

Prior Lake-Spring Lake Watershed District

Annual Report

2012

Mission: To manage & preserve the water resources of the Prior Lake-Spring Lake Watershed District to the best of our ability using input from our communities, sound engineering practices, and our ability to efficiently fund beneficial projects which transcend political jurisdictions.



TABLE OF CONTENTS

Introduction	3
About the District	3
Background	3
Board of Managers	3
Citizen Advisory Committee	4
Staff	5
Consulting Services	5
Water Resources Management Plan	6
Assessment of 2012 Work Plan / CIP	7
Innovative Water Management and Demonstration Projects	7
Education and Outreach Program	7
District Monitoring Program	8
BMP and Conservation Easement Inventory and Inspection	10
Wetland Functions and Values and High Value Natural Areas Protection	10
Prior Lake Outlet Structure	10
PLOC Restoration and Maintenance	11
Outlet Channel Monitoring	11
Storage and Infiltration Projects	11
TMDL Implementation Plan and projects	11
Lower Prior Lake Retrofit BMP Feasibility Study	12
TMDL Implementation Plan and projects	12
Highway 13 Wetland, $FeCl_3$ System, and Desiltation Basin Operation and Maintenance	12
Aquatic Vegetation Surveys and Management	12
Rough Fish Surveys and Management	12
Grant Match for Land or Easement Acquisition	12
Rules and Standards Revision	13
Permitting, Plan Review and Compliance	13
Planning and Program Development	13
Research	13
Residential Cost Share Program	13
District Rules and Permits	14

Rules Update	14
Permit Activity	14
Status of Local Plan Adoption and Implementation	14
Monitoring	14
Financial Report	16
2012 Financial Summary	16
Grants	17
2013 Work Plan / CIP	18
Subclass 610 – Planning, Program Management, and Development	18
Subclass 617 – In-Lake Management	18
Subclass 620 – Iron Chloride System	18
Subclass 630 – Land Management	18
Subclass 640 – Education and Outreach	19
Subclass 650 – Innovative Water Management	19
Subclass 655 – Monitoring and Data Acquisition	19
Subclass 660 – Permitting and Compliance	19
Subclass 665 – Lake Management Plans and TMDLs	19
Subclass 720 – Prior Lake Outlet Channel	19
Subclass 725 – Prior Lake Outlet Structure	19
Subclass 740 – Wetland Reserve Enhancement Program	19
Subclass 810-819 – Prior Lake Outlet Channel Construction	19
Subclass 830-839 – Prior Lake Outlet Channel Maintenance	19

INTRODUCTION

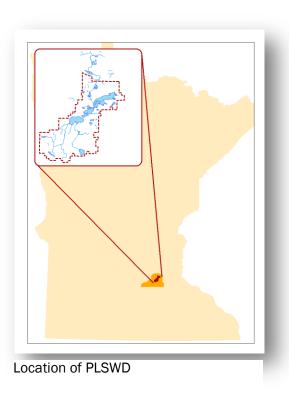
This report has been prepared by the Prior Lake-Spring Lake Watershed District (PLSLWD, or District) and details the activities of the District through the calendar year 2012. The report will focus on the District's program and project accomplishments relative to the approved Capital Improvement Plan established in the 2010 PLSLWD Water Resources Management Plan, and annual work plan. Annual reporting requirements listed in Minnesota Rules Chapter 8410.0150, Subpart 3 will also be included in this report.

ABOUT THE DISTRICT

BACKGROUND

The Prior Lake-Spring Lake Watershed District was established on March 4, 1970 by order of the Minnesota Water Resources Board (MWRB) under the authority of the Minnesota Watershed Act (Minnesota Statutes, Chapter 112). The order was in response to a petition filed by resident landowners within the watershed on June 24, 1969. This citizen petition sought establishment of the District for the purposes of wisely managing and conserving the waters and natural resources of the watershed.

The PLSLWD is approximately 42 square miles in size and is located in north central Scott County, Minnesota, encompassing parts of the cities of Prior Lake, Shakopee, and Savage and parts of Sand Creek and Spring Lake Townships. In addition, a portion of the Shakopee Mdewakanton Sioux Community tribal lands are located within the District.



BOARD OF MANAGERS

The PLSLWD is administered by a five-person Board of Managers (Board) appointed by the Scott County Commissioners. All of the District's policies, goals, and accomplishments are directed by the citizens who serve on the Board. The Board of Managers meets the second Tuesday of the month at 3:00 PM at the Prior Lake City Hall, located at 4646 Dakota St. SE, Prior Lake, MN 55372. Meeting notices, agendas and approved minutes are available on the District website at www.plslwd.org/meetings.php.

Board members serving during the calendar year 2012 are listed below.

Craig Gontarek

President (until 8/13/2012) Term: 3/3/2009-3/2/2012 Resides in Prior Lake

15721 Island View Road Prior Lake, MN 55372

Greg Aamodt

Treasurer Term: 6/12/2010-2/11/2013 Resides in Prior Lake

15221 Wilds Parkway NW Prior Lake, MN 55372 William Kallberg

Vice President (until 8/13/2012) President (beginning 8/13/2012) Term: 3/3/2010-3/2/2013 Resides in Spring Lake Township

2550 South Shore Drive Prior Lake, MN 55372

Marianne Breitbach

Secretary

Term: 8/13/2012 - 3/2/2015 Resides in Prior Lake

14890 Pixie Point Circle SE Prior Lake, MN 55372 William Schmokel

Secretary (until 8/13/2012) Vice President (beginning 8/13/2012)

Term: 3/3/2010-3/2/2013 Resides in Prior Lake

4151 Grainwood Circle NE Prior Lake, MN 55372

Bruce Thorsen Manager

Term: 6/26/2011-6/25/2014 Resides in Spring Lake Township

PO Box 1264

Prior Lake, MN 55372

CITIZEN ADVISORY COMMITTEE

The Prior Lake-Spring Lake Watershed District formalized its Citizen Advisory Committee (CAC) in 2011. The CAC consists of residents who provide input and recommendations to the Board on projects, reports, prioritization and act as the primary interface for the Board to integrate the current issues of concern of the local citizens. Christian Morkeberg became a new member in 2012 and replaced Bruce Thorsen. The CAC meets monthly on the last Thursday of the month at 6:30pm at the Prior Lake City Hall, located at 4646 Dakota St. SE, Prior Lake, MN 55372.

Citizen Advisory Committee members that served during the calendar year 2012 are listed below.

Paul Krueger

Resides in Spring Lake Twp 17746 Fairlawn Avenue Prior Lake, MN 55372

Kim Silvernagel

Resides in Prior Lake 3152 Butternut Circle Prior Lake, MN

Jim Weninger

Resides in Spring Lake Twp 2591 Spring Lake Rd SW Shakopee, MN 55379 Steve Pany

Resides in Prior Lake 5561 Cedarwood Street NE Prior Lake, MN 55372

Christian Morkeberg

Resides in Spring Lake Twp 17556 Vergus Avenue Jordan, MN 55352 Larry Rundell

Resides in Prior Lake 15096 Fish Point Road Prior Lake, MN 55372

Roger Wahl

Resides in Prior Lake 16510 Inguadona Beach Prior Lake MN 55372

STAFF

Day to day operations of the Prior Lake-Spring Lake Watershed District are managed by a District Administrator and staff. All staff can be contacted through the main District phone number, 952-447-4166, or at the District Office, 14070 Commerce Avenue NE, Suite 300, Prior Lake, MN 55372. Staff throughout all or part of calendar year 2012 are listed below.



2012 Staff, Front Row: Emily Javens, Meghan Jackson, Mike Kinney. Back Row: Nat Kale, Jaime Rockney, Amy Tucci. Not Pictured: Stacy Sass and Shawn Tracy.

Michael Kinney* District Administrator Amy Tucci* Administrative Assistant Emily Javens* Watershed Engineer

Nat Kale* Watershed Planner Shawn Tracy Watershed Ecologist Meghan Jackson* District Outreach Specialist

Stacy Sass

Jaime Rockney*

Water Resources Technician Water Resources Specialist

CONSULTING SERVICES

Solicitation for consulting services for 2012 and 2013 were made in September and October, 2011. After review of submittals, at its December 13, 2011 meeting, the District Board elected to maintain the existing consulting firms for 2012 and 2013.

Abdo, Eick and Meyers, LLP

Audit Services

Phone: 952-835-9090 www.aemcpas.com

Blue Water Science

Phone: 651-690-9602

Messerli and Schadow, PLLP **Accounting Services**

Phone: 952-927-8350 www.messerli-schadow.com **Ecological Services**

Smith Partners, PLLP Legal Services

Phone: 612-344-1400 www.smithpartners.com Emmons and Olivier Resources,

Inc

Engineering Services Phone: 651-770-8448 www.eorinc.com

^{*}Current staff as of Dec 31, 2012

WATER RESOURCES MANAGEMENT PLAN

The Minnesota Board of Water and Soil Resources (BWSR) approved the District's third generation Water Resources Management Plan (WRMP) on June 23, 2010 and the District Board adopted the plan at its July 13, 2010 meeting.

In 2012, a minor WRMP plan amendment was approved by the Board. The Minnesota Pollution Control Agency (MPCA) would not renew the ferric chloride (FeCl $_3$) system's NPDES permit. The FeCl $_3$ system was designed to decrease the amount of phosphorus entering into Spring Lake. FeCl $_3$ was injected into the stream, which would bind to phosphorus and allow the particles to settle out in a desiltation basin located downstream of the injection site, and upstream of Spring Lake. Because the system injected FeCl $_3$ solution directly into Class 2b waters of the state, a modification was needed. The modification was made to the FeCl $_3$ design in order to meet MPCA requirements by injecting FeCl $_3$ directly into the desiltation basin, which is not considered Class 2 water. The plan amendment was approved in order to accommodate the need to proceed with the design and subsequent construction of the modifications.

A copy of the WRMP is available electronically on the District website or by request, or in hard copy format at the District office. The WRMP lists several specific goals that guide the District's planning and management functions, as well as provides the basis for the District's policies, standards and rules. The goals are as follows:

- 1. To minimize new discharge of stormwater from the District.
- 2. To protect the District's rights and capacity of the Prior Lake Outlet Channel.
- 3. To plan for future development and redevelopment and optimize the quality of life by minimizing problems with water and land resources.
- 4. To maintain or improve water quality within the District.
- 5. To obtain quantitative data to better manage water quantity and quality issues.
- 6. To reduce, to the greatest extent practical, the public expenditures needed to manage surface water.
- 7. To minimize erosion and, when it occurs, retain the sediment upland and onsite.
- 8. To seek opportunities to integrate recreational, wildlife, and open space benefits on projects initiated or partnered on by the District.
- 9. To maintain existing conveyance routes.
- 10. To serve as a central resource for local water resource information in the District.
- 11. To fully understand the character and condition of all wetlands in the watershed for the purpose of resources planning, restoration and permitting.
- 12. To restore, enhance and/or preserve wetlands or partially drained wetlands which provide natural attenuation of runoff volumes, improve water quality and provide fish and wildlife habitat.
- 13. To cooperate with governmental units and other organizations to promote infiltration and groundwater recharge.

ASSESSMENT OF 2012 WORK PLAN / CIP

The following is a summary of the implementation activities completed in 2012 relative to the Capital Improvement Plan (CIP) within the District's WRMP.

INNOVATIVE WATER MANAGEMENT AND DEMONSTRATION PROJECTS

Alum Dose Determination and Application Plan completed for Spring Lake.

PLSLWD pledged to provide technical and monetary support (\$14,167) for a restoration project of Arctic Lake, led by Shakopee Mdewakanton Sioux Community (SMSC). A diagnostic and feasibility study is anticipated to be completed in 2013.

EDUCATION AND OUTREACH PROGRAM

Participated in and provided funding toward the Scott Clean Water Education program to provide effective and efficient coordinated water resources education and public outreach within the District and throughout Scott County.

Hosted Boat Tour and Farm Tour with the Citizen Advisory Committee.

Attended and presented at local community group meetings. Participated in Fall Community Festival.

Completed the first half of a documentary made for television titled "What is a Watershed District?"

Submitted five articles for printing in local newspaper with updates on District activities. Citizen Advisory Committee submitted four articles in the Prior Lake American Newspaper to cover water



Farm Tour hosted by Citizen Advisory Committee

friendly tips, brief educational items, and outreach to get citizens involved.

Updated website by adding continuous stage of Prior Lake levels, a Twitter feed, and a carp mapping tool allowing citizens to track carp siting's. Created new social media accounts with Facebook and Twitter.

Continued the District's Citizen Advisory Committee. Seven resident committee members meet monthly.

Held two informational meetings for the public on the status of Lower Prior Lake, and what they can do to protect it.

Contributed to the Conservation Partners "Thank You" Event which honored citizens who have embraced conservation and helped manage local resources. Event sponsored by PLSLWD, Scott WMO, Scott SWCD, and Vermillion River Watershed Joint Powers Organization.



MAWD Summer Tour - Outlet Structure

Hosted and organized the MN Association of Watershed Districts (MAWD) summer tour. Tour sites included Jeffers Pond Elementary School, Boudins neighborhood street reconstruction and city park, iron-sand- stormwater pond retrofit site, the Prior Lake Outlet Structure, and SMSC Green Roof.

Sent letters to residents with information on microsystin after concern about bluegreen algae on Spring Lake. Samples confirmed abundant presence of microsystin in the channel between Spring Lake and Upper Prior Lake during

low flow conditions late in the summer. Microsystin is a toxic byproduct of blue-green algae.

Hosted BlueThumb Classes for citizens on Raingarden Design. Three introductory classes and twelve rain garden design classes were provided to the public.

DISTRICT MONITORING PROGRAM

Monitoring included a mix of staff led, volunteer based, and contracted work which incorporated inlake monitoring, stream water quality and flow measurements, precipitation and aquatic vegetation monitoring according to the Monitoring Plan. Partners included Metropolitan Council Environmental Services, Three Rivers Park District, Shakopee Mdewakanton Sioux Community, Scott Soil and Water Conservation District (SWCD), Blue Water Science, and Emmons and Oliver Resources (EOR).

Water quality equipment (Hydrolab MS5 multi-parameter sonde, wading rods, Ott Level Logger, and

FloMate flow meter) was purchased or acquired in order to expand the District's ability to monitor water quality.

Implemented a comprehensive water quality database which stores all of the water quality data online.

Aquatic plant surveys were conducted by Blue Water Science on Fish, Upper Prior, Lower Prior, and Spring Lake twice in 2012 (spring and summer). Pike Lake had one vegetation survey completed in summer. No aquatic vegetation treatment for aquatic vegetation was conducted by the District in 2012.



Aquatic Plant Surveys

Sixty-six samples were taken by District staff at the FeCl₃ in 2012. This includes samples from CD1 (site upstream of FeCl₃ facility on CSAH 13), CD2 (site located at the FeCl₃ facility), and CD3 (site located downstream of FeCl₃ facility).

Parameters collected include: Iron, soluble reactive phosphorus, total phosphorus, and total suspended solids. Continuous stage and flow was measured at CD1 and CD2.

Continuous stage and flow were collected at 12 monitoring stations by using level loggers and flow meters. Forty-four flow measurements were collected at 10 stations by Scott SWCD in streams throughout the watershed for purposes of water quality monitoring. Rating curves and hydrographs for all sites were created by EOR and will be used for determining pollutant loads.

EOR collected 20 flow measurements at 2 locations along the outlet channel for purposes of calibrating the XP-SWMM model.

Scott SWCD collected a total of 58 stream water quality samples in 2012. Twenty samples were collected along the Prior Lake Outlet Channel and 38 samples were collected in the upper watershed. Data is to be used in conjunction with the flow monitoring in order to quantify pollutant loads.

Three Rivers Park District monitored four lakes in 2012: Pike, Fish, Upper Prior, and Spring Lake. Pike Lake had two locations monitored – east and west. Fish, Upper, and Spring Lake each had one sample location, and three samples were taken at each location to monitor surface, middle, and bottom conditions. Pike Lake was only monitored for surface conditions because it does not stratify. Samples were taken at each location 13 times totaling 143 samples. Parameters that were monitored include total phosphorus, soluble reactive phosphorus, total nitrogen, chlorophyll a, total suspended solids, volatile suspended solids, chloride, Secchi depth, water temperature, dissolved oxygen, specific conductivity, and pH.



Lake Sediment Coring on Spring Lake

Sediment coring was conducted on Spring Lake to determine historic phosphorus conditions.

Volunteers in the Citizen Assisted Monitoring Program collected a total of 52 samples on lakes in 2012. Five samples collected on Cates, 14 on Fish, 14 on Lower Prior, 11 on Upper Prior, and 8 on Spring Lake. Data collected by volunteers includes Secchi depth, water temperature, water color, water odor, wind, cloud cover, lake level, air temperature, physical conditions, recreational suitability, chlorophyll a, total Kjeldahl nitrogen, phosphorus, and pheophytin.

Precipitation data was collected daily by volunteers at four locations in the PLSLWD and a gauge is also monitored at the District office. Two automated tipping buckets were installed along the PLOC for calibrating the XP-SWMM model (only one worked), and one automated tipping bucket collects data at the FeCl₃ monitoring site. The automated gauges summarize data every 15 minutes.

District staff conducted a total of 101 Lake level readings at Cates Lake (20 staff gauge readings), Pike Lake (28 staff gauge readings), and Lower Prior (53 staff gauge readings). Lake level information can be found on DNR Lakefinder website.

A level logger was purchased in 2012 and recorded lake levels on Lower Prior Lake every 15 minutes. Current lake level data is uploaded every two hours to the PLSLWD website.

Lower Prior Lake Diagnostic Study report was completed and Implementation Plan began.

Monitored for microsystin (blue-green algae byproduct) due to citizen concerns on the Spring Lake outlet channel. Sent letters to residents with information on microsystin.



Sampling for Microsystin on the Spring Lake Outlet Channel

BMP AND CONSERVATION EASEMENT

INVENTORY AND INSPECTION

Inspections continued on District permitted Best Management Practices (BMP) and easements. Developed and utilized new BMP inspection form. 36 BMP inspections were conducted.

Authorization of an expanded easement acquisition on the Kinney Trust Property. This would facilitate management of the PLOC and of the riparian edge of the PLOC and Pike Lake for public purposes including water quality, habitat protection, and public recreation use in partnership with the City of Prior Lake.

Wetland Functions and Values and High Value Natural Areas Protection

Final Wetland Plan approved. This plan will characterize the conditions of all wetlands in the watershed for purposes of resource planning, restoration, and permitting.

PRIOR LAKE OUTLET STRUCTURE

The outlet structure was flowing from May 24 through August 3 in 2012, out-letting approximately 5,700 acre feet of water total in 2012, moderating lake elevations below the Ordinary High Water (OHW) and preventing major flooding.

More than 25 inspections were made throughout the year to ensure the integrity and efficiency of the system was maintained.

Height of weir was cut to correct the elevation back to 902.5'.



Prior Lake Outlet Structure

PLOC RESTORATION AND MAINTENANCE

Previously reconstructed areas were monitored for project integrity and the entire channel was monitored for stability and function.

Continued implementation of the Joint Powers Agreement/Memorandum of Agreement for the PLOC and continued to seek corrected easements for channel areas.

Vegetation and Channel Stability Assessment completed on the PLOC. Vegetation surveys were completed in spring and fall along the PLOC for purposes of invasive species management and beautification of the channel.

Removed invasive species along outlet channel, such as Siberian Elm, Common Buckthorn, Tartarian Honeysuckle, and Black Locust.

OUTLET CHANNEL MONITORING

Thirty-two flow measurements were conducted at four locations along the outlet channel. Twenty of those thirty-two flow measurements, and two of the stations, were monitored for purposes of XP-SWMM model calibration. Twelve of the thirty-two flow measurements were collected at the other two stations for the purpose of water quality monitoring. Twenty water quality samples were taken along the outlet channel in 2012. (this information is also included in District Monitoring section)

An update to the PLOC XP-SWMM model was begun in 2012 using data from two of the flow monitoring sites along the outlet channel. The update is anticipated to be completed in early 2013.

Precipitation was collected with an automated tipping bucket in segment 5A. (also included in District Monitoring section)

Inspected the outlet channel on 25 days in 2012, totaling 547 individual culvert inspections.

STORAGE AND INFILTRATION PROJECTS

Cost share allocated toward retrofit projects on the Boudin neighborhood reconstruction that previously drained untreated to Lower Prior Lake. Phase 2 of Boudins ended during 2012.

Clean Water Fund Grant obtained for Upper Prior BMP Retrofit project of \$189,511 from BWSR beginning April 2011 and continuing through December 2012. In 2012, two Neighborhood Bioretention Systems were constructed in subwatersheds that previously received no treatment prior to discharge into Prior Lake. In 2011, one raingarden was installed and 11 ponds were modified with iron-sand filters.

TMDL IMPLEMENTATION PLAN AND PROJECTS

Approved the Spring and Upper Prior Lake Nutrient TMDL Implementation Plan.



Bioretention System installed with the Clean Water Fund Grant

Lower Prior Lake Retrofit BMP Feasibility Study

This project obtained grant funding of \$48,417 from the MPCA beginning in 2011 and running through June 2013. Analysis of the data was completed for the Diagnostic Study in 2012 and BMP locations were identified.

TMDL IMPLEMENTATION PLAN AND PROJECTS

Approved the Spring and Upper Prior Lake Nutrient TMDL Implementation Plan.

Board approved a contract with Barr Engineering Company for the Alum Dosing in Spring Lake Design and Management Project.

Cedar Tree Revetments installed on Spring Lake outlet channel using Cost Share funds.

HIGHWAY 13 WETLAND, FECL₃ SYSTEM, AND DESILTATION BASIN OPERATION AND MAINTENANCE

Removed 11,348 cubic yards of sediment in the desiltation basin of the $FeCl_3$ system to restore it to full capacity.

The FeCl₃ system was not operated in 2012, but 66 samples were collected in order to analyze conditions with no dosing (more information included in District Monitoring section).

The system was redesigned in order to release the $FeCl_3$ solution into a desiltation basin, rather than the stream (requirement of the MPCA). This redesign was approved by the Board and is anticipated to begin construction in 2013.

AQUATIC VEGETATION SURVEYS AND MANAGEMENT

Completed aquatic plant surveys on Spring, Fish, Upper Prior, Lower Prior, and Pike Lake and provided the information to residents, including a public presentation of results.

ROUGH FISH SURVEYS AND MANAGEMENT

Tagged 1752 carp from Spring Lake to evaluate populations, control populations, and assess spawning areas and migration patterns. (30 high school students volunteered to help with Carp removal)

No fish were tagged in Fish Lake in 2012 because commercial fisherman found the lake bottom conditions too treacherous to deploy his nets. Future populations will be estimated by a different method.

GRANT MATCH FOR LAND OR EASEMENT ACQUISITION

Clean Water Fund grants were extended into 2012 in order to be used for the CR 12/17 Wetland Restoration. The City of Prior Lake and Scott County will also be



Carp Tagging on Spring Lake

partnering with this project.

RULES AND STANDARDS REVISION

Progress toward revision of the District's Rules, including incorporation of new standards, updates regarding new technologies and science and overall streamlining. Several Rules were drafted in late 2011 with input from citizen, stakeholder and the TAC. Remaining Rules were carried forward into 2012. Completion date is expected in fall of 2013.

<u>Permitting, Plan Review and Compliance</u>

Issued one permit and inspected permit sites for compliance. Reviewed 18 permits for Local Government Units.

Attended local development review committee meetings at Prior Lake City Hall.

Worked with the City of Prior Lake to combine inspection efforts and inspected 15 City of Prior Lake permit sites.

Developed and utilized new erosion and sediment control (ESC) inspection form. In total, 246 ESC inspections were conducted.

City of Prior Lake and PLSLWD entered into an agreement to update the Federal Emergecny Management Agency (FEMA) Floodplain model.

RESIDENTIAL COST SHARE PROGRAM

Continued the District's cost share program by providing incentives for voluntary implementation of Best Management Practices. Five wells were decommissioned and two landowners participated in a bankshore stabilization project along the Spring Lake outlet channel by using a Cedar Tree Revetment.

Three Raingardens were installed through the Blue Thumb program.



Installing a Rain Garden with the Blue Thumb Program

PLANNING AND PROGRAM DEVELOPMENT

Participated in the MPCA Minimal Impact Design Standards process.

Continued staying abreast of Municipal Separate Storm Sewer Systems (MS4) General Permit reissuance and additional local, regional, state and federal watershed planning issues.

RESEARCH

Researched locations for Discovery Farms Minnesota to conduct a multiyear field-scale intensive monitoring study within the District; however, no locations were deemed suitable.

DISTRICT RULES AND PERMITS

RULES UPDATE

The Board of Managers approved a process for updating the District Rules in July of 2011. All of the current set of rules will undergo final revision in 2013. Substantive rules, such as Stormwater Management, Erosion Control, Wetland Alteration, and others that impose conditions on the issuance of a permit, have been and will be reviewed by a Technical Advisory Committee of local government water resource experts. Rule will be presented to the Board as they are updated, and are planned to be adopted in a single action when revisions to all rules have been completed, likely in fall of 2013.

PERMIT ACTIVITY

One permit was issued in 2012; the 12.05 Pike Lake Road Culvert Replacement. This permit and previous permits: 06.04: Hickory Shores, 10.02: Jeffers Waterfront, 11.03: Jeffers Pointe were subject to regular permit inspections. In addition to 15 of the City of Prior Lake's sites which the PLSLWD combined inspection efforts, permit 06.04: Hickory Shores and 09.02: Riverside Bluffs Channel Crossings were closed in 2012, with the issuance of Certificates of Completion to the applicants. Permits are inspected to ensure water resources are not degraded during the building process.



Permit Inspections

STATUS OF LOCAL PLAN ADOPTION AND IMPLEMENTATION

With approval of the District's WRMP in June of 2010, local

units of government (LGU) having land use planning and regulatory responsibility are required by statute to prepare or update existing local water management plans. Although submission and review of the LGUs Local Surface Water Management Plans is required to occur by June of 2012, the City of Savage plan was reviewed and approved on June 14, 2011. Submittals of plans from the City of Shakopee were approved in 2012, Scott County was approved in early 2013, and the City of Prior Lake will likely be approved shortly after the rules revisions are approved in 2013.

MONITORING

Monitoring efforts in 2012 were implemented in regard to the Annual Monitoring Plan. These efforts included in-lake, stream, flow, and precipitation monitoring.

In-lake monitoring included bi-weekly sampling throughout the open water season by citizen volunteers through the Metropolitan Council Citizen Assisted Monitoring Program (CAMP) on Cates, Fish, Lower Prior, Spring and Upper Prior Lakes. Additional bi-weekly lake profile monitoring was

completed on Fish, Spring, Pike, and Upper Prior Lakes via Three Rivers Parks District for the PLSLWD. Aquatic vegetation surveys and reports were completed in early spring and mid-summer on Fish, Lower Prior, Spring, and Upper Prior Lakes by Blue Water Science on behalf of the District. 2012 was the first year conducting an aquatic vegetation survey on Pike lake and it was completed in mid-summer.

Lake level monitoring is conducted on Prior, Cates, Fish, and Pike lake. Staff gauges are read weekly and submitted to the DNR for inclusion in the DNR Lake Finder website. In 2012, an automated level logger was installed on Lower Prior Lake and was recording continuously. The PLSLWD website is updated with current stage readings of Lower Prior Lake every two hours and available for the public to view.

Stream monitoring consisted of measuring flows at ten sites and included use of level loggers to monitor continuous stage and flow at those sites. Water quality chemistry sampling was completed at nine sites, as well as collection of field data with the use of multiparameter sondes.

Precipitation was tracked daily by volunteers at four existing sites throughout the District and an automated Tipping Bucket Rain Gauge was at one additional site.



Installing New Lake Level Logger on Prior Lake

A significant improvement to the Monitoring Program of the District in 2011 was the development and implementation of a web based Water Quality Database. The database has been continuously updated and replaces a number of Excel spreadsheets with a single system. It allows for dynamic querying, bulk upload and download of data, and dynamic graphing, including correlation graphs (one parameter on the X axis, and another on the Y axis). The database was again used to store and analyze data in 2012. An assessment of 2012 water quality data trending and analysis can be queried within the Water Quality Database at www.plslwd.org/wqdb.

FINANCIAL REPORT

The 2012 PLSLWD Audit was completed by Abdo, Eick and Meyers LLP, and includes both the District's Annual Financial Report and the Independent Auditor's Report on Compliance with Minnesota Legal Compliance Guide for Local Governments for the year ended December 31, 2012. A copy of the 2012 Annual Audit is available for review on the District website and at the District office.

2012 FINANCIAL SUMMARY

Values presented in the chart and graph below are unaudited. Please refer to the 2012 Annual Audit for more details.

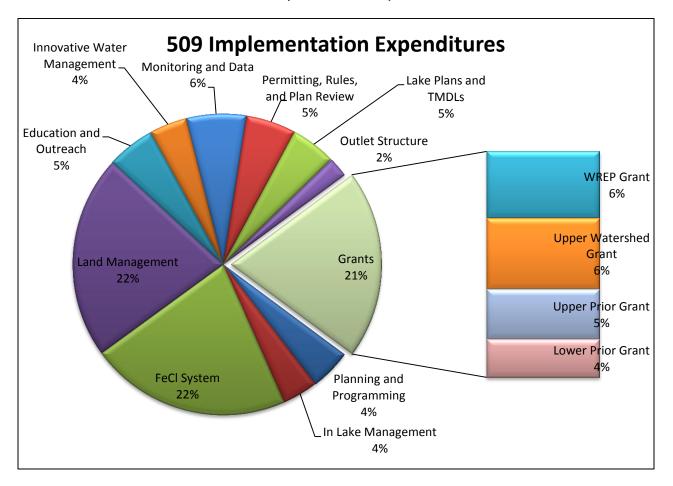
2012 Financial Summary

Fund	Starting Balance	Approved Budget	Tax Levy Revenue*	Additional Revenue**	Expenditures	Ending Balance
General	\$146,747	\$98,107	\$100,000	\$27,234	\$98,165	\$125,900
509 Implementation	\$2,254,776	\$1,387,235	\$467,980	\$36,429	\$1,387,386	\$1,471,551
MOA/JPA Funds	\$543,521	\$213,562	\$ O	\$212,295	\$209,795	\$1,700,234
Bond Debt Service	\$47,121	\$145,065	\$145,065	\$3,010	\$145,065	\$38,728
Bond Construction Funds	\$99,053	\$ O	\$0	\$6,195	\$0	\$182,224
Total	\$3,091,218	\$1,843,969	\$713,045	\$285,163	\$1,840,411	\$3,518,637

^{*}Tax levy revenues shown are tax levy dollar amounts collected. The 2012 actual tax levy was \$703,759.

Page 16

^{**} Additional revenues include permit fees, investment income, transfers (to)/from other funds, and grant funding used of \$76,433.



2012 509 Implementation Expenditures

GRANTS

Grants obtained by the District that were active in 2012 are as follows:

- USDA-NRCS Wetland Reserve Enhancement Program (WREP)
 - This \$2.5 million project is a watershed-based regional program to restore and enhance high quality wetlands and surrounding upland habitat in Sand Creek and Prior Lake-Spring Lake Watersheds in Scott County, MN. This is a joint initiative with the Prior Lake-Spring Lake Watershed District (PLSLWD), Scott Soil and Water Conservation District (SWCD), Scott Watershed Management Organization (WMO), Rice SWCD, Le Sueur SWCD, and the Minnesota Department of Natural Resources (MDNR). The grant went into effect on October 1st, 2010 and will continue for a five year period.
- Spring and Prior Lakes Upper Watershed Stormwater Runoff Volume Reduction
 A grant of \$195,600 was received by the District from BWSR via the Clean Water Fund.
 The grant funding will aid in the establishment and restoration of wetlands and natural depressional areas in the upper watershed of the District, reducing both nutrient levels and water volume reaching the lakes during wet seasons. The grant began on April 7, 2011 and was expected to continue through December 31, 2012, however the grant has been amended to continue through December 31, 2013.

Page 17

- Upper Prior Lake Targeted Stormwater BMP Retrofits and Enhancements
 Grant funding was issued to the District in the amount of \$189,511 from the Clean
 Water Fund administered by BWSR. The funding was utilized to enhance and retrofit
 existing water quality features, including adding iron sand filters and pond modifications
 to stormwater ponds, and to install additional new practices, such as rain gardens and
 permeable pavement, in targeted areas that currently are untreated and drain directly
 into Upper Prior Lake. The grant began on April 7, 2011 and continued through
 December 31, 2012.
- Lower Prior Lake Diagnostic Study

The District received a grant of \$48,417 for a diagnostic study on Lower Prior Lake that will include an assessment of current water quality and pollutant sources and prescribe targeted protection strategies for the lake. Funding was provided through the Clean Water Partnership administered by the MPCA. The grant began on January 29, 2011 and will continue through June 30, 2013.

2013 WORK PLAN / CIP

The following is a summary of implementation activities planned to be completed in 2013 and the amount budgeted for that activity.

Subclass 610 – Planning, Program Management, and Development	
Review of Jurisdictional Border Review and update of the WRMP	\$15,000 \$20,000
Review water management plans as PLSLWD Rules and Water Resources Management Plan are updated	\$5,000
Planning, Program Development, Staff Trainings, and Annual Reporting	\$35,000
Subclass 617 – In-Lake Management	
Alum Treatment on Spring Lake	\$300,000
Continued Rough Fish Management and study efforts	\$30,000
Aquatic Vegetation Surveys - Blue Water Science	\$10,000
Aquatic Vegetation Treatments (if recommended)	\$5,000
Subclass 620 – Iron Chloride System	
Annual Operations and Maintenance Costs	\$24,000
System redesign and modification work	\$255,000
Subclass 630 – Land Management	
Conservation Drainage Pilot Project	\$5,000
Discovery Farms Site Establishment	\$24,000
Spring Lake Outlet Easements	\$30,000
Cost Share Incentives - Urban and Rural	\$40,000
Wetland Land and Easement Acquisition	\$50,000
Public Infrastructure Partnership Projects	\$75,000
County Roads 12 and 17 Wetland Restoration	\$80,000

SUBCLASS 640 – EDUCATION AND OUTREACH MS4 Education Program – consultant and staff PLSLWD CAC Coordination PLSLWD Direct Outreach Prior Lake-Savage Areas Schools Partnership	\$50,000 \$9,000 \$35,000 \$5,000
SUBCLASS 650 – INNOVATIVE WATER MANAGEMENT Buck Lake Chemical Treatment Innovative Demonstration Projects Lower Prior Implementation Property Tax Incentive Program Research and Infiltration Pilot Projects	\$90,000 \$25,000 \$25,000 \$30,000 \$20,000
SUBCLASS 655 – MONITORING AND DATA ACQUISITION 2013 District Monitoring Program Discovery Farms GIS Software, Licenses, Data Management District Wide Model Analysis	\$90,000 \$10,000 \$8,000 \$5,000
<u>SUBCLASS 660 – PERMITTING AND COMPLIANCE</u> Permitting BMP and Conservation Easement Inventory and Inspections Rules Revision Finalization	\$18,000 \$15,000 \$10,000
Subclass 665 – Lake Management Plans and TMDLs Spring and Upper Prior TMDL Implementation Plan	\$5,000
<u>SUBCLASS 720 – PRIOR LAKE OUTLET CHANNEL</u> District's share of the JPA/MOA budget for continued channel restoration, enhancement, maintenance, and emergency repairs.	\$70,517
<u>SUBCLASS 725 – PRIOR LAKE OUTLET STRUCTURE</u> Maintenance Activities	\$5,000
SUBCLASS 740 – WETLAND RESERVE ENHANCEMENT PROGRAM PLSLWD (cash and in-kind) construction PLSLWD Easement Incentive PLSLWD Technical Assistance	\$14,000 \$125,000 \$6,000
<u>SUBCLASS 810-819 – PRIOR LAKE OUTLET CHANNEL CONSTRUCTION</u> Determined by the JPA/MOA partners	\$25,000
SUBCLASS 830-839 – PRIOR LAKE OUTLET CHANNEL MAINTENANCE Maintenance and Monitoring Determined by the JPA/MOA partners	\$16,000