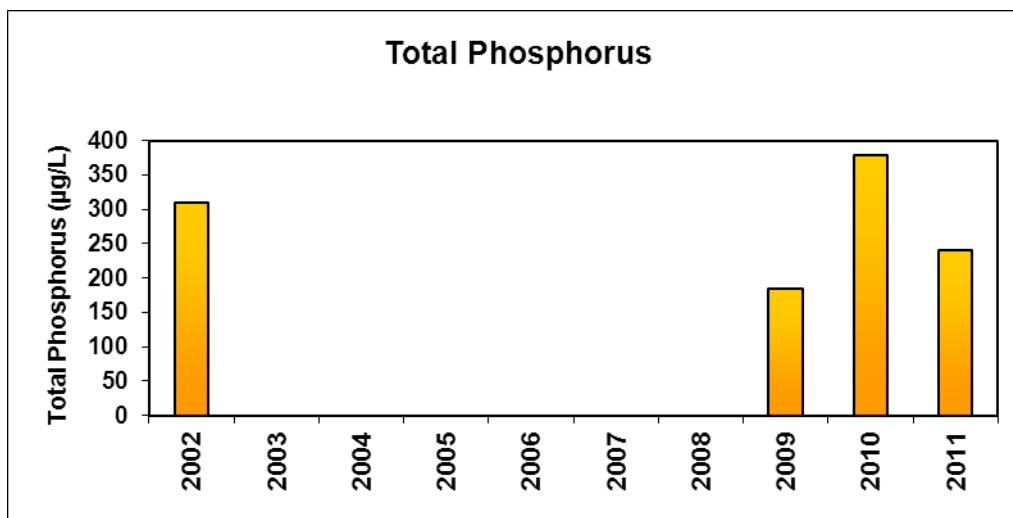


Figure 1: Mill Pond annual changes in total phosphorus concentrations.

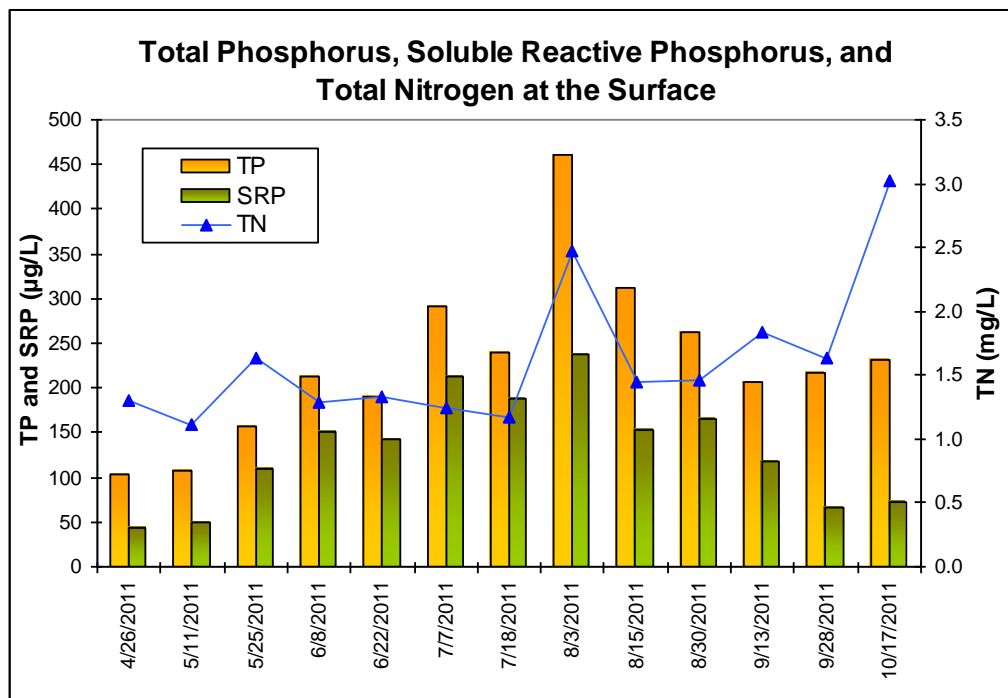


Figure 2. Mill Pond seasonal changes in total phosphorus, soluble reactive phosphorus, and total nitrogen in 2010.

Despite high phosphorus concentrations, Mill Pond does not appear to have severe algal blooms. The average chlorophyll-a concentration was 5.22 µg/L with values ranging from 1.0 µg/L to 26.7 µg/L (Figure 3 & 4). Secchi depth transparency was not measured consistently throughout the summer, but Secchi depth transparency was frequently on the bottom. The residence time within Mill Pond is relatively short since the shallow lake is essentially part of the Elm Creek flowage. Consequently, Mill Pond has chlorophyll-a concentrations that are more indicative of Elm Creek. The reduced residence time is not conducive for the development of algal blooms despite the high phosphorus concentrations. Maximum chlorophyll-a concentration of 26.7 µg/L in late September may be most likely due to low base flow conditions during periods of below average rainfall in the fall of 2011.

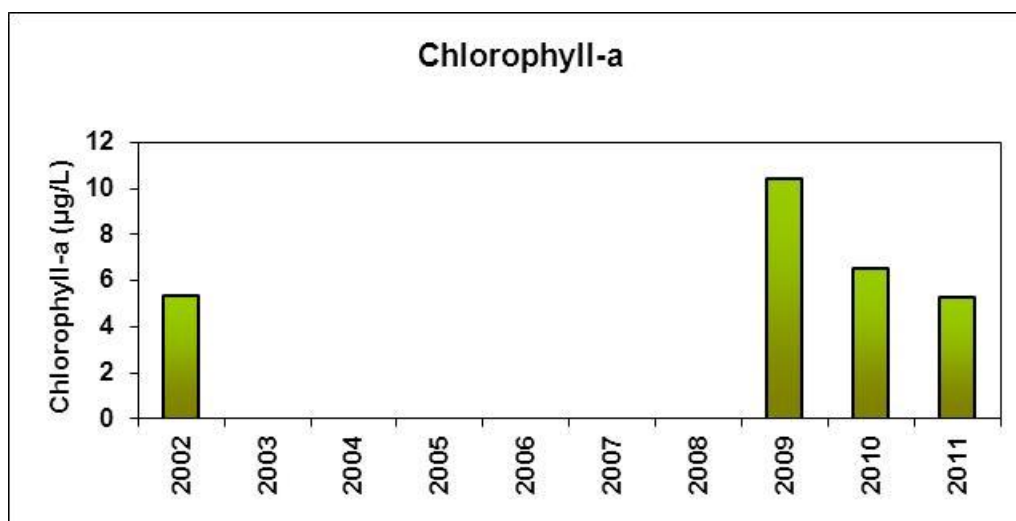


Figure 3: Mill Pond annual changes in chlorophyll-a concentration.

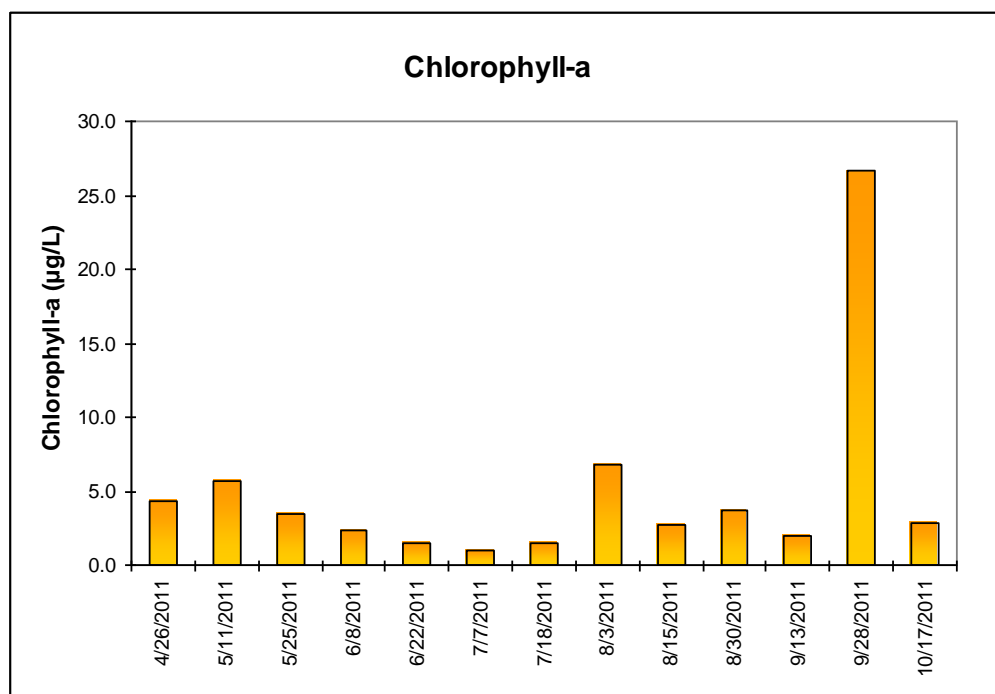


Figure 4. Mill Pond average chlorophyll-a concentrations during 2011.

Lake Monitoring History

	<i>Cook</i>	<i>Cowley</i>	<i>Diamond</i>	<i>Dubay</i>	<i>Fish</i>	<i>French</i>	<i>Henry</i>	<i>Jubert</i>	<i>Mill Pond</i>	<i>Mud</i>	<i>Rice</i>	<i>Sylvan</i>	<i>Weaver</i>
2011			T	C	T	T	C		T		C		T
2010		C	T		T	T	C		T	T	C/T		T
2009		C	T		T	T	C		T		C		T
2008			T		T		C				C	C	T
2007		C	T		T		C				C		T
2006		C			T	T	C						T
2005					T	T	C						T
2004			T		T	T							T
2003													
2002					T	C			T				T
2001	T				T	C							T
2000					T			C					T
1999					T				T				T
1998			T		T								T
1997					T							T	T
1996					T								T
1995					T		C						T
1994			C		T								T
1993					T								T
1992	T		T		T								T
1991					T			T	T				T
1990	T				T	T							T
1989			T	T	T			T					T
1988	T				T				T				T
1987					T			T					T
1986	T		T	T	T					T			T

T = monitored by Three Rivers Park District

C = monitored through CAMP program

Stream Monitoring

The Elm Creek watershed contains several large depressions and drainageways. Water is generally directed from the south and west to the northeast via four main drainageways – Rush Creek, North Fork Rush Creek, Diamond Creek, and Elm Creek. These drainageways converge in the Elm Creek Park Reserve and enter Hayden Lake. Water is eventually discharged to the Mississippi River near the Mill Pond in Champlin.

The monitoring station in Champlin, located at the Elm Creek Road crossing in the Elm Creek Park Reserve, is operated in cooperation with the United States Geological Survey (USGS). The Commission shares the costs of operating the station, which collects continuous flow data and periodic event and base water quality data. The watershed area above the gauging station is 86 square miles, or 81% of the hydrologic watershed.

Both grab samples and storm runoff samples are collected and analyzed for various parameters. Analyses of the streamflow and water quality monitoring data for Elm Creek and its tributaries are summarized below. Real time data from the monitoring station in Champlin may be viewed on the Internet at http://waterdata.usgs.gov/mn/nwis/uv/?site_no=05287890&PARAMeter_cd=00065,00060.

Flow Monitoring

Storm event samples are collected using an automatic sampler. Routine manual sampling occurs approximately monthly. The average daily discharge for the 2011 WY, October 1, 2010 through September 30, 2011, was 86.4 cubic feet per second (cfs) or 13.63 inches. During the same period, the minimum and maximum observed average daily discharge values were 2.7 cfs and 723 cfs, respectively. The long-term average daily discharge at the station is 39.2 cfs or 6.19 inches (years 1979-2011). A spreadsheet of the data received in 2011 water year (WY), including daily discharge and summary information, long-term flow volumes (calendar and water years), the flow hydrograph and the annual instantaneous peak discharge values at the gauging station for the period of record are also found in this appendix.

Elm Creek Annual Instantaneous Peak Discharge Rates					
Date	Peak Flow (cfs)	Date	Peak Flow (cfs)	Date	Peak Flow (cfs)
4/4/79	307	8/1/90	225	4/25/01	875**
3/25/80	199	6/1/91	371	5/11/02	554
6/15/81	44	3/8/92	380	6/28/03	695
4/3/82	471*	6/22/93	315	6/03/04	350
3/9/83	408	4/30/94	669*	10/30/04	118
2/25/84	341	3/17/95	237	10/09/05	295
3/18/85	579*	3/19/96	407	3/17/07	223
3/27/86	812*	4/1/97	511*	5/4/08	205
8/1/87	185	4/5/98	306	3/27/09	119
3/27/88	39	5/15/99	538*	3/17/10	369
3/31/89	159	7/13/00	112	3/24/11	803

*These values have been revised based on the 2001 rating curve.

**All-time instantaneous peak discharge. 100-year flood discharge at this site is 2290 cfs.

U.S. DEPARTMENT OF THE INTERIOR - U.S. GEOLOGICAL SURVEY - WATER RESOURCES
Station No 05287890 Elm Creek Nr Champlin, MN SourceAgencyUSGSState 27 County 053

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Daily Mean Values Discharge, cubic feet per second[e, estimated]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	48	e22	e31	e19	e47	294	171	271	84	55	16
2	117	47	e21	e28	e20	e45	295	178	235	74	57	14
3	104	45	e21	e29	e20	e43	296	176	202	62	56	16
4	91	42	e21	e26	e19	e39	308	169	174	54	53	16
5	81	38	e21	e25	e19	e36	311	165	148	50	50	15
6	71	35	e20	e25	e18	e34	301	158	127	48	47	13
7	62	33	e20	e26	e18	e32	276	146	109	44	44	12
8	55	30	e19	e24	e18	e31	250	132	93	39	39	10
9	50	27	e19	e23	e19	e29	223	126	79	37	35	9.1
10	45	25	e19	e23	e19	28	220	123	67	34	30	8.0
11	41	23	e19	e22	e21	27	214	117	59	38	26	7.3
12	37	22	e19	e22	e25	27	197	123	51	36	22	6.9
13	33	23	e19	e21	e29	29	179	143	45	33	20	6.0
14	29	26	e18	e21	e33	32	163	146	40	31	19	5.3
15	26	29	e17	e21	e37	25	145	144	46	39	16	4.7
16	23	30	e17	e21	e42	27	131	138	55	113	17	4.2
17	21	29	e16	e20	e49	41	118	129	53	200	56	3.9
18	18	29	e17	e20	e57	80	107	118	51	231	83	3.7
19	16	29	e16	e20	e62	122	97	106	50	268	81	3.5
20	14	27	e15	e19	e67	200	90	97	48	276	81	3.2
21	13	28	e15	e19	e67	341	85	133	60	248	78	3.3
22	11	27	e15	e19	e68	476	80	435	81	203	70	3.0
23	10	29	e15	e19	e67	622	77	666	96	176	61	2.8
24	11	29	e16	e19	e66	646	73	723	110	163	53	2.8
25	12	27	e16	e18	e64	525	69	644	130	143	44	2.7
26	24	27	e16	e18	e59	478	82	563	147	120	37	2.7
27	41	25	e17	e17	e55	431	108	485	152	107	31	2.7
28	46	24	e18	e16	e51	396	116	425	141	96	26	2.7
29	47	24	e20	e16	---	356	126	376	120	82	23	2.7
30	48	e23	e26	e17	---	322	145	339	99	70	19	3.0
31	48	---	e35	e19	---	293	---	308	---	60	17	---

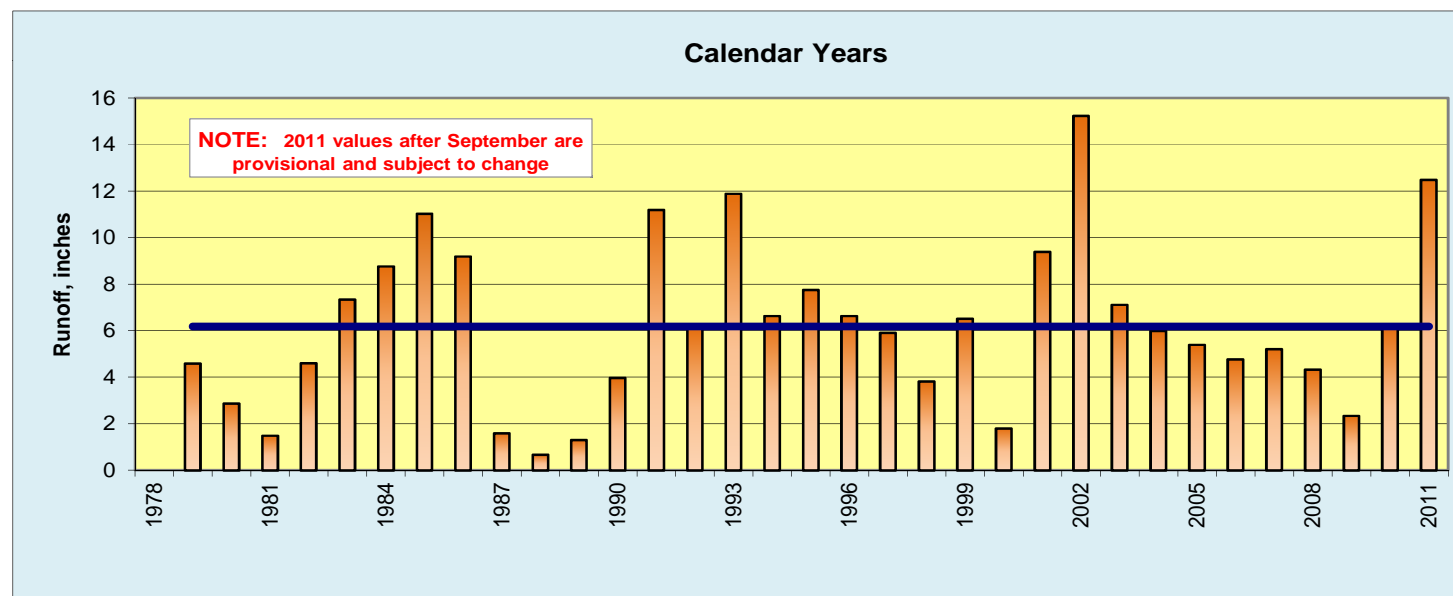
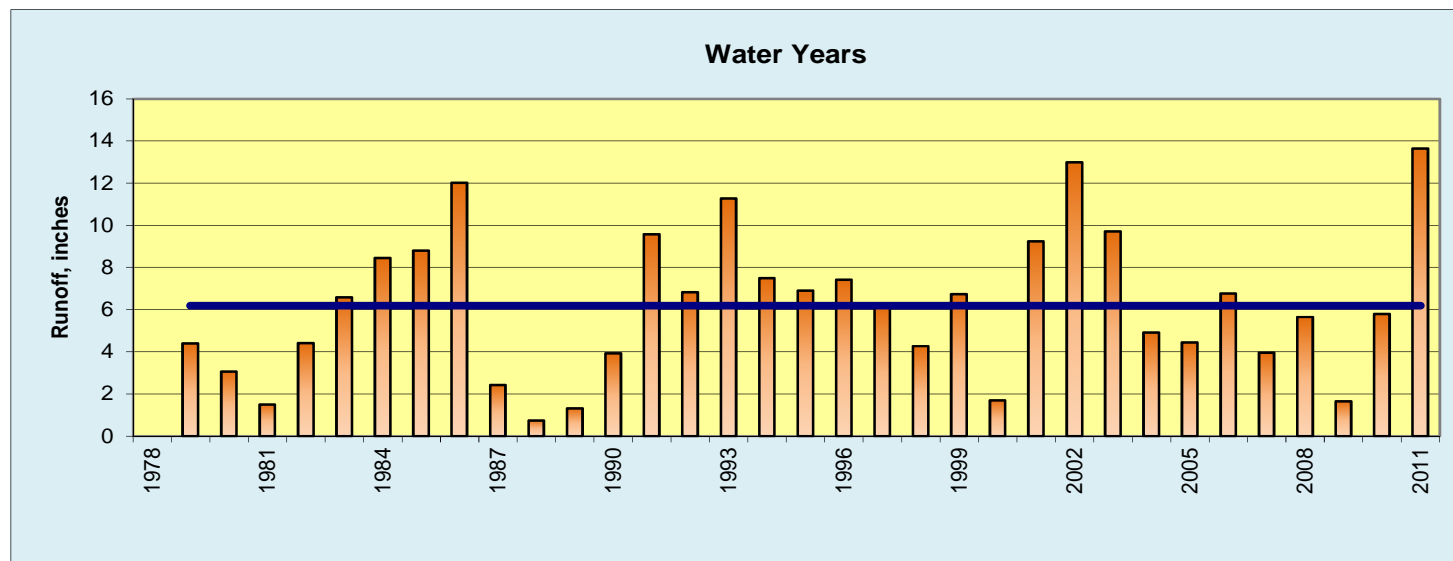
Statistics for Water Year October 2010 to September 2011

Total	1,375	900	585	664	1,108	5,860	5,176	7,902	3,139	3,259	1,346	206.2
Mean	44.4	30.0	18.9	21.4	39.6	189	173	255	105	105	43.4	6.87
Max	130	48	35	31	68	646	311	723	271	276	83	16
Min	10	22	15	16	18	25	69	97	40	31	16	2.7
Ac-ft	2,730	1,790	1,160	1,320	2,200	11,620	10,270	15,670	6,230	6,460	2,670	409
Cfsm	0.52	0.35	0.22	0.25	0.46	2.20	2.01	2.96	1.22	1.22	0.50	0.08
Inches	0.59	0.39	0.25	0.29	0.48	2.53	2.24	3.42	1.36	1.41	0.58	0.09

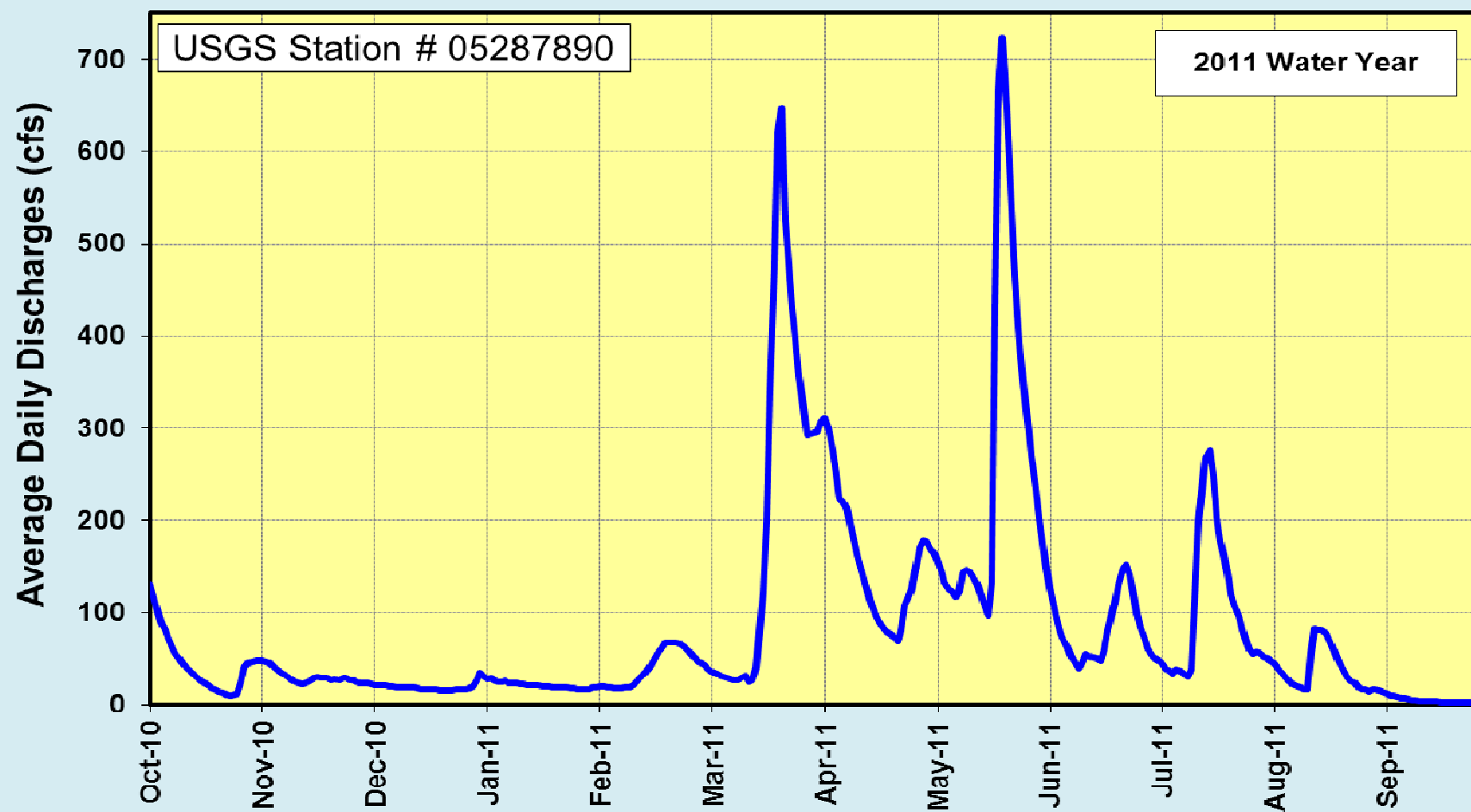
Statistics of monthly mean data for 1979-2011,byWaterYear(WY)

Mean	33.6	21.3	10.4	5.70	9.49	65.2	103	74.5	51.7	39.5	28.1	26.6
Max	240	67.4	41.3	22.0	99.1	189	414	255	196	157	151	170
(WY)	(1986)	(1994)	(1992)	(1992)	(1984)	(2011)	(2001)	(2011)	(2004)	(1993)	(2002)	(1991)
Min	1.13	1.03	0.92	0.74	0.91	3.86	5.31	3.54	1.34	0.76	1.37	1.08
(WY)	(1990)	(1990)	(1990)	(1991)	(1990)	(2001)	(1987)	(2000)	(1988)	(1988)	(2008)	(1988)

Summary Statistics	Calendar Year 2010		Water Year 2011		Water Years 1979 - 2011	
Annual total	14,462.49		31,520.2			
Annual mean	39.6		86.4		39.2	
Highest annual mean					86.4	
Lowest annual mean					4.54	
Highest daily mean	357		Mar 17	723	May 24	815
Lowest daily mean	0.94		Jun 3	a2.7	Sep 25	0.31
Annual seven-day minimum	0.98		Feb 28	2.7	Sep 23	0.35
Maximum peak flow			803		Mar 24	875
Maximum peak stage			9.81		Mar 24	10.02
Instantaneous low flow			2.6		Sep 28	0.29
Annual runoff (ac-ft)	28,690		62,520		28,390	
Annual runoff (cfsm)	0.461		1.00		0.456	
Annual runoff (inches)	6.26		13.63		6.19	
10 percent exceeds	99		221		110	
50 percent exceeds	24		39		12	
90 percent exceeds	1.8		15		1.6	



Elm Creek near Champlin Average Daily Discharges



Elm Creek Near Champlin (USGS Station 05287890)

Manual Water Quality Samples for Water Year 2011

(Selected Parameters)

USGS Parameter #		P00010	P00020	P00025	P00061	P00095	P00300	P00301	P00340	P00400
DATE	Sample Start Time	Water Temp. °C	Air Temp. °C	Barom Press mm Hg	Disch Inst cfs	Sp cond mS/cm	DO mg/L	DO % Satur	COD mg/L	pH
26-Oct-10	14:20	11.4	7.0	704	32.0	528	8.6	85	30	6.6
19-Nov-10	10:00	2.0	2.9	743	29.0	569	11.6	86	40	7.4
8-Dec-10	10:20	0.0	-5.0	745	E 20	695	9.6	67	30	6.9
28-Jan-11	14:10	0.0	-1.0	736	16.0	814	8.7	62	40	6.7
25-Feb-11	14:30	0.0	-11.0	746	E 100	860	6.6	46	50	6.8
14-Mar-11	13:25	0.4		747	44.0	926	6.4	45	50	6.8
15-Apr-11	13:20	7.8	2.0	739	150.0	559	E 9.9	E 86	30	7.2
24-May-11	14:40	17.7		734	796.0	454	6.6	72	30	7.6
6-Jun-11	14:00	23.7	33.3	733	128.0	494	E 6.2	E 77	40	7.7
20-Jul-11	8:40	27.2	33.3	730	273.0	485	1.4	18	40	7.4
23-Aug-11	10:20	22.1	24.0	734	67.0	463	4.4	53	40	7.5
8-Sep-11	11:30	16.5	27.6	746	14.0	518	6.6	69	40	7.6

USGS Parameter #		P00530	P00535	P00608	P00613	P00625	P00631	P00665	P00666	P00940
DATE	Sample Start Time	TSS mg/L	Volatile Residue mg/L	Ammonia mg/L	Nitrite mg/L	Total Nitrogen mg/L	Dissolved NO ₂ +NO ₃ mg/L	Total P mg/L	Dissolved P mg/L	Dissolved Chloride mg/L
26-Oct-10	14:20	< 15	< 10	0.069	0.021	1.10	0.21	0.15	0.09	53.1
19-Nov-10	10:00	< 15	< 10	0.023	0.002	0.90	0.04	0.07	0.03	61.9
8-Dec-10	10:20	< 15	< 10	0.076	0.004	1.10	0.12	0.07	0.04	76.7
28-Jan-11	14:10	63	46	0.278	0.003	1.30	0.09	0.34	0.03	84.2
25-Feb-11	14:30	< 30	< 20	0.409	0.004	1.60	0.11	0.49	0.08	108.0
14-Mar-11	13:25	< 30	< 20	0.392	0.004	1.60	0.07	0.64	0.02	114.0
15-Apr-11	13:20	< 30	20	0.011	0.003	0.92	< 0.02	0.11	0.10	65.1
24-May-11	14:40	15	< 10	0.032	0.018	0.84	0.17	0.17	0.10	53.0
6-Jun-11	14:00	< 30	< 20	0.047	0.004	1.10	0.04	0.32	0.23	45.9
20-Jul-11	8:40	< 30	< 20	0.282	0.007	1.50	0.03	0.48	0.27	45.7
23-Aug-11	10:20	< 30	< 20	0.033	0.002	1.00	0.05	0.28	0.17	41.7
8-Sep-11	11:30	< 30	< 20	0.1	0.038	1.20	0.23	0.20	0.13	42.0

Data are provisional and are subject to change

E = Estimated

Automatic Event Samples for Water Year 2011

(Selected parameters)

USGS Parameter #			P00095	P00340	P00400	P00530	P00608	P00613	P00625	P00631	P00665	P00666	P00940
DATE & TIME			Sp Cond μS/cm	COD mg/L	pH	TSS mg/L	Ammoni a mg/L	Nitrite mg/L	Total N mg/L	Dissolved NO ₂ +NO ₃ mg/L	Total P mg/L	Dissolved P mg/L	Dissolved Chloride mg/L
26-Oct-10	01:26	to	548	40	7.3	< 15	0.04	0.012	1.2	0.25	0.19	0.1	57.3
28-Oct-10	10:27												
21-Mar-11	15:56	to	548	30	7.3	26	0.216	0.052	1.3	1.21	0.29	0.08	65
23-Mar-11	18:56												
26-Apr-11	09:29	to	618	40	7.3	30	0.017	0.002	1.1	0.08	0.2	0.06	78.7
27-Apr-11	09:29												
21-Jun-11	17:28	to	505	40	8	21	0.06	0.022	1.3	0.3	0.3	0.17	48.9
24-Jun-11	08:28												
24-Jun-11	11:22	to	527	40	8.1	< 15	0.04	0.009	1.1	0.1	0.23	0.17	53.8
27-Jun-11	08:22												
15-Jul-11	13:32	to	429	40	7.7	< 30	0.067	0.017	1.3	0.15	0.37	0.19	41.8
18-Jul-11	10:33												
16-Aug-11	18:58	to	421	50	8	48	0.027	0.012	1.5	0.16	0.37	0.13	35.1
18-Aug-11	06:58												

USGS Parameters

- # P00010 - Temperature, water, degrees Celsius
- # P00020 - Temperature, air, degrees Celsius
- # P00025 - Barometric pressure, millimeters of mercury
- # P00061 - Discharge, instantaneous, cubic feet per second
- # P00095 - Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius
- # P00300 - Dissolved oxygen, water, unfiltered, milligrams per liter
- # P00301 - Dissolved oxygen, water, unfiltered, percent of saturation
- # P00340 - Chemical oxygen demand, high level, water, unfiltered, milligrams per liter
- # P00400 - pH, water, unfiltered, field, standard units
- # P00530 - Residue, total nonfilterable, milligrams per liter
- # P00535 - Loss on ignition, from nonfilterable residue, milligrams per liter
- # P00608 - Ammonia, water, filtered, milligrams per liter as nitrogen
- # P00613 - Nitrite, water, filtered, milligrams per liter as nitrogen
- # P00625 - Ammonia plus organic nitrogen, water, unfiltered, milligrams per liter as nitrogen
- # P00631 - Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen
- # P00665 - Phosphorus, water, unfiltered, milligrams per liter
- # P00666 - Phosphorus, water, filtered, milligrams per liter
- # P00940 - Chloride, water, filtered, milligrams per liter

Elm Creek Watershed-wide TMDL Impairment Summary

Table __ – Elm Creek Watershed Bacteria Impairments

Reach Name on 303(d) List/Description	Yr ¹²	Assessment Unit ID ¹⁰	Affected use	Pollutant or stressor ³	Target start// completion ⁷
Diamond Cr., Headwaters (French L.) to Unnamed Lake	2010	07010206-525	Aquatic recreation	E. coli	2009//2014
Rush Creek – Headwaters to Elm Cr.	2010	07010206-528	Aquatic recreation	E. coli	2009//2014
Rush Cr., S. Fk – Un-named lake to Rush Cr.	2010	07010206-532	Aquatic recreation	E. coli	2009//2014
Elm Creek - Headwaters (Lk Medina 27-0146-00) to Mississippi R	2010	07010206-508	Aquatic recreation	E. coli	2009//2014

Table __ – Elm Creek Watershed Turbidity/TSS Impairments

Reach Name on 303(d) List/Description	Yr ¹²	Assessment Unit ID ¹⁰	Affected use	Pollutant or stressor ³	Target start// completion ⁷
NONE					

Table __ – Elm Creek Watershed Low Dissolved Oxygen Impairments

Reach Name on 303(d) List/Description	Yr ¹²	Assessment Unit ID ¹⁰	Affected use	Pollutant or stressor ³	Target start// completion ⁷
Diamond Cr., Headwaters (French L.) to Unnamed Lake	2010	07010206-525	Aquatic life	Dissolved oxygen	2009//2014
Rush Creek – Headwaters to Elm Creek	2010	07010206-528	Aquatic life	Dissolved oxygen	2009//2014
Elm Creek - Headwaters (Lk Medina 27-0146-00) to Mississippi R	2004	07010206-508	Aquatic life	Dissolved oxygen	2009//2014

Table __ – Elm Creek Watershed Biotic Impairments

Reach Name on 303(d) List/Description	Yr ¹²	Assessment Unit ID ¹⁰	Affected use	Pollutant or stressor ³	Target start// completion ⁷
Rush Cr., Headwaters to Elm Creek	2002	07010206-528	Aquatic life	Fish Bioassessments	2009//2013
Diamond Creek, Headwaters (French L) to Unnamed Lake	Proposed for 2014	07010206-525	Aquatic life	IBI Fish	2014/??
Diamond Creek, Headwaters (French L) to Unnamed Lake	Proposed for 2014	07010206-525	Aquatic life	IBI Inverts	2014/??
Rush Cr.-Headwaters to Elm Cr.	Proposed for 2014	07010206-528	Aquatic life	IBI Inverts	2014/??
Rush Cr., S. Fk. – Unnamed Lake to Rush Cr.	Proposed for 2014	07010206-732	Aquatic life	IBI Fish	2014/??
Rush Cr., S. Fk. – Unnamed Lake to Rush Cr	Proposed for 2014	07010206-732	Aquatic life	IBI Inverts	2014/??
S. Fk. Rush Cr. – Unnamed ditch to Co. Ditch 16	Proposed for 2014	07010206-760	Aquatic life	IBI Fish	2014/??
S. Fk. Rush Cr. – Unnamed ditch to Co. Ditch 16	Proposed for 2014	07010206-760	Aquatic life	IBI Inverts	2014/??
Elm Cr. – Headwaters (L. Medina) to Mississippi R.	Proposed for 2014	07010206-508	Aquatic life	IBI Fish	2014/??
Elm Cr. – Headwaters (L. Medina) to Mississippi R.	Proposed for 2014	07010206-508	Aquatic life	IBI Inverts	2014/??

Table _ – Elm Creek Watershed Lake Nutrient Impairments

Name on 303(d) List/Description	Yr¹²	Assessment Unit ID¹⁰	Affected use	Pollutant or stressor³	Target start// completion⁷
Cowley Lake	2010	27-0169	Aquatic recreation	Nutrients	2009/2014
Diamond Lake	2006	27-0125	Aquatic recreation	Nutrients	2011/2016
Fish Lake	2008	27-0118	Aquatic recreation	Nutrients	2009/2014
French Lake	2004	27-0127	Aquatic recreation	Nutrients	2009-2014
Henry Lake	2008	27-0175	Aquatic recreation	Nutrients	2009/2014
Rice Lake - Main	2010	27-0116-01	Aquatic recreation	Nutrients	2009/2014
Rice Lake – West Bay	Proposed for 2014	27-0116-02	Aquatic recreation	Nutrients	2014/??

Local Watershed Organizations Host Workshops

As policymakers grapple with stretching tax dollars, the need and potential cost of protecting threatened water resources may seem overwhelming. The West Metro Water Alliance (WMWA), a group of west Hennepin watershed organizations, has come together to help local government officials accomplish both. Beginning March 23, WMWA will host a low-cost, three-part series of forums, *Protecting Our Water Resources – a Forum Series for Policymakers*. The series will provide information and tools to help shape critical decisions that affect water quality, property values and the effective use of tax dollars. The forums will also provide networking opportunities to share strategies and success stories.

“The quality of our lakes, streams and wetlands is critical to our quality of life,” said Pauline Langsdorf, Crystal’s commissioner on the Bassett Creek Watershed Commission. “A telephone survey revealed that citizens who live in our local watersheds feel strongly that protecting the quality of our water resources is of great importance. The decisions of elected and appointed officials, along with those of municipal and county staff play a key role in protecting the water resources that our citizens value,” said Langsdorf.

The series of three workshops is broken down into five sessions to address the varying needs of the urban/suburban and suburban/rural communities. Managing the volume of storm water and the nutrients that cause much of the pollution to local water resources will be the subjects of the first two workshops. The third workshop will delve deeper into understanding and working with the planning and priorities that drive federal, state and watershed rules that impact local governments.

This series is presented by WMWA (Bassett Creek, Elm Creek, Pioneer-Sarah Creek, Shingle Creek and West Mississippi watershed commissions) in partnership with Hennepin County, Three Rivers Park District and the Freshwater Society.

Learn more and sign up for one or all three workshops at www.hennepin.us/waterforums.

####

Road Salt Applicators' Workshop

Wednesday, November 2, 7:30 a.m. to noon

Plymouth Ice Center, 3650 Plymouth Blvd., Plymouth



Training topics include:

Application rates ● Cost saving tips
Calibrating equipment ● De-Icing
Anti-Icing ● New maintenance methods
Pre-wetting ● Material selection

To register, contact Beverly Love at 763-553-1144 or blove@jass.biz.

Participants eligible for certification.

**Elm Creek Watershed Management Commission
2012 Approved Operating Budget**

	A	B	C	D	Q	R	T	U	V	W	X	Y	Z	AA	AB	AC	AD
1					2009 Budget	2009 Final	2010 Budget Revised	2010 Final	2011 Approved (corrected) Revised	2011 Projected	2012 Approved	2013 Projected	2014 Projected	2015 Projected	2016 Projected	Totals W- wide TMDL	
2	Expenses																
3		Administrative			76,000	75,533	77,500	72,158	78,500	78,500	79,500	80,300	81,100	81,900	82,000		
4		Website			10,000	4,805	6,500	4,425	7,500	6,000	7,000	7,000	7,500	7,500	8,000		
5		Legal Services			2,000	692	1,500	532	1,500	1,000	1,500	2,000	1,500	1,500	1,500		
6		Audit			5,000	4,500	4,500	4,500	5,000	4,500	5,000	5,000	5,000	5,000	5,000		
7		Insurance			4,500	2,648	4,000	2,959	4,000	3,600	4,000	4,100	4,300	4,300	4,500		
8		Miscellaneous			1,000	0	500	300	1,000	500	1,000	1,000	1,000	1,000	1,000		
9				Subtotal	98,500	88,178	94,500	84,874	97,500	94,100	98,000	99,400	100,400	101,200	102,000		
10																	
11		Project Reviews															
12		Technical - HCES			62,000	32,200	63,000	51,400	63,000	63,000	65,000	65,000	68,000	68,000	70,000		
13		Technical Support - Consultant			15,000	198	7,000	1,059	7,000	5,000	3,000	6,000	6,000	7,000	7,000		
14		Admin Support			10,000	6,952	10,000	6,891	10,000	7,500	9,000	10,000	10,000	10,000	10,000		
15				Subtotal	87,000	39,349	80,000	59,350	80,000	75,500	77,000	81,000	84,000	85,000	87,000		
16																	
17		Wetland Conservation Act															
18		WCA Expense - HCES			10,250	5,259	9,250	1,056	9,250	6,000	6,500	6,500	6,500	6,500	6,500		
19		WCA Expense - Legal			500	70	750	0	500	500	500	700	700	800	800		
20		WCA Expense - Admin			4,000	892	3,500	1,051	3,000	2,000	3,000	3,000	3,000	3,000	3,000		
21				Subtotal	14,750	6,221	13,500	2,107	12,750	8,500	10,000	10,200	10,200	10,300	10,300		
22																	
23		Water Monitoring															
24		Stream Monitoring			16,000	19,793	18,872										
25		Stream Monitoring - USGS			0	0	0	14,691	17,500	17,670	18,288	18,928	19,590	20,275	20,985		
26		Stream Monitoring - TRPD															
27		Macroinvertebrate Monitoring-River V			6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000		
28		Gauging Station - Elec Bill			150	108	150	104	150	170	170	170	170	180	180		
29		Rain Gauge Network			1,200	284	700	570	1,000	100	100	500	100	100	500		
30		Lake Monitoring															
31		Lake Monitoring - CAMP			5,010	210	1,650	1,030	1,650	1,820	1,700	1,700	1,750	1,750	1,802		
32		Lake Monitoring - TRPD				0	3,400	3,400	3,400	3,400	3,500	3,500	3,605	3,605	3,715		
33		Wetland Monitoring - WHEP			3,200	2,200	4,000	3,200	4,000	4,000	4,000	4,000	4,000	4,000	4,000		
34		Stream Health (SHEP)			6,000	6,000	4,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000		
35				Subtotal	37,560	34,595	38,772	34,995	39,700	39,160	39,758	40,798	41,215	41,910	43,182		
36																	
37		Education															
38		Education - city/citizen programs			1,000	5,652	6,500	8,553	4,500	6,000	6,500	7,000	8,000	8,000	9,000		
39		2011 Workshop Series							3,000	3,000							
40		WMWA Implementation Activities									3,000	3,000	3,000	3,000	3,000		
41		Survey			0	0	0		0		0	0	0	0	0		
42		Rain Garden Workshop			2,000	2,000	2,000	2,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500		
43		Education Grants			2,000	0	1,000	500	2,000	2,000	2,000	2,000	2,000	2,000	2,000		
49				Subtotal	5,000	7,652	9,500	11,053	12,000	13,500	14,000	14,500	15,500	15,500	16,500		
50																	

Elm Creek Watershed Management Commission
2012 Approved Operating Budget

	A	B	C	D	Q	R	T	U	V	W	X	Y	Z	AA	AB	AC	AD
1					2009 Budget	2009 Final	2010 Budget Revised	2010 Final	2011 Approved (corrected) Revised	2011 Projected	2012 Approved	2013 Projected	2014 Projected	2015 Projected	2016 Projected	Totals W- wide TMDL	
51				Special Projects													
52				CWLA Grant		10,014			0	0							
53				Special Projects - general	0	0	3,000		5,000	5,000	5,000	5,000	5,000	5,000	5,000		
54				South Metro Miss TMDL							500	500	500	500	500		
55				Upper Miss Bacteria TMDL	0	92	0	23	100	100	500	500	500	500	500		
58				Subtotal	0	10,106	3,000	23	5,100	5,100	6,000	6,000	6,000	6,000	6,000		
59																	
60				Contingency	2,000	0	1,728	0	3,600	2,000	3,600	3,600	3,600	3,600	3,600		
61				Subtotal	2,000	0	1,728	0	3,600	2,000	3,600	3,600	3,600	3,600	3,600		
62																	
63				Total Operating Budget	244,810	186,101	241,000	192,402	250,650	237,860	248,358	255,498	260,915	263,510	268,582		
64																	
65				Watershed-wide TMDL (see summary below)													
66				Commission contribution	10,000	2,545	35,000	24,955	10,000	20,000	20,000	20,000	32,500	0	0	120,000	
67				TRPD/Commission Co-op Agreement	0	16,500	101,000	55,650	77,000	77,000	70,000	50,000	70,850	0	0	340,000	
68				Administration	1,500		3,200	4,657	2,000	5,000	5,000	5,000	5,000	0	0		
71				Subtotal	11,500	19,045	139,200	85,262	89,000	102,000	95,000	75,000	108,350	0	0		
72																	
73				Management Plan													
74				Second Gen Plan Amendment	10,000	11,772	0	11,243	15,000	15,000							
75				Third Gen Management Plan			0				20,000	25,000	25,000	0	0		
76				Local Plan Review										4,000	12,000		
77				Subtotal	10,000	11,772	0	11,243	15,000	15,000	20,000	25,000	25,000	4,000	12,000		
78																	
79				Capital Improvement Projects													
80				CIPs/Studies/Project Identification	10,000	0	0	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000		
81				Capital Projects - Cost Share		0	0	0	0	0	15,000	15,000	15,000	25,000	25,000		
82				Subtotal	10,000	0	0	0	10,000	10,000	25,000	25,000	25,000	35,000	35,000		
83																	
84				Total All Expenses	276,310	216,918	380,200	288,907	364,650	364,860	388,358	380,498	419,265	294,510	291,582		

**Elm Creek Watershed Management Commission
2012 Approved Operating Budget**

	A	B	C	D	Q	R	T	U	V	W	X	Y	Z	AA	AB	AC	AD
1					2009 Budget	2009 Final	2010 Budget Revised	2010 Final	2011 Approved (corrected) Revised	2011 Projected	2012 Approved	2013 Projected	2014 Projected	2015 Projected	2016 Projected	Totals W- wide TMDL	
85	Revenue																
86		Project Review Fees			40,000	26,500	25,000	51,050	35,000	45,000	50,000	55,000	55,000	55,000	55,000		
87		Water Monitoring - TRPD Co-op Agmt			2,600	3,630	3,500	4,296	4,000	4,500	5,500	5,500	5,500	6,000	6,000		
88		BMP Implementation			0	0	0		0	0	0	0	0	0	0		
89		WCA Fees			6,000	1,700	2,000	1,000	2,000	1,000	2,500	2,500	2,750	2,750	3,000		
90		Forfeited sureties			0	0	0		0	0	0	0	0	0	0		
91		Capital Project Funding			0	0	0		0	0	0	0	0	0	0		
92		Membership Dues			180,000	180,000	180,000	180,000	188,000	188,000	193,000	202,650	212,800	223,500	234,700	2.67% increase in 2012	
93		Member Assess - Contribution to Reserves									0	0	0	0	0		
94		Interest Income			12,000	997	1,000	172	1,500	300	300	300	300	300	400		
95		CWLA Grant			0	17,163	0		0	0	0	0	0	0	0		
96		Watershed-wide TMDL - MPCA			0	15,730	101,000	118,127	77,000	77,000	70,000	50,000	9,143	0	0	340,000	
97		Miscellaneous Income			0	0	0		0	0	0	0	0	0	0		
99	Total Revenue				240,600	245,720	312,500	354,645	307,500	315,800	321,300	315,950	285,493	287,550	299,100		
100																	
101	Op Fund Surplus (Deficit) To (From) Cash Res				35,710	28,803	67,700	65,738	57,150	49,060	67,058	64,548	133,772	6,960	7,518		
102																	
103	Total Unencumbered Fund Balance, Beginning of Year					225,956		254,759		320,497	271,437	204,379	139,831	6,059	901		
104	Total Unencumbered Fund Balance, End of Year					254,759		320,497		271,437	204,379	139,831	6,059	(901)	6,617		
105																	
106	Encumbered Funds - WCA (accum) (cash)					45,650		39,962		39,962							
107	Total All Funds, including Escrows and Sureties					300,409		360,459		311,399							
108																	
109																	

**Elm Creek Watershed Management Commission
2012 Member Assessments**

2009	2008 Taxable Market Value	2009 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	551,900,300	4.98%	8,964.35	1.25%	111.11
Corcoran	828,217,000	7.47%	13,452.48	5.66%	720.68
Dayton	580,864,500	5.24%	9,434.81	7.98%	697.33
Hassan	537,389,200	4.85%	8,728.65	4.51%	376.66
Maple Grove	5,833,326,300	52.64%	94,748.98	-1.61%	-1,550.68
Medina	824,215,400	7.44%	13,387.48	16.93%	1,938.06
Plymouth	650,196,100	5.87%	10,560.94	11.28%	1,070.37
Rogers	1,275,791,400	11.51%	20,722.30	8.57%	1,636.47
Totals	11,081,900,200	100.00%	180,000.00	2.86%	5,000.00
2010	2009 Taxable Market Value	2010 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	523,805,500	4.78%	8,600.55	-4.06%	-363.80
Corcoran	772,067,800	7.04%	12,676.86	-5.77%	-775.62
Dayton	569,842,400	5.20%	9,356.45	-0.83%	-78.36
Hassan	506,127,000	4.62%	8,310.28	-4.79%	-418.37
Maple Grove	5,907,276,800	53.89%	96,993.70	2.37%	2,244.72
Medina	841,805,700	7.68%	13,821.91	3.25%	434.42
Plymouth	662,359,500	6.04%	10,875.52	2.98%	314.58
Rogers	1,179,384,700	10.76%	19,364.74	-6.55%	-1,357.56
Totals	10,962,669,400	100.00%	180,000.00	0.00%	0.00
2011	2010 Taxable Market Value	2011 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	8,932.76	3.86%	332.21
Corcoran	704,789,600	6.85%	12,882.95	1.63%	206.10
Dayton	528,922,900	5.14%	9,668.26	3.33%	311.81
Hassan	406,303,500	3.95%	7,426.88	-10.63%	-883.40
Maple Grove	5,613,392,300	54.58%	102,608.03	5.79%	5,614.33
Medina	830,631,900	8.08%	15,183.24	9.85%	1,361.33
Plymouth	631,150,100	6.14%	11,536.89	6.08%	661.37
Rogers	1,081,067,600	10.51%	19,760.99	2.05%	396.25
Totals	10,284,943,500	100.00%	188,000.00	4.44%	8,000.00
2012	2011 Taxable Market Value	2012 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	486,223,700	4.82%	9,311.12	4.24%	378.36
Corcoran	702,744,800	6.97%	13,457.47	4.46%	574.52
Dayton	524,379,400	5.20%	10,041.80	3.86%	373.54
Hassan	401,007,300	3.98%	7,679.24	3.40%	252.36
Maple Grove	5,490,107,700	54.47%	105,134.84	2.46%	2,526.82
Medina	773,549,700	7.68%	14,813.38	-2.44%	-369.87
Plymouth	630,559,900	6.26%	12,075.14	4.67%	538.25
Rogers	1,069,825,600	10.62%	20,487.02	3.67%	726.03
Totals	10,078,398,100	100.00%	193,000.00	2.66%	5,000.00

Elm Creek Watershed Management Commission

2011 Operating Budget - Approved May 12, 2010

	A	B	C	D	O	P	Q	R	S	T	U	V	W	X	Y	Z
1					2008 Budget	2008 Final	2009 Budget	2009 Final	2010 Budget	2010 Budget Revised	2011 Approved	2012 Projected	2013 Projected	2014 Projected	2015 Projected	Totals W- wide TMDL
2	Expenses															
3		Administrative			76,500	67,853	76,000	75,533	77,500	77,500	78,500	79,500	80,300	81,100	81,900	
4		Website			10,000	4,400	10,000	4,805	7,500	7,500	7,500	7,500	7,800	7,800	8,000	
5		Legal Services			2,000	259	2,000	692	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
6		Audit			5,000	4,500	5,000	4,500	4,500	4,500	5,000	5,000	5,000	5,000	5,000	
7		Insurance			4,500	3,483	4,500	3,077	4,000	4,000	4,000	4,000	4,100	4,300	4,300	
8		Miscellaneous			1,000	0	1,000	0	1,000	500	1,000	1,000	1,000	1,000	1,000	
9		Project Reviews														
10		Technical - HCES			67,000	42,000	62,000	32,200	63,000	63,000	63,000	65,000	65,000	68,000	68,000	
11		Technical Support - Consultant			30,000	2,322	15,000	198	15,000	7,000	7,000	7,000	8,000	8,000	8,000	
12		Admin Support			20,000	7,863	10,000	6,952	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
13		Wetland Conservation Act														
14		WCA Expense - HCES			10,250	6,300	10,250	5,259	9,250	9,250	9,250	9,500	9,500	9,750	9,750	
15		WCA Expense - Legal			500	518	500	70	750	750	500	500	700	700	800	
16		WCA Expense - Admin			4,000	2,002	4,000	892	3,500	3,500	3,000	3,000	3,000	3,500	3,500	
17		Water Monitoring														
18		Stream Monitoring - USGS			15,830	11,697	16,000	19,793	16,000	16,000	17,500	17,850	18,200	18,550	19,000	
19		Stream Monitoring - TRPD			0	0	0	0	0	0						
20		Gauging Station - Elec Bill			150	105	150	108	150	150	150	150	150	150	150	
21		Lake Monitoring - CAMP			4,620	1,730	5,010	210	1,650	1,650	1,650	1,750	1,800	1,800	1,800	
22		Lake Monitoring - TRPD				2,520		0	3,400	3,400	3,400	3,500	3,500	3,500	3,500	
23		Macroinvertebrate Monitoring-River Watch			6,000	6,000	6,000	6,000	6,400	6,400	6,000	6,000	6,000	6,000	6,000	
24		Rain Gauge Network			1,000	131	1,200	284	2,000	1,500	1,000	1,000	1,000	1,000	1,000	
25		Wetland Monitoring - WHEP			3,200	3,200	3,200	2,200	4,000	4,000	4,000	4,000	5,000	5,000	5,000	
26		Stream Health (SHEP)			6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	
27		Education														
28		Education - city/citizen programs			2,000	5,376	1,000	5,652	5,000	4,500	7,500	8,500	8,500	10,000	10,000	
29		Survey			0	0	0	0	0	0	0	4,000	1,500	0	0	
30		Rain Garden Workshop			0	1,000	2,000	2,000	2,000	2,000	2,500	2,500	3,000	3,000	3,000	
31		Education Grants			5,000	1,000	2,000	0	2,000	1,000	2,000	2,000	2,000	2,000	2,000	
36		CWLA Grant			38,225	38,687	0	10,014	0	0	0	0	0	0	0	
37		Special Projects														
38		Special Projects - general			5,000	0	0	0	5,000	3,000	5,000	5,000	5,000	5,000	5,000	5,000
39		Miss Bacteria TMDL			0	4,328	0	92	0	0	100	100	100	100	100	
40		Activities - Channel Study			0	0	0	0	0	0	0	0	0	0	0	
41		Activities - Watershed-wide TMDL			0	0	0	0	0	0	0	0	0	0	0	
42		Watershed-wide TMDL (see summary below)														
43		Commission contribution			0	0	10,000	2,545	15,000	15,000	10,000	10,000	10,000	10,000	0	85,000
44									20,000	20,000					0	
45		TRPD/Commission Co-op Agreement			0	0	0	16,500	101,000	101,000	77,000	81,000	58,000	6,500	0	340,000
46		Administration					1,500		2,000	2,000	2,000	2,000	2,000	2,000	0	
49		Third Gen Management Plan/Plan Amendment			10,000	14,486	10,000	11,772	10,000	0	15,000	15,000	15,000	0	0	
50		CIPs/Studies/Project Identification			20,000	0	10,000	0			10,000	10,000	10,000	10,000	10,000	30,000
51		Contingency			1,840	0	2,000	0	3,600	3,600	3,600	3,600	3,600	3,600	3,600	
52		Total Expenses			349,615	237,760	276,310	217,347	402,700	380,200	364,650	377,450	356,250	294,850	277,900	

Elm Creek Watershed Management Commission

2011 Operating Budget - Approved May 12, 2010

	A	B	C	D	O	P	Q	R	S	T	U	V	W	X	Y	Z
1					2008 Budget	2008 Final	2009 Budget	2009 Final	2010 Budget	2010 Budget Revised	2011 Approved	2012 Projected	2013 Projected	2014 Projected	2015 Projected	Totals W- wide TMDL
53	Revenue															
54			Project Review Fees		65,000	19,500	40,000	26,500	27,000	25,000	35,000	37,500	40,000	40,000	40,000	
55			Water Monitoring - TRPD Co-op Agmt		2,600	3,525	2,600	3,630	3,500	3,500	4,000	4,500	5,000	5,000	5,000	
56			BMP Implementation		0	0	0	0	0	0	0	0	0	0	0	
57			WCA Fees		6,000	900	6,000	1,700	2,000	2,000	2,000	2,500	2,500	2,750	2,750	
58			Forfeited sureties		0	0	0	0	0	0	0	0	0	0	0	
59			Capital Project Funding		0	0	0	0	0	0	0	0	0	0	0	
60			Membership Dues		175,000	175,000	180,000	180,000	180,000	180,000	188,000	197,400	207,270	217,635	228,515	
61			Interest Income		7,500	7,708	12,000	1,426	2,000	2,000	1,500	1,500	1,500	1,500	1,500	
62			CWLA Grant		54,360	72,197	0	17,163	0	0	0	0	0	0	0	
63			Watershed-wide TMDL - MPCA		0	0	0	15,730	101,000	101,000	77,000	81,000	60,000	5,270	0	340,000
64			Miscellaneous Income		0		0	0	0	0	0	0	0	0	0	
66			Total Revenue		310,460	278,830	240,600	246,149	315,500	313,500	307,500	324,400	316,270	272,155	277,765	
67																
68			Op Fund Surplus (Deficit) To (From) Cash Reserves		39,155	41,070	35,710	28,802	87,200	66,700	57,150	53,050	39,980	22,695	135	
69																
70			Total Fund Balance, Beginning of Year			184,886		225,956								
71			Total Fund Balance, End of Year			225,956		254,758		188,058	130,908	77,858	37,878	15,183	15,048	
72			Encumbered Funds - WCA (accum) (cash)			41,378		45,650								
73			Total All Funds, including Escrows and Sureties			267,334		300,408								
74																
75																
76																
77																
78																
79																
80																
81			Summary of Watershed-wide TMDL					2009		2010	2011	2012	2013	2014		Total
82			Partner Contributions													
83			Minnesota Pollution Control Agency (line 63, above)					15,730		101,000	77,000	81,000	60,000	5,270		340,000
84			Three Rivers Park District contribution (in-kind)					25,000		50,000	50,000	50,000	50,000	50,000		275,000
85			Elm Creek Commission contribution (cash)													
86			cell R43/44 above					2,545								
87			cell Q43/44 minus cell R43/44 (encumbered)					7,455								
88			cells O50 plus Q50 (both encumbered)							30,000						
89			cells O38 (encumbered) plus T43								20,000					
90			cell T44									20,000				
91			cells U43/44 plus V43/44										20,000			
92			cells W43/44 plus X43/44											20,000		
93			TRPD / Commission Cooperative Agmt - Comm pay to TRPD (line 45 above)					16,500		101,000	77,000	81,000	58,000	6,500		340,000
94			Totals TMDL					35,770		80,000	70,000	70,000	68,000	71,230		395,000
95																
96			Anticipated costs per MPCA agreement incl inflation					45,000		96,000	98,000	100,000	87,000	35,000		461,000

Elm Creek Watershed Management Commission
Member Assessments - 2011 Approved Operating Budget

2009	2008 Taxable Market Value	2009 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	551,900,300	4.98%	8,964.35	-0.64%	111.11
Corcoran	828,217,000	7.47%	13,452.48	1.21%	720.68
Dayton	580,864,500	5.24%	9,434.81	-0.64%	697.33
Hassan	537,389,200	4.85%	8,728.65	-0.64%	376.66
Maple Grove	5,833,326,300	52.64%	94,748.98	-0.64%	-1,550.68
Medina	824,215,400	7.44%	13,387.48	-0.64%	1,938.06
Plymouth	650,196,100	5.87%	10,560.94	-0.64%	1,070.37
Rogers	1,275,791,400	11.51%	20,722.30	4.00%	1,636.47
Totals	11,081,900,200	100.00%	180,000.00	2.86%	5,000.00
2010	2009 Taxable Market Value	2010 Budget Share		Increase over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	523,805,500	4.78%	8,600.55	-4.06%	-363.8
Corcoran	772,067,800	7.04%	12,676.86	-5.77%	-775.62
Dayton	569,842,400	5.20%	9,356.45	-0.83%	-78.36
Hassan	506,127,000	4.62%	8,310.28	-4.79%	-418.37
Maple Grove	5,907,276,800	53.89%	96,993.70	2.37%	2,244.72
Medina	841,805,700	7.68%	13,821.91	3.25%	434.42
Plymouth	662,359,500	6.04%	10,875.52	2.98%	314.58
Rogers	1,179,384,700	10.76%	19,364.74	-6.55%	-1,357.56
Totals	10,962,669,400	100.00%	180,000.00	0.00%	0
2011	2010 Taxable Market Value	2011 Budget Share		Change over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	8,932.76	3.86%	332.21
Corcoran	704,789,600	6.85%	12,882.95	1.63%	206.09
Dayton	528,922,900	5.14%	9,668.26	3.33%	311.81
Hassan	406,303,500	3.95%	7,426.88	-10.63%	-883.40
Maple Grove	5,613,392,300	54.58%	102,608.03	5.79%	5,614.33
Medina	830,631,900	8.08%	15,183.24	9.85%	1,361.33
Plymouth	631,150,100	6.14%	11,536.89	6.08%	661.37
Rogers	1,081,067,600	10.51%	19,760.99	2.05%	396.25
Totals	10,284,943,500	100.00%	188,000.00	4.444%	7,999.99
2012 Projected	2010 Taxable Market Value	2012 Budget Share		Change over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	9,379.39	5.00%	446.64
Corcoran	704,789,600	6.85%	13,527.10	5.00%	644.15
Dayton	528,922,900	5.14%	10,151.67	5.00%	483.41
Hassan	406,303,500	3.95%	7,798.23	5.00%	371.34
Maple Grove	5,613,392,300	54.58%	107,738.43	5.00%	5,130.40
Medina	830,631,900	8.08%	15,942.41	5.00%	759.16
Plymouth	631,150,100	6.14%	12,113.73	5.00%	576.84
Rogers	1,081,067,600	10.51%	20,749.04	5.00%	988.05
Totals	10,284,943,500	100.00%	197,400.00	5.00%	9,400.00
2013 Projected	2010 Taxable Market Value	2013 Budget Share		Change over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	9,848.36	5.00%	468.97
Corcoran	704,789,600	6.85%	14,203.46	5.00%	676.36
Dayton	528,922,900	5.14%	10,659.26	5.00%	507.58
Hassan	406,303,500	3.95%	8,188.14	5.00%	389.91
Maple Grove	5,613,392,300	54.58%	113,125.35	5.00%	5,386.92
Medina	830,631,900	8.08%	16,739.53	5.00%	797.12
Plymouth	631,150,100	6.14%	12,719.42	5.00%	605.69
Rogers	1,081,067,600	10.51%	21,786.50	5.00%	1,037.45
Totals	10,284,943,500	100.00%	207,270.00	5.00%	9,870.00
2014 Projected	2010 Taxable Market Value	2014 Budget Share		Change over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	10,340.85	5.00%	492.49
Corcoran	704,789,600	6.85%	14,913.73	5.00%	710.28
Dayton	528,922,900	5.14%	11,192.30	5.00%	533.04
Hassan	406,303,500	3.95%	8,597.60	5.00%	409.47
Maple Grove	5,613,392,300	54.58%	118,782.44	5.00%	5,657.09
Medina	830,631,900	8.08%	17,576.62	5.00%	837.10
Plymouth	631,150,100	6.14%	13,355.48	5.00%	636.06
Rogers	1,081,067,600	10.51%	22,875.98	5.00%	1,089.48
Totals	10,284,943,500	100.00%	217,635.00	5.00%	10,365.00
2015 Projected	2010 Taxable Market Value	2015 Budget Share		Change over Prev Year	
		%age	Dollars	%age	Dollars
Champlin	488,685,600	4.75%	10,857.81	5.00%	516.96
Corcoran	704,789,600	6.85%	15,659.30	5.00%	745.57
Dayton	528,922,900	5.14%	11,751.82	5.00%	559.52
Hassan	406,303,500	3.95%	9,027.41	5.00%	429.81
Maple Grove	5,613,392,300	54.58%	124,720.60	5.00%	5,938.17
Medina	830,631,900	8.08%	18,455.31	5.00%	878.69
Plymouth	631,150,100	6.14%	14,023.15	5.00%	667.67
Rogers	1,081,067,600	10.51%	24,019.59	5.00%	1,143.61
Totals	10,284,943,500	100.00%	228,515.00	5.00%	10,880.00

**Elm Creek Watershed Management Commission
Treasurer's Report**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			2011 Budget	Jan 2011	Feb 2011	Mar 2011	April 2011	May 2011	June 2011	July 2011	Aug 2011	Sept 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	2011 Y/E A/Es	2011 Budget YTD
2	EXPENSES																	
3	Administrative		78,500	6,451.44	6,556.93	8,025.96	7,612.05	6,968.10	6,651.04	6,039.70	5,875.34	6,898.03	6,582.47	6,543.10	7,159.17	7,307.99		82,219.88
4	Website		7,500	87.50	128.50	454.00	108.00	62.50	213.00	464.00	117.00	100.65	83.50	517.50	916.50	181.50		3,346.65
5	Legal		1,500			70.00				42.00	923.84	43.50		81.00	17.00			1,177.34
6	Audit		5,000					4,500.00										4,500.00
7	Insurance		4,000		99.00		3,363.00								-588.00			2,874.00
8	Miscellaneous		1,000															0.00
9	Project Reviews	HCES	63,000												47,600.00			47,600.00
10	Project Reviews	Consult	7,000	934.50												513.85		513.85
11	Project Reviews	Admin	10,000	412.83	169.64	309.34	483.12	346.77	450.92	652.22	774.49	699.01	660.97	675.41	1,018.08	408.57		6,648.54
12	WCA-Technical	HCES	9,250												2,000.00			2,000.00
13	WCA	Admin	3,000	245.76	168.02	219.13		40.29	161.07	73.59	1.22	82.95	98.12	201.45	218.44	348.37		1,612.65
14	WCA	Legal	500															0.00
15	Stream Monitoring *		17,500				6,324.00	see note on line 45				9.64		17,670.00				17,679.64
16	Rain Gauge		150	8.15	10.18	10.18	10.18	10.18	10.98	11.68	14.53	14.62	13.83	12.45	9.73	10.41		136.69
17	Rain Gauge Network		1,000															0.00
18	Lakes Monitoring - CAMP		1,650	1,030.00												1,100.00		1,100.00
19	Lakes Monitoring - TRPD		3,400													3,400.00		3,400.00
20	Invertebrate Monitoring		6,000												6,000.00			6,000.00
21	Wetland Monitoring		4,000												4,000.00			4,000.00
22	Stream Health (SHEP)		6,000												6,000.00			6,000.00
23	Education																	0.00
24	Education		4,500	60.00	683.83	1,108.67	1,441.51	714.54	404.56	1,748.49	425.32		138.87	-335.42	770.53	82.50		7,243.40
25	Education - 2012			988.92												60.00		0.00
26	Rain Garden Workshops		2,500				1,250.00									2,000.00	-1,250.00	2,000.00
27	2011 Workshops		3,000	279.50	212.14	152.03	675.03		1,149.25					532.05				3,000.00
28	Education Grants		2,000						664.93						1,087.49			1,752.42
29	Special Projects																	0.00
30	Special Projects - General		5,000															0.00
31	Upper Miss Bacteria TMDL		100															0.00
33	Activities - W-wide TMDL		0															0.00
34	Watershed-wide TMDL																	0.00
35	Commission Contribution		10,000															0.00
36	Admin		2,000	412.88	1,047.98		624.36	576.37	408.78	536.64	1,171.00	593.01	704.55	591.19	262.97	171.94		6,688.79
37	TRPD Coop Agmt		77,000		8,670.00				20,410.00			28,715.00			7,170.00		4,890.00	61,185.00
38	Plan Amend/Third Gen Plan		15,000	872.15	1,211.65	1,531.56	599.11	316.47	586.36	635.87		122.42	55.00	198.00		524.81		5,781.25
39	CIPS/Studies/Project ID		10,000															0.00
40	Contingency		3,600															0.00
41	To Fund Balance																	0.00
42	TOTAL - Month			11,783.63	18,957.87	11,880.87	22,490.36	13,535.22	31,110.89	10,204.19	9,312.38	37,269.19	8,337.31	26,686.73	83,641.91	16,109.94		278,460.10
43	TOTAL		364,650.00	23,567.26	42,525.13	54,406.00	76,896.36	90,431.58	121,542.47	131,746.66	141,059.04	178,328.23	186,665.54	213,352.27	296,994.18	313,104.12		
44																		
45	* Line 15 - In 2010 amount in accounts payable was stated as \$10,508. Commission was invoiced for the reduced amount of \$6,324. \$17670 is the total amount of the 2011 USGS contract. (G/L Acct No 55100)																	
46																		
47																		

Elm Creek Watershed Management Commission
Treasurer's Report

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			2011 Budget	Jan 2011	Feb 2011	Mar 2011	April 2011	May 2011	June 2011	July 2011	Aug 2011	Sept 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	2011 Y/E AJEs	2011 Budget YTD
48	INCOME																	
49	<i>From Fund Balance</i>		57,150.00															
50	Member Dues		188,000.00	49,667.07	17,978.37		51,304.02			69,050.53						114,899.97		187,999.99
51	Water Qlty Monitoring		4,000.00												4,262.69			4,262.69
52	Misc Income																	0.00
53																		
54	Project Review Fees		35,000.00		300.00	8,050.00	3,050.00	15,350.00	5,100.00	3,450.00	550.00	1,600.00	1,600.00	500.00	100.00			39,350.00
55	Return Project Fee						-500.00											-500.00
56	Project Review Fee - 2010																	0.00
57	WCA Fees		2,000.00				150.00	250.00			400.00		800.00		300.00			1,900.00
58	WCA Fee - 2010 less bank charge						-47.00											-47.00
59	WCA Fee - 2010						300.00											0.00
60	Return WCA Fee																	0.00
61	WCA-Reimburse Surety					1,461.79											2,137.95	3,599.74
62	CWLA Grant																	0.00
63	Watershed-wide TMDL		77,000.00		8,670.00					20,410.00	28,715.00				7,170.00		4,890.00	61,185.00
64	Interest/Dividends Earned		1,500.00	5.42	4.89	5.33	5.49	5.89	5.43	6.21	6.56	6.33	6.20	6.00	5.91			69.66
65	Total - Month			49,672.49	26,953.26	9,517.12	54,262.51	15,605.89	5,105.43	92,916.74	29,671.56	1,606.33	2,406.20	506.00	11,838.60	114,899.97	0.00	297,820.08
66	TOTAL - Year		364,650.00	49,672.49	76,625.75	86,142.87	140,405.38	156,011.27	161,116.70	254,033.44	283,705.00	285,311.33	287,717.53	288,223.53	300,062.13	414,962.10		
67	CASH SUMMARY																	
68	Checking																	
69	4M Fund		384,211.48	420,890.34	426,111.40	423,747.65	455,519.80	456,717.41	430,711.95	513,335.40	532,448.58	496,785.72	490,198.73	463,487.90	391,466.09	487,359.43		
70	Cash on Hand			420,890.34	426,111.40	423,747.65	455,519.80	456,717.41	430,711.95	513,335.40	532,448.58	496,785.72	490,198.73	463,487.90	391,466.09	487,359.43		
71	CASH SURETIES HELD																	Activity CY
72	WCA Escrows Received																	0.00
73	WCA Escrow Reduced			-1,210.00	-2,774.33			-873.06		-89.10	-1,246.00		-655.88	-530.10	-218.50	-2,896.69	-793.38	-10,077.04
74	Total Cash Sureties Held		41,172.00	39,962.00	37,187.67	37,187.67	37,187.67	36,314.61	36,314.61	36,225.51	34,979.51	34,979.51	34,323.63	33,793.53	33,575.03	30,678.34	29,884.96	

ELM CREEK WATERSHED
MANAGEMENT COMMISSION

Annual Financial Report
Year Ended
December 31, 2011

ELM CREEK WATERSHED MANAGEMENT COMMISSION

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INDEPENDENT AUDITORS' REPORT

Board of Directors
Elm Creek Watershed Management Commission
Plymouth, Minnesota

We have audited the accompanying financial statements of the governmental activities and major fund of the Elm Creek Watershed Management Commission (the Commission), as of and for the year ended December 31, 2011, which collectively comprise the Commission's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year partial comparative information has been derived from the Commission's financial statements for the year ended December 31, 2010 and, in our report dated March 28, 2011, we expressed an unqualified opinion on the financial statements of the governmental activities and major fund.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall basic financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the governmental activities and major fund of the Commission as of December 31, 2011, and the respective changes in the financial position thereof, and the budgetary comparison for the General Fund for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The financial statements include prior year partial comparative information, which does not include all of the information required in a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Commission's financial statements for the year ended December 31, 2010, from which such information was derived.

In accordance with *Government Auditing Standards*, we have also issued our report dated April 2, 2012, on our consideration of the Commission's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis is not a required part of the basic financial statements, but is supplementary information required by accounting principles generally accepted in the United States of America. The Commission has not presented the MD&A that is necessary to supplement, although not be a part of, the basic financial statements.

Johnson + Company, Ltd.

April 2, 2012



BASIC FINANCIAL STATEMENTS

Elm Creek Watershed Management Commission

Statement of Net Assets and Balance Sheet

General Fund

December 31, 2011

(with Comparative Actual Amounts as of December 31, 2010)

	Governmental Activities	
	2011	2010
Assets		
Investments	\$ 386,084	\$ 374,534
Accounts receivable	7,028	13,566
Total assets	<u>\$ 393,112</u>	<u>\$ 388,100</u>
Liabilities and Net Assets		
Liabilities		
Accounts payable	\$ 24,620	\$ 27,640
Fund balance/net assets		
Restricted fund balance/net assets	29,885	39,962
Unrestricted/unassigned fund balance/net assets	338,607	320,498
Total net assets	<u>368,492</u>	<u>360,460</u>
Total liabilities and fund balance/net assets	<u>\$ 393,112</u>	<u>\$ 388,100</u>

Elm Creek Watershed Management Commission

Statement of Activities and Revenue, Expenditures,
and Changes in Fund Balance/Net Assets
Budget and Actual

General Fund

Year Ended December 31, 2011

(with Comparative Actual Amounts for the Year Ended December 31, 2010)

	Governmental Activities			
	2011		2010	
	Original and Final Budget	(Audited)	Over (Under)	(Audited)
Program/project expenditures/expenses				
General government				
Invertebrate monitoring	\$ 6,000	\$ 6,000	\$ -	\$ 6,000
Lakes monitoring	5,050	4,500	(550)	4,430
Stream monitoring	17,500	17,680	180	14,691
Rain gauge	150	137	(13)	674
Rain Network	1,000	-	(1,000)	-
Wetland monitoring	4,000	4,000	-	3,200
Project reviews	80,000	54,762	(25,238)	59,350
Watershed-wide TMDL	89,000	67,874	(21,126)	85,262
Miss Bacteria TMDL	-	-	-	23
Second generation plan amendment	15,000	5,781	(9,219)	11,243
Special projects	5,100	-	(5,100)	-
Stream health evaluation	6,000	6,000	-	6,000
CIPs and studies	10,000	-	(10,000)	-
Watershed management plan	-	-	-	-
CWLA grant	-	-	-	-
WCA - administration	3,000	1,613	(1,387)	1,051
WCA - legal	500	-	(500)	-
WCA - technical services	9,250	2,000	(7,250)	1,056
Total program/project expenditures/expenses	251,550	170,347	(81,203)	192,980
Program/project revenue				
General government				
Membership dues	188,000	188,000	-	180,000
WCA administration fees	2,000	1,900	(100)	1,000
WCA Reimburse Surety	-	3,600	-	-
Project reviews	35,000	38,850	3,850	51,050
Water monitoring - lakes and streams	4,000	4,263	263	4,296
Watershed-wide TMDL	77,000	61,185	(15,815)	118,127
CWLA grant	-	-	-	-
Total program/project revenue	306,000	297,798	(11,802)	354,473
Net program/project revenue	54,450	127,451	69,401	161,493
General expenditures/expenses				
Administration	78,500	82,220	3,720	72,157
Insurance	4,000	2,874	(1,126)	2,959
Legal and audit services	6,500	5,677	(823)	5,032
Web site	7,500	3,347	(4,153)	4,425
Education and training	12,000	15,246	3,246	11,053
Contingency	3,600	-	(3,600)	-
Miscellaneous	1,000	48	(952)	300
Total general expenditures/expenses	113,100	109,412	(3,688)	95,926
General revenue				
Interest and dividend income	1,500	70	(1,430)	172
Net general revenue (expenditures/expenses)	(111,600)	(109,342)	2,258	(95,754)
Change in net assets	\$ (57,150)	18,109	\$ 71,659	65,739
Net assets - Unrestricted/unassigned				
Net assets - beginning of year		320,498		254,759
Net assets - end of year		\$ 338,607		\$ 320,498

Elm Creek Watershed Management Commission

Notes to Financial Statements December 31, 2011

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

The Elm Creek Watershed Management Commission is formed under a Joint Powers Agreement, as amended according to Minnesota Statutes Sections 103B.201 through 103B.255 and Minnesota Rules Chapter 8410 relating to Metropolitan Area Local Water Management and its reporting requirements. Elm Creek Watershed Management Commission was established in February, 1973 to protect and manage the natural resources of the Elm Creek Watershed.

The Commission is considered a governmental unit, but is not a component unit of any of its members. As a governmental unit, the Commission is exempt from federal and state income taxes.

Reporting Entity

A joint venture is a legal entity resulting from a contractual agreement that is owned, operated, or governed by two or more participants as a separate and specific activity subject to joint control, in which the participants retain either an ongoing financial interest or an ongoing financial responsibility. The Commission is considered a joint venture.

As required by accounting principles generally accepted in the United States of America, these financial statements include the Commission (the primary government) and its component units. Component units are legally separate entities for which the primary government is financially accountable, or for which the exclusion of the component unit would render the financial statements of the primary government misleading. The criteria used to determine if the primary government is financially accountable for a component unit include whether or not the primary government appoints the voting majority of the potential component's unit board, is able to impose its will on the potential component unit, is in a relationship of financial benefit or burden with the potential component unit, or is fiscally depended upon by the potential component unit. Based on these criteria, there are no component units required to be included in the Commission's financial statements.

Government-Wide and Fund Financial Statement Presentation

The government-wide financial statements (the Statement of Net Assets and the Statement of Activities) report information about the reporting government as a whole. These statements include all the financial activities of the Commission. The Statement of Activities demonstrates the degree to which the direct expenses of a given function are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or segment, and grants or contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Other internally directed revenues are reported instead as general revenues.

Measurement Focus, Basis of Accounting and Financial Statement Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as eligibility requirements imposed by the provider have been met.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Measurement Focus, Basis of Accounting and Financial Statement Presentation (Continued)

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the Commission considers revenue to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting.

Fund Financial Statement Presentation

The accounts of the Commission are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenue, and expenditures. Resources are allocated to, and accounted for in individual funds based on the purposes for which they are to be spent and the means by which spending activities are controlled. The resources of the Commission are accounted for in one major fund:

- **General Fund (Governmental Fund Type)** - This fund is used to receive dues and miscellaneous items which may be disbursed for any and all purposes authorized by the bylaws of the Commission.

Typically, separate fund financial statements are provided for Governmental Funds. However, due to the simplicity of the Commission's operation, the Governmental Fund financial statements have been combined with the government-wide statements.

Budgets

The amounts shown in the financial statements as "budget" represent the budget amounts based on the modified accrual basis of accounting. A budget for the General Fund is adopted annually by the Commission. Appropriations lapse at year-end and encumbrance accounting is not used. Budgetary control is at the fund level.

Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Members' contributions

Members' contributions are calculated based on the member's share of the taxable market value of all real property within the watershed to the total market value of all real property in the watershed.

Capital assets

The Commission follows the policy of expensing any supplies or small equipment at the time of purchase. The Commission currently has no capitalized assets.

Receivables

The Commission utilizes an allowance for uncollectible accounts to value its receivables; however, it considers all of its receivables to be collectible as of December 31, 2011 and 2010.

Net assets

Net assets represent the difference between assets and liabilities in the government-wide financial statements.

Change in Accounting Principle

For the year ended December 31, 2011, the Commission has implemented GASB Statement No. 54, "Fund Balance Reporting and Governmental Fund Type Definitions." The objective of this statement is to enhance the usefulness of fund balance information by providing clearer fund balance classifications that can be more consistently applied and by clarifying the existing governmental fund type definitions. This statement establishes fund balance classifications that comprise a hierarchy based primarily on the extent to which a government is bound to observe constraints imposed upon the use of the resources reported in governmental funds. The Commission is implementing this standard retroactively, meaning prior year fund balance classifications have been restated. More information on these fund balance classifications is included elsewhere in these notes.

Prior Period Comparative Financial Information/Reclassification

The basic financial statements include certain prior year partial comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Commission's financial statements for the year ended December 31, 2010, from which the summarized information was derived. Also, certain amounts presented in the prior year data have been reclassified in order to be consistent with the current year's presentation.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 2 - ASSETS, LIABILITIES AND NET ASSETS

A. Deposits

In accordance with applicable Minnesota Statutes, the Commission maintains a checking account authorized by the Commission.

The following is considered the most significant risk associated with deposits:

Custodial Credit Risk - In the case of deposits, this is the risk that in the event of a bank failure, the Commission's deposits may be lost.

Minnesota Statutes require that all deposits be protected by federal deposit insurance, corporate surety bond, or collateral. The market value of collateral pledged must equal 110 percent of the deposits not covered by federal deposit insurance or corporate surety bonds. Authorized collateral includes treasury bills, notes, and bonds; issues of U.S. government agencies; general obligations rated "A" or better; revenue obligations rated "AA" or better; irrevocable standard letters of credit issued by the Federal Home Loan Bank; and certificates of deposit. Minnesota Statutes require that securities pledged as collateral be held in safekeeping in a restricted account at the Federal Reserve Bank or in an account at a trust department of a commercial bank or other financial institution that is not owned or controlled by the financial institution furnishing the collateral. The Commission has no additional deposit policies addressing custodial credit risk.

At year-end, the Commission had no funds held in its bank account. All funds were transferred to their MBIA investment account. (see below)

B. Investments

At December 31, 2011 and 2010, the Commission held \$386,084 and \$374,534 (approximate cost and fair market value), respectively, in investments with MBIA in Minnesota 4M Holdings.

The 4M fund is an external investment pool not registered with the Securities Exchange Commission (SEC) that follows the same regulatory rules of the SEC under rule 2a7. The 4M Fund is a customized cash management and investment program for Minnesota public funds that is allowable under Minnesota Statutes. The fair value of the position in the pool is the same as the value of the pool shares.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 2 - ASSETS, LIABILITIES AND NET ASSETS (CONTINUED)

Investments are subject to various risks, the following of which are considered the most significant:

Custodial Credit Risk - For investments, this is the risk that in the event of a failure of the counterparty to an investment transaction (typically a broker-dealer) the Commission would not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Commission does not have a formal investment policy addressing this risk, but typically limits its exposure by purchasing insured or registered investments, or by the control of who holds the securities.

Credit Risk - This is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Minnesota Statutes limit the Commission's investments to direct obligations or obligations guaranteed by the United States or its agencies; shares of investment companies registered under the Federal Investment Company Act of 1940 that receive the highest credit rating, are rated in one of the two highest rating categories by a statistical rating agency, and all of the investments have a final maturity of 13 months or less; general obligations rated "A" or better; revenue obligations rated "AA" or better; general obligations of the Minnesota Housing Finance Agency rated "A" or better; bankers' acceptances of United States banks eligible for purchase by the Federal Reserve System; commercial paper issued by United States corporations or their Canadian subsidiaries, rated of the highest quality category by at least two nationally recognized rating agencies, and maturing in 270 days or less; Guaranteed Investment Contracts guaranteed by a United States commercial bank, domestic branch of a foreign bank, or a United States insurance company, and with a credit quality in one of the top two highest categories; repurchase or reverse purchase agreements and securities lending agreements with financial institutions qualified as a "depository" by the government entity, with banks that are members of the Federal Reserve System with capitalization exceeding \$10,000,000; that are a primary reporting dealer in U.S. government securities to the Federal Reserve Bank of New York; or certain Minnesota securities broker-dealers. The Commission's investment policies do not further address credit risk.

Concentration Risk - This is the risk associated with investing a significant portion of the Commission's investment (considered 5 percent or more) in the securities of a single issuer, excluding U.S. guaranteed investments (such as treasuries), investment pools, and mutual funds. The Commission does not have an investment policy limiting the concentration of investments.

Interest Rate Risk - This is the risk of potential variability in the fair value of fixed rate investments resulting from changes in interest rates (the longer the period for which an interest rate is fixed, the greater the risk). The Commission does not have an investment policy limiting the duration of investments.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 3 - FUND EQUITY

The following fund balance classifications describe the relative strength of the spending constraints placed on the purposes for which resources can be used:

- Nonspendable fund balance - amounts that are not in a spendable form (such as inventory) or are required to be maintained intact;
- Restricted fund balance - amounts constrained to specific purposes by their providers (such as grantors, bondholders, and higher levels of government), through constitutional provisions, or by enabling legislation;
- Committed fund balance - amounts constrained to specific purposes by a government itself, using its highest level of decision-making authority; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest level action to remove or change the constraint;
- Assigned fund balance - amounts a government intends to use for a specific purpose; intent can be expressed by the governing body or by an official or body to which the governing body delegates the authority;
- Unassigned fund balance - amounts that are available for any purpose; these amounts are reported only in the general fund.

The Commission establishes (and modifies or rescinds) fund balance commitments by passage of an ordinance or resolution. This is typically done through adoption and amendment of the budget. A fund balance commitment is further indicated in the budget document as a designation or commitment of the fund. Assigned fund balance is established by the Commission through adoption or amendment of the budget as intended for specific purpose.

Restricted fund balance is comprised of the following:

The Monitoring Guarantee Restricted Funds are for wetland mitigation projects. The initial monitoring fee is set by the commission per project and is to be reduced over a five year period provided the project meets the requirements of the mitigation.

The Financial Guarantee Restricted Funds are received as a guarantee that the mitigation will perform as required. Upon completion, and if the project meets the qualified plan requirements, these financial guarantees are refunded.

The Administrative Guarantee Restricted Funds are received as a guarantee that the project administration fees are paid. The restricted amount is reduced as project-related administrative expenses arise. Any residual funds not used are refunded upon completion of the project.

NOTE 4 - COMMITMENTS AND CONTRACTS

Minnesota Pollution Control Agency (MPCA) - Watershed-wide TMDL Project

During 2009, the MPCA contracted the Commission to conduct a water monitoring program of the Elm Creek watershed for a cost not to exceed \$35,000. This contract was amended twice to add additional funds of \$148,000 for phase II and \$100,000 for phase III. The Commission earned \$61,185 and \$118,127, during the years ended December 31, 2011 and 2010, respectively.

Elm Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2011

NOTE 5 - MEMBERS' DUES

Dues received from members were as follows:

	For Year Ended December 31			
	2011		2010	
	Amount	Percentage	Amount	Percentage
Champlin	\$ 8,933	4.75 %	\$ 8,601	4.78 %
Corcoran	12,883	6.85	12,677	7.04
Dayton	9,668	5.14	9,356	5.20
Hassan	7,427	3.95	8,310	4.62
Maple Grove	102,608	54.58	96,994	53.89
Medina	15,183	8.08	13,822	7.68
Plymouth	11,537	6.14	10,875	6.04
Rogers	19,761	10.51	19,365	10.76
Total	<u>\$188,000</u>	<u>100.00 %</u>	<u>\$180,000</u>	<u>100.00 %</u>

OTHER REQUIRED REPORTS

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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL

Board of Directors
Elm Creek Watershed Management Commission
Plymouth, MN

We have audited the financial statements of the governmental activities and the major fund of the Elm Creek Watershed Management Commission as of and for the period ended December 31, 2011, which collectively comprise the Commission's basic financial statements, and have issued our report thereon dated April 2, 2012. We conducted our audit in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Commission is responsible for establishing and maintaining effective internal control over financial reporting.

In planning and performing our audit of the financial statements of the Elm Creek Watershed Management Commission as of and for the year ended December 31, 2011, in accordance with auditing standards generally accepted in the United States of America, we considered the Commission's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of the Commission's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that material misstatement of the financial statements will not be prevented or detected and corrected on a timely basis.

A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, we identified the following deficiencies in internal control that we consider to be significant deficiencies:

Because of the limited size of your office staff, your organization has limited segregation of duties. A good system of internal accounting control contemplates an adequate segregation of duties so that no one individual handles a transaction from inception to completion. While we recognize that your organization is not large enough to permit an adequate segregation of duties in all respects, it is important that you be aware of the condition.

This communication is intended solely for the information and use of the Board of Directors to the Commission, its member cities, the state of Minnesota, and is not intended to be and should not be used by anyone other than these specified parties.

Johnson & Company, Ltd.

April 2, 2012

-11-



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INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH MINNESOTA STATE LAWS AND REGULATIONS

Board of Directors
Elm Creek Watershed Management Commission
Plymouth, Minnesota

We have audited the financial statements of the governmental activities and major fund of the Elm Creek Watershed Management Commission (the Commission) as of and for the year ended December 31, 2011, which collectively comprise the Commission's basic financial statements, and have issued our report thereon April 2, 2012.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and the provisions of the *Minnesota Legal Compliance Audit Guide for Local Governments* promulgated by the State Auditor pursuant to Minnesota Statute 6.65. Accordingly, the audit included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The *Minnesota Legal Compliance Audit Guide for Local Governments* covers six main categories of compliance to be tested: contracting and bidding, deposits and investments, conflicts of interest, public indebtedness, claims and disbursements, and miscellaneous provisions. Our study included all of the applicable categories.

The results of our tests indicate that for the items tested the Commission complied with the material terms and conditions of applicable legal provisions.

This report is intended solely for the information and use of the Commission, its member cities, the state of Minnesota, and management of the Commission and is not intended to be, and should not be, used by anyone other than these specified parties.

Johnson & Company, Ltd.

April 2, 2012

