

**MINUTES**

November 12, 2009

I. A meeting of the Shingle Creek Watershed Management Commission was called to order by Chair Tina Carstens on Thursday, November 12, 2009, at noon, at the Clubhouse at Edinburgh, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present were: Della Young, Brooklyn Center; Tina Carstens, Brooklyn Park; Janet Moore, Crystal; Karen Jaeger, Maple Grove; Diane E. Stauner, New Hope; Dawn Swanson, Plymouth; Wayne Sicora, Robbinsdale; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present: Shelley Schwaninger and Steve Lillehaug, Brooklyn Center; Jon Knutson and Todd Tuominen, Champlin; Greg Gappa and Tom Mathisen, Crystal; Rick Lestina, Maple Grove; Dan Stauner, New Hope; Kyle Turner and Kevin Springob, Plymouth; Richard McCoy, Robbinsdale; and Barb Peichel, Minnesota Pollution Control Agency (MPCA).

Not represented: Minneapolis and Osseo.

II. Motion by Moore, second by Carstens to **approve the revised agenda.**\* *Motion carried unanimously.*

III. Motion by D. E. Stauner, second by Moore to approve the **minutes of the October 8, 2009 meeting.**\* *Motion carried unanimously.*

IV. Motion by Moore, second by D. E. Stauner to approve the **Treasurer's Report.**\* *Motion carried unanimously.*

V. Motion by Moore, second by Young to approve the **November claims.**\* Claims totaling \$35,312.19 were *approved by roll call vote*: ayes - Young, Carstens, Moore, Jaeger, D. E. Stauner, and Turner; nays - none; absent - Minneapolis, Osseo and Robbinsdale.

VI. **Open Forum.**

VII. **Communications.\***

The Commissioners reviewed the **Communications Log.**\* Matthiesen noted that the Highway 610 project is being launched. He also stated that the Minneapolis *StarTribune* has featured articles on TMDLs in Plymouth lakes.

[Swanson arrived 12:08 p.m.]

VIII. **Water Quality.**

A. Staff's November 5, 2009 memo\* provided an update on the status of the **lake TMDLs** in the watershed.

1. The **Pomerleau-Schmidt-Bass Lakes TMDL** was approved by the Environmental Protection Agency (EPA) on September 25, 2009. Initial Minnesota Pollution Control Agency (MPCA) comments on the draft Implementation Plan were reviewed with the City of Plymouth and the revised Implementation Plan has been forwarded to the MPCA. Additional MPCA comments are being discussed with the MPCA and, when resolved, the Implementation Plan will be considered by the MPCA for final approval. The City of Plymouth will be holding a public meeting in December to begin discussing and prioritizing implementation activities to be included in the City's revised SWPPP.

2. **Cedar Island-Pike-Eagle Lakes TMDL.** The Public Notice period for this TMDL was September 28 - October 28, 2009. The MPCA received comments from Mn/DOT and three residents. The MPCA is in the process of developing responses to those comments, will make any necessary revisions to the TMDL, and forward the TMDL to the EPA for final approval.

3. The Public Notice period for the **Meadow Lake TMDL** was also September 28 - October 28, 2009. The MPCA received comments from three residents. The MPCA is in the process of developing responses to those comments, will make any necessary revisions to the TMDL, and forward the TMDL to the EPA for final approval.



4. The **Lake Magda TMDL** is at the EPA for review. When comments are received the necessary revisions will be made and the TMDL will be circulated internally to prepare for the Public Notice period.

B. The **Shingle Creek DO/Biotic TMDL** is ready to begin the public input process. The work plan from the MPCA includes two public open houses - one to present initial findings and gather input on possible implementation actions and one near the end of the process to review final findings and potential implementation actions. The Commission can undertake additional stakeholder and public outreach activities if it so desires from its own Education budget. Work on the TMDL must be completed by March 1, 2010.

Staff recommended that initial findings be presented to the Technical Advisory Committee (TAC) at its next meeting. They further recommended that a public open house be scheduled at the Brooklyn Center Community Center or the Brookdale Library for no later than mid-December. Staff will work with local newspapers in Camden, Brooklyn Center, Brooklyn Park, New Hope, and Plymouth to publish articles about the TMDL, publicizing the meeting, and providing an email and telephone input method for those unable to attend the meeting. TAC meetings in January and February will be scheduled to continue to review findings and develop implementation actions. The second Open House would be held in mid-February, at the same venue as the first one. Again, articles would be submitted to the local papers and email and telephone input options made available.

C. Matthiesen attended a meeting on October 29, 2009 in Plymouth that introduced a new urban stormwater runoff program from the PCA called **MIDS (Minimum Impact Design Standards)**.<sup>\*</sup> The PCA has a LCMR grant to develop products that will include:

1. A performance standard for new development and redevelopment projects.
2. Zoning code and ordinance revisions for LGUs.
3. A full menu of desired stormwater management techniques.
4. A calculation methodology, to be used by designers and regulatory reviewers, to guide practitioners in using the high-performance stormwater management techniques to meet water quality and quantity goals and standards.

The performance standards will be written around the following: *Post-development runoff hydrology (quantity and quality) and pollutant loading should not exceed pre-development runoff hydrology, based on native vegetation for the site and design storm of 5-year frequency.* The standards will apply to 1) low and medium density residential projects, 2) high density residential, commercial, and industrial projects, 3) linear projects (roads, utilities), and 4) redevelopment. Agricultural land is not included.

The presenters stated that the application of the standards will be voluntary but the legislation under Article 1, section 3, Subd.2 describes the proposed performance and design standards in the context of issuing a general permit and adopting and enforcing rules. The documentation in the presentation noted this would address the non-degradation rules but those rules have 1977 and not pre-settlement as the starting point. It is anticipated that if this becomes a rule there will be discussion on making this a state-wide requirement.

Vegetation from a site in its pre-development condition will be determined and the runoff generated by the 5-year storm will be the maximum rate and volume. In most cases in Shingle Creek/West Mississippi this will be prairie, oak savannah or basswood forest. In areas with an underlying sandy soil a 5-year 24-hr event (3.5") will result in close to zero runoff. Matthiesen estimated the volume abstraction requirement is approximately four times more than the current rule. SC/WM's current standard treats 85% of the annual precipitation volume; the proposed rule treats 97%.

At this time the program is under development and it is unclear whether the standards will ultimately become mandatory, what the regulated community involvement will be, and the schedule. Adoption of these standards will have an effect on redevelopment costs and municipal operations and maintenance. If the Commission is given some freedom in applying this rule it should determine whether the 5-year pre-settlement to 5-year post-project will result in achieving the water quality goals set forth in the TMDL plans and state water quality standards. This analysis will



determine whether this rule is too little or too much. Considering initial construction costs and continued operation and maintenance of BMPs, a blanket state-wide approach may not be the most cost-effective approach.

Staff will follow development of the standards, zoning, techniques chosen and calculation methodology and provide comment when appropriate.

**D.** Joe Bischoff, Wenck Associates, attended the **Upper Mississippi River Bacteria TMDL\*** stakeholder meeting in Elk River on October 6, 2009. Prior to the meeting a draft report was made available to the stakeholders at: [ftp://files.pca.state.mn.us/pub/tmp/090924\\_UMR\\_Bacteria\\_TMDL-DRAFT\\_Data-Sources-MonitoringRecReport.pdf](ftp://files.pca.state.mn.us/pub/tmp/090924_UMR_Bacteria_TMDL-DRAFT_Data-Sources-MonitoringRecReport.pdf).

The meeting provided an overview of the initial study which is a data and literature review for bacteria in the Upper Mississippi River watershed. The report outlines numerous data gaps for development of a TMDL including data from Shingle Creek. Staff recently provided data to the MPCA that will be included in the study. Shingle Creek will likely be listed on the impaired waters list for bacteria in the foreseeable future although it is not included on the draft 2010 303(d) list. However, due to the urban nature of the watershed, both the sources and solutions are unclear and few studies are available that address urban bacteria sources. Furthermore, Staff is currently working on developing good relationships between fecal coliform and E. coli for the Shingle Creek outlet. A couple of interesting findings were presented including:

1. Bacteria concentrations in the Mississippi River were relatively low until reaching the metro area where exceedances were much more common, suggesting that urban areas are large sources of bacteria to surface waters.
2. Bacteria concentrations seemed to be relatively high during the winter months when they would be expected to be low because of cold weather. The reason for the winter increases is not clear at this time.

The MPCA intends to have a draft TMDL by the end of 2012. It is not clear whether this would include enforceable load allocations to the Shingle Creek watershed; however, this appears likely. The MPCA is looking for monitoring partners to help identify urban sources of bacteria. MPCA may pay for some of the analytical costs; the partners would provide field collection of the data.

Motion by D. E. Stauner, second by Moore directing Staff to offer to partner with the MPCA in monitoring for an urban bacteria source assessment. *Motion carried unanimously.* The activities would be included under the current monitoring budget.

#### **IX. Watershed Management Plan.**

On September 18, 2009 the **City of Crystal\*** submitted its first Local Water Management Plan (LWMP) for review. The Commission has 60 days in which to review and approve the plan, unless the city approves an extension to the review period. That review period extends through November 17, 2009. The Plan was also submitted to the Metropolitan Council for its statutory 45-day review. The Commission is required to consider Met Council comments in its review of the Local Plan. The Council's comments were received September 30, 2009 and state that the Plan is consistent with their policy requirements.

Staff's review determined that the draft Plan requires minor revisions to meet the requirements of the Commission's Second Generation Plan. The proposed revisions were enumerated in Staff's memo dated November 5, 2009. Staff recommended that Crystal's LWMP be approved subject to the completion of those revisions and that the revised Plan should be submitted within one month. Mathisen requested an extension of this deadline since the consultant that developed the plan is unavailable to make the revisions.

Motion by Jaeger, second by Young to grant approval contingent on completing the recommended revisions and granting the City of Crystal an extension of time to January 16, 2010. *Motion carried unanimously.*



**X. Project Review.**

**SC2009-05 CSAH 81 TH 100 to Bass Lake Road, Crystal.\*** Reconstruction of CSAH 81 and frontage roads, including addition of a third lane in each direction, intersection improvements, multi-use trails, storm sewer, and stormwater BMPs. A complete project review was received October 29, 2009.

The proposed project is the reconstruction of 1.6 miles of CSAH 81 and 0.4 miles of Bass Lake Road to an urban section with medians and turning lanes, replacement of a bridge over the Soo Line railroad tracks, and intersection, frontage road, and utility improvements. The project area discharges to Twin Lake. The project construction limits encompass 61.25 acres, of which the existing impervious area is 33.5 acres, or 55%. Some currently impervious area such as buildings, parking area, and pavement will be removed and converted to pervious area. The addition of a lane, trails, and other pavement will create a net increase of only 0.5 acres of impervious surface.

To comply with the Commission's water quality treatment requirement the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing the same level of treatment - 85% TSS removal and 60% TP removal. For redevelopment/reconstruction projects such as this, the requirement applies to the new impervious surface. The applicant must also attempt to bring the rest of the site up to Commission standards. The project will create three new wet ponds, one with an infiltration shelf and one in series with an adjacent infiltration basin; a dry pond combined with an underground treatment structure; and routing of some runoff to an existing MnDOT TH 100 pond. Some of these BMPs will also treat adjacent residential or commercial areas that are not now treated. Applicant has provided calculations demonstrating that the BMPs will provide a net 26 pound phosphorus load reduction annually to Twin Lake. The BMPs accomplish a project overall removal of 64% of annual TP and 93% of annual TSS, exceeding Commission standards.

Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Rate control is provided through wet and dry detention ponds. The project meets the Commission's rate control requirements. Commission rules also require the site to abstract or infiltrate 0.5" of runoff from new impervious area, or 0.02 acre-feet, within 48 hours. Two infiltration areas are provided on this project: an infiltration shelf on the 48th Avenue Pond, and Xenia Pond, an infiltration basin. The total infiltration volume provided is 0.79 acre-feet, which meets the Commission abstraction requirement.

There are wetlands in the project area as detailed in the EAW for the project. The NWI shows a linear Type 1 Seasonal Wetland in the right of way on the east side of the highway between Wilshire and the CP Rail line. This wetland was not delineated in the EAW, which noted that there were a number of linear stormwater conveyances in the corridor with wetland characteristics that exhibited upland soils. This NWI-identified Type 1 wetland is proposed to be the location of the Xenia Pond infiltration basin planted with native vegetation. The City of Crystal is LGU for WCA. The project is not adjacent to nor does it contain any Public Waters. The project does not impact any floodplain. The Erosion Control Plan meets Commission requirements, including native seeding of pond slopes and buffers.

Several public Open Houses have been held on this project by Hennepin County, meeting the notification requirement.

Motion by Moore, second by Young to advise the City of Crystal approval of Project 2009-05 is granted with no conditions. *Motion carried unanimously.*

[Sicora arrived 12:34 p.m.]

**XI. Special Studies.**

**A. Wetland 639W.** In September Crystal Public Works Director Mathisen and Commission Staff met with staff from the Metropolitan Airports Commission (MAC) to present the Commission's preferred option which would construct a sheetpile weir at the outlet and an upstream weir that overflows into an open channel along the west side of the wetland. MAC staff was supportive of the preferred option and offered some initial comments.



MAC requested that a letter be submitted to them describing the proposed project and the hydrologic and hydraulic modeling results and requesting that the existing lease agreement between MAC and the cities of Crystal and Brooklyn Center be revised to provide for this construction. Staff is drafting a letter for review by the two cities and creating preliminary drawings for MAC review. MAC staff expects that it will take several weeks for internal review and agreement drafting, after which it will be presented to the Metropolitan Airports Commission for review and approval. Following receipt of MAC approval, plans and specifications will be developed for construction in fall-winter 2010-2011.

**B. Paired Intersection Study.** Both the control and test sections of pavement have been completed at the Robbinsdale site. Instrumentation installation except for the cameras has also been completed. Monitoring will begin with this winter season and continue for two winters.

Staff has met with City of Plymouth staff at their proposed test site. Located in the Bassett Creek watershed, the site is in a commercial/industrial area near their Public Works Maintenance Facility, 23rd and 25th Avenues at Niagara Lane. Bassett Creek has been listed for chloride on the draft 2010 303(d) list of Impaired Waters, so the research study would be relevant to that watershed. Staff will send a letter to the Bassett Creek Watershed Management Commission informing them of the study and requesting their participation with this test site.

A proposed contract between the MPCA and the Commission for completion of the Paired Intersection Study is still being updated by MPCA. It will be reviewed by the Commission's attorney prior to execution, after which the Commission will submit a request for reimbursement for costs incurred to date.

## **XII. Education and Public Outreach.**

### **A. Water Quality Education Grants.**

**B.** Staff's November 4, 2009 memo outlines Move One Degree's services to redesign the **Commission's website.**\* Motion by Jaeger, second by Moore to contract with Move One Degree at a cost of \$1,500 to provide the outlined services. *Motion carried unanimously.*

**C.** Motion by Jaeger, second by Swanson to authorize the Chair to sign the 2010 **Blue Thumb Partners Agreement.**\* *Motion carried unanimously.* The Commission's contribution will be \$500 cash and \$1,000 in-kind.

**D.** The next meeting of the **Joint Education and Public Outreach Committee** is scheduled for 8:30 a.m., Tuesday, December 8, 2009, at Plymouth City Hall. The group will continue development of the *West Metro Education and Outreach Plan.*

## **XIII. Grant Opportunities.**

**A.** The Commissioners received a copy of the **Shingle Creek Restoration I-94/CR 10 project**\* submitted to Hennepin County in partnership with Brooklyn Center. This project is in the Commission's 2010 CIP.

**B.** They also received a copy of a letter of consistency provided to New Hope in its application for an MPCA Environmental Assistance Grant for the upcoming **45th Avenue Pond Project.**\* This project is also in the Commission's 2010 CIP.

**C.** The FY2010 solicitation for **Clean Water Grants** is open until December 1, 2009. These grants will be available annually, although grant targeting, funding, eligibility, and other details may be revised periodically. For FY2010, the applicant must provide at least a 25% match to the grant amount. To be eligible for funding from the FY2010 grant program, projects must be identified in an *approved TMDL* or in a state-approved plan.

The Commissioners considered a draft application for a Clean Water Grant that would be submitted by the Commission. Proposed by Metro Blooms, the project is a citizen-support approach to stormwater management through **raingarden clusters in urban landscapes.**\* Metro Blooms would partner with the cities of Minneapolis and Robbinsdale, the Commission and Crystal Lake lakeshed residents to install raingardens on private property. They



submitted application requests for \$249,000 and \$136,000 for 200 and 100 raingardens, respectively. They are requesting Commission support with \$12,000/\$10,000. At this time Robbinsdale has indicated its support with \$25,000. Staff is discussing participation with Minneapolis staff. Since the Commission's Grant Match budget line is committed through 2010, its contribution would have to come from the Education budget and in-kind services. Motion by Carstens, second by D. E. Stauner to develop and submit this application pending participation by the City of Minneapolis. *Motion carried unanimously.*

**D. Other grant opportunities** include:

1. BWSR Runoff Reduction Grants (\$2.46 million) - Infiltration/abstraction BMPs in the Twin/Ryan Lake, Crystal Lake, or Pomerleau/Schmidt/Bass Lake watersheds.
2. BWSR Clean Water Assistance Grants (\$2.65 million) - New Hope 45th Avenue pond and Twin Lake rough fish removal.
3. BWSR Shoreland Improvement Grants (\$1.4 million) - Shingle Creek Restoration, I-94 to CR 10 (Brooklyn Center) or Regent to Noble (Brooklyn Park) and shoreline restoration projects on Twin Lake, Crystal Lake, or Pomerleau/Schmidt/Bass Lakes.

**XIV. Other Business.**

**A.** Representatives of the Board of Water and Soil Resources (BWSR) met with the Commission at its October 8, 2009 meeting to review the findings and recommendations of the Commission's **Performance Review\*** conducted earlier this year. BWSR has asked for a response from the Commission by November 20, 2009. Staff's November 5, 2009 memo outlined six recommendations for Shingle Creek and staff's proposed responses. Motion by Moore, second by Carstens directing Staff to transmit the responses to BWSR. *Motion carried unanimously.*

**B.** Motion by Jaeger, second by Swanson to approve the Shingle Creek Commission's proposed **Data Practices Procedures.\*** *Motion carried unanimously.*

**C.** A tour of sites in the western portion of the watershed will begin after this meeting. The Commissioners will view the following sites:

1. Great River Energy Building, Maple Grove.
2. Schmidt Lake rain gardens.
3. Meadow Lake improvements.
4. 45th Avenue Pond, New Hope.
5. Crystal rain gardens.

**D. Adjournment.** There being no further business before the Commission, motion by Sicora, second by Carstens to adjourn. The meeting was adjourned at 12:47 p.m.

Respectfully submitted,

Judie A. Anderson  
Recording Secretary

\*item included in meeting packet  
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