



Shingle Creek Watershed Management Commission

2011 Annual Activity Report

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This report was prepared for the
Shingle Creek Watershed Management Commission
by JASS

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We gratefully acknowledge the assistance of
Diane Spector, Wenck Associates

Cover photograph: Sunset Bass Lake
Sally Strand, Plymouth

Annual Activity Report.

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

The Commission.

The Shingle Creek Watershed Management Commission is governed by a nine-member board comprised of representatives from each member city who are appointed for terms of three years. The nine member cities are Brooklyn Center, Brooklyn Park, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth and Robbinsdale. Commissioners who served in 2011 are shown in *Appendix 1*.

Consultants.

The Commission has no employees. The names of the consultants currently retained by the Commission are also listed in *Appendix 1*.

Meetings.

The Commission meets monthly at 12:45 p.m. on the second Thursday at the Clubhouse at Edinburgh, USA, 8700 Edinbrook Crossing, Brooklyn Park. The meetings are open to the public. Meeting notices, agendas and approved minutes are posted on the Commission's website, www.shinglecreek.org.

Watershed Management Plan.

The Shingle Creek/West Mississippi Watershed Management Commissions' joint 2003 Second Generation Watershed Management Plan (Plan) includes a section that identifies significant watershed issues identified by the public, city staffs and Commissioners along with a brief description of the proposed actions in the Plan that address those concerns.

Significant progress has been made towards meeting the goals of the Second Generation Plan, notably:

- Coordinated and expanded monitoring activities with numerous agencies and volunteers.
- Expanded the education and outreach program.
- Received approval of the Shingle Creek Chloride TMDL and Implementation Plan.
- Approved the Shingle Creek/West Mississippi (SCWM) Water Quality Plan.
- Completed the Shingle Creek Corridor Study and the Tributaries Corridor Study.
- Received approval of TMDLs and Implementation Plans for the thirteen impaired lakes in the watershed.
- Received approval of the Shingle and Bass Creeks Biota and Dissolved Oxygen (DO) TMDL and Implementation Plan.
- Revised the cost share policy and adopted revised CIPs with additional capital projects.
- Conducted an opinion survey of watershed residents in collaboration with neighboring watershed management organizations as part of its education and public outreach program.
- Implemented Pike Creek and Shingle Creek channel improvements.
- Received over \$2.1 million in grant funding for various activities.

Status of 2011 Objectives.

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

1. **Complete draft of Third Generation Plan.** *The Commissions (the Shingle Creek and West Mississippi WMOs working jointly) made significant progress the Third Generation planning process. A draft is anticipated in mid-2012.*
 - a. Identified issues, goals, policies, and implementation actions and review rules
 - b. Obtained input from policymakers regarding issues, goals, policies, and implementation actions.
 - c. Technical Advisory Committee (TAC) met regularly to review Rules and Standards.
 - d. The Education and Public Outreach Committee (EPOC) met to develop an education and outreach plan.

2. **Continue to Implement TMDLs.** *The Commission completed the last of the TMDLs on the Impaired Waters in the watershed, undertook implementation actions, and supported the member cities in their implementation actions. One planned action, hosting a chloride operators meeting, was not completed due to time constraints.*
 - a. Received final EPA approval of the Biotic and Dissolved Oxygen (DO) TMDL.
 - b. Completed the Shingle/Bass Creeks Biota/DO Implementation Plan and submitted it to the Minnesota Pollution Control Agency (MPCA) for approval.
 - c. Incorporated Commission actions in TMDL Implementation Plans into the budget.
 - d. Continued to develop a process for evaluating progress towards TMDLs as part of the Third Generation Watershed Management Plan.
 - e. Incorporated TMDL Implementation Plan monitoring into routine monitoring program.
 - f. Continued to pursue grant funding for projects and programs
 - g. Participated in Mississippi River Bacterial TMDL working groups. Future Shingle Creek and West Mississippi monitoring program recommendations will be based on outcomes from these meetings.
 - h. Stayed informed of implementation strategies proposed for Lake Pepin TMDL, Bacterial TMDL, etc. Participated in stakeholder groups as appropriate.

3. **Continue the Paired Intersection Study and disseminated findings to interested parties.** *Two test porous asphalt sections were constructed in 2009 and 2010 in residential areas of Robbinsdale and compared to adjacent controls. Monitoring results suggest that porous pavement appears to result in the same amount of ice-free pavement as salted pavement. The Commission will continue to compile and analyze data, assess maintenance requirements and pavement durability, and communicate their findings. The intersections will be monitored through the winter of 2011-2012.*
 - a. Completed Year 2 of monitoring and evaluation of data.
 - b. Presented findings at conferences and TAC meetings.

4. **Complete the Wetland Management Plan.** *Work is continuing on the Shingle Creek/West Mississippi Wetland Management Plan, which will be incorporated into the Third Generation Watershed Management Plan. Phase I of the Plan, completed and transmitted to the member cities in 2009, included a review of existing city wetland assessment data and completion of a Minnesota Routine Assessment Method (MnRAM) assessment on seven wetlands in the watersheds. Phase II included establishment of a watershed-wide database and evaluation of data from the cities of Maple Grove and Plymouth.*

- a. In 2011 the Commissions received and continued to summarize City priority wetlands functions and values assessments.
- b. In 2012 the Technical Advisory Committee will review and recommend a Wetland Management Plan for incorporation into the Third Generation Plan.

5. Partner with other organizations to increase reach and cost effectiveness.

- a. Participated in the West Metro Water Alliance (WMWA) joint education and outreach group. Developed a series of workshops targeted to elected officials, advisory commission member and city staff. Topics were stormwater volume management to reduce runoff, nutrient management to improve water quality, and integrating TMDLs into city planning and management.
- b. Continued to partner with the USGS to operate the Queen Avenue monitoring site (SC-1).
- c. Participated with the Minneapolis Park Board in the Webber Park Master Plan process, which included discussions for a possible future fish bypass around the Webber Park drop structure. *The Commission will continue to pursue this opportunity.*
- d. Implemented 2011 objectives of the Education and Public Outreach Committee (EPOC).
- e. Sponsored the Great Shingle Creek Watershed Cleanup with nine participating member cities.
- f. Awarded Water Quality Education Grants to Patrick Henry High School, the Meadow Lake Watershed Association, the City of Plymouth/Schmidt Lake Raingarden Project, and Meadow Lake Elementary School.
- g. Exhibited at the Plymouth Yard and Garden Expo where information to improve water quality was distributed.
- h. Approved Commission's membership in Blue Thumb, an educational program of the Rice Creek Watershed District.
- i. Partnered with the Bassett Creek, Elm Creek and West Mississippi WMOs to sponsor rain garden workshops for residents in Champlin, Crystal, Golden Valley, New Hope, and Plymouth.

6. Continue ongoing administration and programming.

- a. Continued its stream monitoring program to develop a more complete picture of the total pollutant load from the Shingle Creek watershed.
- b. Continued to sponsor Hennepin County's River Watch program and encouraged participation by students in schools located within the watershed. *Three sites were monitored in the Shingle Creek watershed in 2011.*
- c. Continued participation in the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). *In 2011 five lakes were monitored through CAMP.*
- d. Continued development of the P8 model. *The P-8 model continues under construction as cities submit subwatershed, pond and other structure data. The modeling is expected to be completed in 2012 as part of the Third Generation Plan.*
- e. Continued to review projects within the watershed in accordance with the management standards and policies of the Commission. *A list of the development/redevelopment projects reviewed in 2011, along with a map of their locations, is found in Appendix 2. No variances to the Commission's standards and policies were granted in 2011.*
- f. Continued to serve as the local government unit (LGU) for administering the Minnesota Wetland Conservation Act (WCA) unless member cities have elected to serve in that capacity. *The Shingle Creek Commission currently serves as LGU for the cities of Brooklyn Center, Brooklyn Park, Osseo and Robbinsdale.*

- g. Prepared the 2010 Annual Water Quality Report. *The report provides stream, lake, wetland and biological monitoring results for the past year. It was accepted at the Commission's May 12, 2011 meeting and forwarded to the Board of Soil and Water Resources (BWSR) as an appendix to the Commission's 2010 Annual Activity Report.*
- h. Adopted a 2012 Operating Budget. *At its June 9, 2011 meeting the Commission adopted a 2012 operating budget totaling \$439,200. Of that amount, \$186,700 was allocated for general operations, \$70,000 for monitoring and information gathering, \$45,000 for education and public outreach, \$21,000 for management plans, \$29,000 for projects and \$87,500 for capital improvement projects. Revenue was anticipated from five sources - \$321,400 from member assessments, \$10,000 from project reviews, \$87,500 from ad valorem levy proceeds, and the remaining \$20,300 from interest income and partner reimbursements. The 2012 budget is attached as Appendix 3.*
- i. Formed a Budget and Financial Policy Subcommittee.
- j. Continued education and outreach programming, including the EPOC, WMWA, WaterShed Partners, BlueThumb, and the Patrick Henry HS program.
- k. Invited guest speakers to make lunchtime water resources presentations. *Speakers included Brad Wozney, Board Conservationist with BWSR, and Andy Schilling, landscape restoration specialist for MCD.*
- l. Conducted an annual review of the NPDES Phase II education and outreach program and submitted a report to the participating MS4s. *The 2011 NPDES Phase II Education and Public Outreach Program Annual Report was distributed to the member communities on January 9, 2012.*
- m. Toured project sites in the watershed.
- n. Actively sought grant opportunities to fund Commission projects.
- o. Prepared news articles and other media releases in accordance with MN Rules 8410.0100 §4. *Information releases were provided for education and public outreach activities as well as TMDL-related stakeholder meetings and Management Plan Amendments/CIPs. Information was also posted to Commission and other appropriate websites. (Appendix 4)*
- p. Continually updated the Commission's website.
- q. Published an Annual Activity Report summarizing the Commission's yearly activities and financial reporting. *The 2010 Annual Activity Report was approved by the Commission at their April 14, 2011 meeting.*

7. Undertake Capital Projects.

- a. Completed Wetland 639W feasibility study and project design. *Construction occurred in the 2010-2011 winter season. At year-end, the Metropolitan Airports Commission was still updating the lease agreement with the City of Crystal.*
- b. Identified and ordered the *Connections at Shingle Creek* project as part of the Commissions' Capital Improvement Plan (CIP). *A feasibility report was reviewed and a public hearing was held for the project. It was ordered and certified to Hennepin County for levy in 2011, payment in 2012. The Commission's share of the costs of the project is \$87,500.*

Permits and Variances.

The Shingle Creek Watershed Management Commission does not have a permit program.

Monitoring Data.

The Shingle Creek Watershed Management Commission annually monitors the lakes and streams of the watershed to assess the current status of its water resources as well as to monitor progress toward accomplishing the goals set forth in its *Water Quality Plan*. The Commission's technical staff obtains most stream water quality data while volunteers collect most lake water quality, stream macroinvertebrate and wetland data.

- In 2011 the Commission continued its stream monitoring program for water quantity and water quality in cooperation with the United States Geological Survey (USGS). Comprised of two parts, flow monitoring and sampling, Commission stream monitoring was conducted at two locations on Shingle Creek – one downstream of Humboldt Avenue in Minneapolis and the other downstream of Brooklyn Boulevard in Brooklyn Center. The Commission cost-participated in flow and limited water quality monitoring at the USGS site at Queen Avenue North. Companion to this report, the Commission's 2011 *Annual Water Quality Report* describes in more detail the monitoring undertaken by the Commission.
- The Commission also continued participation in the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). In 2011 five lakes were monitored through CAMP – *Bass, Meadow, Pike, Schmidt and Success*. The Commission's 2011 *Annual Water Quality Report* provides a brief overview of each lake. The 2011 CAMP report will be available in summer 2012 at <http://www.metrocouncil.org/environment/Rivers/Lakes/index.htm>.
- Three sites were monitored in the Shingle Creek watershed through Hennepin County's River Watch program. Sites were monitored by students from Park Center High School, Patrick Henry High School and, for the first time, Metro Tech Academy. The River Watch report is available by contacting mary.karius@co.hennepin.mn.us.
- The Shingle Creek Commission participated in Hennepin County's Wetland Health Evaluation program (WHEP) in 2011 with one wetland near Palmer Lake in Brooklyn Center. The 2011 *Hennepin Field Season Summary of the Minnesota Wetland Health Evaluation Program* will be available in summer 2012 from mary.karius@co.hennepin.mn.us.
- The Commission's annual *Water Quality Monitoring Report* provides more detail on the Commission's stream and lake monitoring activities. The 2011 report was approved at the Commission's April 12, 2012 meeting and is available on the Commission's website.

Status of Local Plan Adoption and Implementation.

Following adoption of the Second Generation Plan, member cities are required to adopt or amend their local water management plans to be in conformance with the Commission's plan. The status of local plan development at December 31, 2011 is shown below.

<u>Member City</u>	<u>Approved</u>
Brooklyn Center	2006
Brooklyn Park	2009
Crystal	2009
Maple Grove	2009
Minneapolis	2006
New Hope	2008
Osseo	2008
Plymouth	2008
Robbinsdale	2010

Consultant Services Selection.

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*. The Commission's current consultants are listed in *Appendix 1*.

Fund Balances.

The Commission's Joint Powers Agreement provides that each member city contributes toward the annual operating budget based 50% on the area located within the watershed boundary and 50% on the tax capacity of all property within the watershed. The 2011 cost allocations to the members are shown as part of the 2011 Operating Budget found in *Appendix 5*.

Of the \$383,400 operating budget approved by the Commission for 2011, \$28,500 as application fees and program reimbursement, and \$1,500 as interest income, resulting in assessments to members totaling \$353,400. No income was projected from grant funding and partner contributions,

The Shingle 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. Amounts paid by the Commission per the 2011 Audit (*Appendix 6*) are as follows:

General engineering	\$94,704
General administration	\$108,042
Education	\$ 54,687
Programs	\$ 58,489
Management Plans	\$ 39,449
Projects	\$354,326
Capital Projects	\$ 786,285
Total	\$1,495,982

The 2011 Audit can be viewed on the Commission's website.

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

Wetland Banking.

The Shingle Creek Watershed Management Commission does not have a wetland banking program.

2012 Work Plan.

The Commission has identified the following activities in 2012:

1. Complete the draft of the Third Generation Watershed Management Plan.
 - a. Complete draft of Plan, including an Implementation Plan and proposed CIP.
 - b. Obtain public input through individual city Citizen Advisory committees and through general public review.
 - c. Review the Plan with member cities, obtain 60-day review comments, and conduct a public hearing on the Plan.
 - d. Submit the final draft Plan to BWSR for review and approval.
2. Continue to Implement TMDLs.
 - a. Incorporate Commission actions in TMDL Implementation Plans into the budget and the Third Generation Plan.

- b. Host an annual chloride TMDL operator's meeting and prepare for chloride TMDL 5-year review.
 - c. Continue to develop a process for evaluating progress towards TMDLs.
 - d. Continue to pursue grant funding for projects and programs.
 - e. Participate in Mississippi River bacterial TMDL working groups.
 - f. Stay abreast of implementation strategies proposed for Lake Pepin TMDL, bacterial TMDL, etc.
3. Complete the Paired Intersection Study and disseminate findings to interested parties.
- a. Complete Year 3 of monitoring and evaluate data.
 - b. Present findings and final report at conferences and TAC meetings.
4. Partner with other organizations to increase reach and cost effectiveness.
- a. Participate in the West Metro Water Alliance joint education and outreach group.
 - b. Continue to partner with the USGS to operate the Queen Avenue monitoring site.
 - c. Partner with the Minneapolis Park Board to consider options for Shingle Creek in Webber Park.
5. Continue ongoing administration and programming.
- a. Commission stream monitoring on Shingle Creek and lake water quality monitoring and aquatic vegetation surveys on Upper, Middle, and Lower Twin Lakes.
 - b. Volunteer stream monitoring through RiverWatch (Hennepin County).
 - c. Volunteer lake monitoring through CAMP (Met Council) on Magda, Ryan, and Cedar Island Lakes.
 - d. Complete reviews of development and redevelopment projects as necessary.
 - e. Prepare an annual water quality report.
 - f. Review feasibility studies for 2012 proposed capital projects, hold public hearings, and order projects.
 - g. Prepare a 2013 annual budget.
 - h. Continue education and outreach programming, including the EPOC, WMWA, WaterShed Partners, BlueThumb, and the Patrick Henry HS program.
 - i. Invite three guest speakers to make lunchtime water resources presentations.
 - j. Tour project sites in the watershed.

Appendices