



Shingle Creek
Watershed Management Commission

2013 Annual Activity Report

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

Questions regarding this report should be directed to
JASS, 763.553.1144 or judie@jass.biz

We gratefully acknowledge the assistance of
Diane Spector, Wenck Associates

Cover photograph: Bass Lake
Sally Strand, Plymouth

Annual Activity Report.

This annual report has been prepared by the West Mississippi 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 during calendar year 2013.

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 2013 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.

On April 11, 2013 the Shingle Creek and West Mississippi Watershed Management Commissions adopted their joint 2013-2022 Third Generation Watershed Management Plan (Plan). The Plan was approved by the Board of Water and Soil Resources on March 27, 2013.

The Plan is the culmination of an almost two-year planning effort by the two Commissions, the cities that are members of these Joint Powers Organizations, state agencies, and the public. The Plan sets forth goals and strategies that will guide water resources management activities in the two watersheds over the coming decade. A strategic overview of the plan is found in [Appendix 2](#).

Watershed Plan Amendment.

On July 11, 2013 the Commissions adopted a minor plan amendment to the 2013 Plan. The amendment revises the Commissions' Rules and Standards to adopt the new National Oceanic and Atmospheric Administration (NOAA) Atlas 14 precipitation frequency standards, replacing the outdated Weather Bureau Technical Paper 40 (TP-40) standards. A copy of the amendment is included in [Appendix 2](#).

Local Plan Adoption and Implementation.

With approval of the Commissions' Third Generation Plan, member cities have two years in which to update their Local Stormwater Management Plans (LWMP). These updates will be expected to include:

- Updated land use, hydrologic, and hydraulic data, and existing or potential water resource-related problems that may have changed since the last local plan.
- An explanation of how the member city will help to implement the actions set forth in the Commissions' Plan.
- An explanation of how the member city will implement project review requirements of the revised Rules and Standards.
- An updated Implementation Plan identifying specific structural, nonstructural, and programmatic solutions to problems and issues identified in the LWMP.
- An implementation program including a description of adoption or amendment of official controls and local policies necessary to implement the Rules and Standards; programs; policies; a capital improvement plan; and estimates of cost and funding mechanisms.

Status of 2013 Work Plan.**Adopt the Third Generation Watershed Management Plan, including the revised Rules and Standards.**

Completed. The Plan was approved by the Board of Water and Soil Resources on March 27, 2013 and adopted by the Commission on April 11, 2013.

Continue to Implement TMDLs.

Develop a process for evaluating progress towards TMDLs, and undertake a 5-year performance review for the chloride TMDL and the Twin and Ryan Lakes TMDL. *Currently underway for Twin and Ryan Lakes. Completed detailed monitoring, met twice with lakeshore residents, and consulted with the MPCA on the evaluation process. Discussed financing options with Hennepin County and submitted a "Demonstration Watershed" application to the Board of Water and Soil Resources. Chloride data are still being analyzed. The Twin Lake/Ryan Lakes TMDL progress report will be completed in 2014.*

Host an annual chloride TMDL operator's meeting. *Postponed pending completion of chloride data analysis. Will likely hold this meeting in summer 2014.*

Continue to pursue grant funding for projects and programs. *Applied for Clean Water Legacy funding for Connections at Shingle Creek and the Biochar Pond Filter Retrofit projects, and applied to BWSR to be a Demonstration Watershed for Twin and Ryan Lakes. The Connections project was selected for funding (\$200,000); the other two applications were not funded.*

Participate in Mississippi River bacterial TMDL working groups. *Submitted comments on the draft TMDL which were incorporated into the revised draft.*

Become informed of implementation strategies proposed for Lake Pepin TMDL, bacterial TMDL, etc. *Staff continues to monitor these TMDLs and recommended the Commission submit comments on the Upper Mississippi bacteria TMDL.*

Complete the Paired Intersection Study and disseminate findings to interested parties.

Present findings and final report at conferences and TAC meetings. *The final findings were presented at the 2013 International Low Impact Development Standards Conference and a final report was submitted to the MPCA in fulfillment of the grant. The final detailed report will be reviewed by the TAC in January 2014 and will be posted on the Commissions' website, www.shinglecreek.org.*

Continue with year two of the modular green roof demonstration project with three roof installations.

The three sets of modular green roof components were installed in 2012 on the Robbinsdale municipal garage; a Three Rivers park shelter at the Coon Rapids Dam in Brooklyn Park; and the Wenck Associates office building in Maple Plain.

Partner with other organizations to increase reach and cost effectiveness.

Participate in the West Metro Water Alliance joint education and outreach group. *The Commission continued to participate in WMWA and serves as its fiscal agent. Several schools in the watershed participated in the Watershed PREP fourth grade program and WMWA educators also attended city events.*

Continue to partner with the USGS to operate the Queen Avenue monitoring site. *This partnership continued in 2013.*

Partner with the Minneapolis Park Board to consider options for Shingle Creek in Webber Park. *Commission and Park Board staff met on site and discussed several options to pursue. These potential actions will be discussed in more detail in 2014, with the intent of possibly submitting a joint Clean Water Fund grant application.*

Coordinate with lake associations for education and implementation. *The Meadow Lake Association made a presentation to the Commission on their ongoing activities. City representatives and Commission staff met twice with representatives from the Upper, Middle, and Lower Twin Lake Associations.*

Continue ongoing administration and programming.

Commission stream monitoring on Shingle Creek and Bass Creek and lake water quality monitoring and aquatic vegetation surveys on Ryan and Crystal Lakes. *Lake and stream monitoring was completed and findings will be detailed in the 2013 annual water quality report.*

Volunteer stream monitoring through RiverWatch (Hennepin County). *Three sites were monitored in 2013 by high school students. Findings will be detailed in the 2013 annual water quality report and in Appendix 3 of this report.*

Volunteer lake monitoring through CAMP (Metropolitan Council) on Bass, Eagle, Pike, and Schmidt Lakes. *CAMP monitoring was not completed in 2013 due to a lack of volunteers.*

Continue the subwatershed assessment analysis and retrofits. *The Commission did not include funding for subwatershed assessments in the 2013 or 2014 budgets.*

Partner with the Minneapolis Park Board, Minneapolis Public Schools, Three Rivers Park District and the University of Minnesota Outdoor Stream Research Facility to consider a grant application to install a stream lab in Webber Park. *Commission and Park Board staff met on site and discussed several options to pursue. These potential actions will be discussed in more detail in 2014, with the intent of possibly submitting a joint Clean Water Fund grant application.*

Complete reviews of development and redevelopment projects as necessary. *The Commission considered 17 project reviews and two WCA wetland determinations in 2013. (Appendix 4) The Commission also adopted a new application form, checklist, and supporting documentation (also found in Appendix 4). The Shingle Creek Commission currently serves as LGU for the cities of Brooklyn Center, Brooklyn Park, Osseo and Robbinsdale. The Commission does not have a permit program or a wetland banking program.*

Continue education and outreach programming, including the EPOC, WMWA, WaterShed Partners, and BlueThumb. *The Commission continued its commitment to education and outreach programming. Much of the 2013 effort was focused on developing and expanding Watershed PREP. (Appendix 5)*

With Metro Blooms, sponsored raingarden workshop in Plymouth. A second workshop was co-sponsored by the cities of Crystal, Golden Valley, New Hope and Robbinsdale.

Conduct an annual review of the NPDES Phase II education and outreach program and submitted a report to the participating MS4s. *The 2013 activity report was provided to the cities on February 21, 2014.*

Prepare an annual water quality report. *The Commission received the 2012 Annual Water Quality Report at the May 8, 2013 meeting. It may be viewed on the Commission's website.*

Review feasibility studies for 2013 proposed capital projects, hold public hearings, and order projects. *There were no capital projects proposed on the 2013 CIP.*

Prepare a 2014 annual budget. *Completed. There was a 2.5% increase in member assessments, following a year of no increase. The budget also includes contributions to the Grant Match Account (currently at \$175,000) and to the 4th Generation Plan Account (currently at \$20,000). (Appendix 9)*

Invite guest speakers to make lunchtime water resources presentations. *Speakers included: Richard Buller, Bob Grant and Marcy Grant from the Meadow Lake Association; Tom Murray, Minneapolis Patrick Henry High School; John Roach from the Lake Success Association; Jim Stark, USGS; and Kim Berggren, City of Brooklyn Park.*

Tour project sites in the watershed. *Several Commissioners and staff participated in a bike tour around the watershed in June 2013.*

Award Water Quality Education Grants to eligible participants. Grants of up to \$1,000 are available to raise awareness of watershed issues, improve water quality education, and fund demonstration projects. *No grants were awarded in 2013.*

Prepare 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, Management Plan adoption, and Plan amendments. Information was also posted to the Commission website and linked to other appropriate websites. (Appendix 5)*

Solicit interest proposals for administrative, legal, technical and wetland consulting services. *The required biennial solicitation for interest proposals for administrative, legal, technical and wetland consulting services was published in the January 22, 2013 edition of the State Register. At their February 14, 2013 meeting the Commission approved for 2013-2014 the consultants listed in Appendix 1.*

Publish an annual activities report summarizing the Commission's yearly activities and financial reporting. *The 2012 Annual Report was accepted at the Commission's April 11, 2013 meeting.*

Continue to populate and maintain the Commission's website. *Updated the website to provide news to residents of the watershed, developers seeking project review requirement information, and educators inquiring about education opportunities. Updates include monthly meeting packets and progress reports regarding projects in the watershed.*

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 2013 continuous flow monitoring and water quality data was collected at two long-term stations (SC-0 and SC-3) and one new station in Bass Creek (BCP) for the Shingle Creek Commission-funded stream monitoring program. Station SC-0, also referred to as the outlet or Webber Park monitoring site, is located upstream of the 45th Avenue crossing in Minneapolis. The SC-3 monitoring station is located downstream of where Shingle Creek crosses Brooklyn Boulevard in Brooklyn Park. The new monitoring site, Bass Creek Park (BCP), is located near the outlet of Bass Creek downstream of the intersection of Boone and 63rd Avenues. SC-0 collects drainage from about 41 square miles, or approximately 92% of the watershed. The SC-3 drainage area covers about 17 square miles which is approximately 39% of the Shingle Creek watershed. The BCP drainage area covers 7.0 square miles, or about 16% of the Shingle Creek Watershed.
- ◆ Additionally, there is a long-term USGS monitoring station on Shingle Creek at Queen Avenue near the border of Minneapolis and Brooklyn Center. This site is located upstream of SC-0 and drains approximately 31 square miles (70% of the watershed). The Commission and USGS collected continuous flow and storm event samples at this location from 1996 through 1999. The USGS has monitored continuous flow at this site since 2001 and continuous conductivity since 2004. Real-time data is available through the USGS website <http://waterdata.usgs.gov/mn/nwis/uv?05288705>. (Appendix 6)
- ◆ The Commission also participates in the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). However, in 2013 no volunteers were identified to assist in this program for lakes in the Shingle Creek watershed. The 2013 CAMP report will be available in summer 2014. Lake "report cards" for lakes in the watershed are included in the Commission's 2013 Water Quality Report.

(Note: After some delay, Met Council's 2012 Annual Lake Report is now available. The report is a product of a project to convert the report to an electronic and automated process, which delayed its publication. The report is in a similar format as before, except that the individual lake reports now have room for expanding data sets. The report is located on Met Council's EIMS document repository: http://es.metc.state.mn.us/eimsrelated_documents/view_documents.asp.)
- ◆ Invertebrate monitoring was conducted in the Shingle Creek watershed through Hennepin County's River Watch program. In 2013 three sites were monitored by students from Park Center High School, Calvin Christian High School and Metro Tech Academy. (Appendix 3) The complete River Watch report is available by contacting mary.karius@co.hennepin.mn.us.

- ◆ The Commission participated financially in Hennepin County's Wetland Health Evaluation program (WHEP). In 2013 three wetlands were monitored in the watershed. (*Appendix 7*) *The report, 2013 Hennepin County Wetland Health Evaluation Program*, can be viewed at http://www.hennepin.us/~media/hennepinus/your-government/get-involved/documents/WHEP_2013_EvalProgram.pdf.

The Commission's annual *Water Quality Monitoring Report* provides more detail on the Commission's stream and lake monitoring activities. The 2013 report was accepted at the Commission's April 8, 2013 meeting and forwarded to the Board of Water Resources as an appendix to the Commission's 2013 Annual Activity Report. It is available on the Commission's website.

2014 Work Plan.

◆ Continue to implement TMDLs.

Undertake a 5-year performance review for the chloride TMDL and the Crystal Lake TMDL.

Consider proceeding with a subwatershed BMP assessment funded from the construction/grant match account.

Host a chloride TMDL operator's meeting to review the results of the chloride TMDL performance review.

Continue to pursue grant funding for projects and programs, including the Biochar and Iron-Enhanced Pond Filter Bench research project and the Twin Lake Target Watershed Demonstration Program.

Explore options to fund projects that normally do not go through the levy process.

Keep abreast of Upper Mississippi River bacterial TMDL implementation planning.

Stay abreast of other regional and state TMDLs.

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

Participate in the West Metro Water Alliance joint education and outreach group.

Continue to partner with the USGS to operate the Queen Avenue monitoring site.

Partner with the Minneapolis Park Board to consider options for Shingle Creek in Webber Park.

Partner with the USGS, DNR, and other interested parties to stay abreast of groundwater issues.

◆ Continue ongoing administration and programming.

Commission stream monitoring on Shingle Creek and Bass Creek and lake water quality monitoring and aquatic vegetation surveys on Bass and Schmidt Lakes.

Volunteer stream monitoring through RiverWatch (Hennepin County).

Volunteer lake monitoring through CAMP (Met Council) on Upper, Middle, and Lower Twin Lakes, Pomerleau Lake, Crystal Lake, Meadow Lake, and Lake Success.

Complete reviews of development and redevelopment projects as necessary.

Prepare an annual water quality report.

Review feasibility studies for 2014 proposed capital projects, hold public hearings, and order projects.

Prepare a 2015 annual budget.

Continue education and outreach programming, including the EPOC, WMWA, WaterShed Partners, BlueThumb and NEMO, with a special focus on distributing educational materials regarding the use of native vegetation in lake and stream buffers.

Invite three guest speakers to make lunchtime water resources presentations.

Tour project sites in the watershed.

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 2013 cost allocations to the members are shown as part of the 2013 Operating Budget found in *Appendix 8*.

Of the \$355,550 operating budget approved by the Commission for 2013, revenue consisting of \$34,000 in application fees and program reimbursement and \$150 in interest income resulted in assessments to members totaling \$321,400. 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 2013 Audit (*Appendix 8*) are as follows:

General engineering	\$111,801
General administration	95,564
Education	53,138
Programs	80,053
Management Plans	6,455
Projects	33,815
Capital Projects	<u>56</u>
Total	\$380,882

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.

Appendix 8 also includes a listing of the projects and studies undertaken as part of its Capital Improvement Program.

Appendices

