

MINUTES

April 8, 2010

I. A meeting of the Shingle Creek Watershed Management Commission was called to order by Vice Chair Wayne Sicora on Thursday, April 8, 2010, at 1:01 p.m., at the Clubhouse at Edinburgh, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present were: Della Young, Brooklyn Center new phone no.; Dean Heng, Brooklyn Park; Janet Moore, Crystal; Karen Jaeger, Maple Grove; Dan Stauner, New Hope; Steve Parks, Osseo; new email address Dawn Swanson, Plymouth; Wayne Sicora, Robbinsdale; Charles LeFevere, Kennedy & Graven; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson and Amy LeMieux, JASS.

Also present: Abiy Assefa, Brooklyn Center; Bill Walraven, Champlin; Tom Mathisen, Crystal; Rick Lestina and Tiffany Peterson, Maple Grove; Kevin Springob, Plymouth; Richard McCoy, Robbinsdale; Barb Peichel, Minnesota Pollution Control Agency (MPCA); John Bilotta, U of M Extension/NEMO; and Robert Marvin, Brooklyn Center.

Not represented: Minneapolis.

The meeting was preceded by the playing of the *Watershed Game*, an interactive tool that helps individuals understand the connection between land use and water quality. Many of the Commissioners and TAC members participated in the *Lake Game*, which was facilitated by Bilotta and LeMieux. Bilotta will send out a brief survey to assess the usefulness of the game.

II. Motion by Stauner, second by Swanson to **approve the revised agenda.*** *Motion carried unanimously.*

III. Motion by Jaeger, second by Heng to approve the **minutes of the March 11, 2010 meeting.*** *Motion carried, Young abstaining.*

IV. Motion by Moore, second by Young to approve the **Treasurer's Report.*** *Motion carried unanimously.*

V. Motion by Jaeger, second by Moore to approve the **April claims.*** Claims totaling \$42,982.24 were *approved by roll call vote*: ayes - Young, Heng, Moore, Jaeger, Stauner, Parks, Swanson, and Sicora; nays - none; absent - Minneapolis.

VI. **Open Forum.**

Moore announced the following events: *Two Great Waters Gone Bad*, April 22, 2010, 8 pm, Channel 2, and the Mississippi River Forum, May 7, 2010, 9 a.m. -1 p.m. Young announced the Brooklyn Center Art Day, April 24, 2010.

VII. **Communications.**

A. The Commissioners reviewed the **Communications Log.*** No action required.

B. The City of Brooklyn Center is undertaking a **stream restoration project*** on Shingle Creek from I-94 to CR 10 in 2010. The City has asked Wenck Associates for a proposal to provide design and construction engineering services for the project. To avoid any conflicts of interest, as the Commission's engineer, Wenck does not perform water resources work in the nine cities in the Commission unless previously approved by the Commission. Wenck did provide conceptual design as part of the successful Clean Water Legacy grant application for this project. Motion by Stauner, second by Moore to allow Wenck to submit a proposal to Brooklyn Center through its RFP process to provide design and construction work for the Shingle Creek Restoration, I-94 to CR 10 Project. *Motion carried unanimously.*

VIII. **Water Quality.**

A. Motion by Swanson, second by Heng to approve the **2010 Monitoring Agreement with Hennepin County*** for participation in River Watch (macroinvertebrate monitoring) and the Wetland Health Evaluation Program (WHEP). Costs will not exceed \$3,000 and \$2,000, respectively. *Motion carried unanimously.*

B. TMDL Updates.*

1. The **Meadow Lake TMDL** was approved by the EPA on March 23, 2010. The final Implementation Plan has been forwarded to the MPCA for final approval. It will take the MPCA a few weeks to update the MPCA Meadow Lake TMDL website with the final documents and the EPA Decision Document. <http://www.pca.state.mn.us/water/tmdl/project-meadowlake-nutrients.html>.

2. The **Cedar Island-Pike-Eagle Lake TMDL** has been sent to the EPA for final approval, expected in about a month. The final Implementation Plan has been forwarded to the MPCA for final approval. The MPCA TMDL website has not yet been updated with the final documents. <http://www.pca.state.mn.us/water/tmdl/project-cedarpikeeagle-nutrients.html>.

3. The **Lake Magda TMDL** is on Public Notice until April 21, 2010. Once the notice period is closed, the TMDL and Implementation Plan will be finalized, reflecting any comments received during the public notice period, and submitted to the MPCA for final approval. Following MPCA approval, the TMDL will be sent to the EPA for final approval, which is expected by mid-summer. <http://www.pca.state.mn.us/water/tmdl/project-lakemagda-nutrients.html>.

4. The **Shingle and Bass Creek dissolved oxygen (DO) and biotic integrity TMDLs** are nearly drafted. The results will be presented to the Technical Advisory Committee (TAC) on April 22 and the Commission at their May 13 meeting.

The Stressor Identification being developed for the biotic integrity TMDL has identified three interrelated primary stressors and two secondary stressors. The primary stressors are Lack of Habitat, Altered Hydrology, and Loss of Connectedness, with the secondary interrelated stressors Dissolved Oxygen and Chloride. The weight of evidence approach is unable to effectively separate the effects of the different stressors nor can this approach determine which of the three primary stressors is the most important. Of these stressors, only dissolved oxygen and chloride are considered pollutants for which a TMDL can be established. The dissolved oxygen TMDL will establish the allocations for DO, while the chloride TMDL has already completed those allocations. The biotic TMDL will include specific recommended actions to address the other stressors, but they will not be in the form of an allocation. The recommended approach is to set a reasonable stream habitat numerical goal using an index such as the Rapid Bioassessment Protocol.

The MPCA has accepted the dissolved oxygen modeling and the proposed "scenarios" to model potential methods to address low DO in Shingle Creek. (MPCA's memo dated April 6, 2010 was included in the meeting packet.)The three initial scenarios are:

a. **Headwaters.** It is suspected that the large wetlands at the head of the two segments of Shingle Creek (the Northland Wetland for Upper Shingle Creek and Palmer Lake for Lower Shingle Creek) affect water quality in the creek and contribute significantly to the inability of the creek to maintain dissolved oxygen. The first scenario asks: What would the water quality discharged from those two wetlands have to be to avoid the DO sag that occurs immediately downstream?

b. **Channel Form.** The widened channel that has been altered to convey storm flows results in reduced velocity when flows are lower. Increasing velocity by modeling a low-flow channel will evaluate and determine an optimal low-flow channel cross section and what length of the stream would need to be improved with a low flow channel to increase reaeration.

c. **Sediment Oxygen Demand (SOD).** Sediments in the wetland and slow-flowing reaches typically have high organic content, the decay of which consumes available oxygen within the sediments and overlying water column. The model suggests SOD is high enough in certain reaches of Shingle Creek to lower dissolved oxygen to an anoxic state similar to a lake bottom. Under these conditions, phosphorus and reduced forms of nitrogen may be released from the sediments and become available to algae and other aquatic plants for primary production. This scenario asks: How much SOD reduction would need to occur to maintain at least 5 mg/L dissolved

oxygen? SOD can be reduced in a number of ways, such as reducing water-sediment contact by constructing narrower low-flow channels or by excavating a mucky streambed and replacing it with a sand/cobble streambed.

IX. Watershed Management Plan.

A. The proposed **Major Plan Amendment*** revising the Capital Improvement Program (CIP) will complete its 60 day review process on April 13, 2010. (No comments have been received to date.) The schedule below sets forth the process the Commissions must follow to complete this major plan amendment. Since the Board of Water and Soil Resources (BWSR) often does not meet in July, this schedule assumes approval at the August 2010 BWSR Metro Committee and BWSR Board meetings. The next step is to hold a public hearing on the amendment.

February 12, 2010	Send out 60-day review document
April 13, 2010	Completion of 60 day review
May 13, 2010	Public hearing (30 days, must be within 30-45 days of 60-day period)
May 14, 2010	Send out 45-day review documents
June 30 or so	Completion of 45-day review
July or August	County consideration and approval
August	BWSR consideration and approval
September 9, 2010	Commission adoption of amendment, project hearings and certification if necessary

Motion by Stauner, second by Parks to set the public hearing on the Major Plan Amendment for Thursday, May 13, 2010, at the regular meeting at 12:45 p.m. *Motion carried unanimously.*

B. The **Technical Advisory Committee (TAC)*** will meet on Thursday April 22, 2010, to view a presentation on the Shingle Creek Biotic TMDL Stressor ID and Dissolved Oxygen TMDL Scenarios, discuss proposed items for the Capital Improvement Program (CIP) "Wish List," and review the City of Maple Grove's proposed Stormwater Diversion and Treatment System.

1. The **CIP "Wish List"** stems from the ongoing discussions between BWSR, the Commissions, and Staff regarding ways to minimize future major plan amendments. The Commissions' attorney has determined that it would be to the advantage of the Commissions to include as many projects in the CIP as possible and to describe them with as much detail as possible. This would make it more likely that the Commission could avoid having to go through a plan amendment altogether or, if a plan amendment is required, that it would only be a minor plan amendment. The Commissions referred this suggestion to the TAC and Staff to attempt to describe as many capital projects as can reasonably be done for inclusion in the CIP. Cities are encouraged to identify projects for inclusion on the list.

2. Stormwater Diversion and Treatment System.* Maple Grove is developing a plan for building infiltration credits as its gravel mining area (GMA) is developed. Due to porous soils the City has the opportunity to exceed the Commission standard of not discharging stormwater from a 0.5" rain fall over impervious surfaces. The City is proposing five sub-watersheds that would acquire credits up to infiltrating a 1.5" to 1.7" storm. Commission staff proposes to treat this as a plan review but needs to develop a plan to track the use of the credits over time. It is expected the GMA will build out over 50 years and a credit-tracking mechanism needs to be constructed and maintained to survive staff changes. This is also a new approach to build regional credits for infiltration although something on a smaller scale was done in Brooklyn Center for regional water quality near the Regal Theater at Highways 252 and 694. The TAC will review the proposed plan at their April 22, 2010 meeting and make a recommendation to the Commission at a regular Commission meeting.

X. Project Review.

SC2009-02 Crystal Lake Lakeview Terrace Park Project, Robbinsdale. McCoy updated the Commissioners on his meetings with the Department of Natural Resources (DNR) regarding this project. He indicated DNR is still

concerned about setting a precedent of using the lakebed for stormwater treatment. They were also concerned about reducing lake levels too far and that as much concentrated flocculent as possible be removed.

XI. Special Studies.

Paired Intersection Study.* The Commissioners reviewed proposed sub-grant agreements between the Commission and the cities of Robbinsdale and Plymouth. By way of these agreements the cities agree to construct the control and test intersections for the Paired Intersection Study and to the terms of the cost reimbursement. The cities will be reimbursed the difference between the total cost to install the porous pavement and the cost for a traditional cross-section and pavement based on the construction contract unit prices up to the limits in the agreement. Motion by Young, second by Moore to approve the agreements, with changes as necessary for approval by the cities. *Motion carried unanimously.*

XII. Education and Public Outreach.

A. Water Quality Education Grants.

1. Meadow Lake Watershed Association.* This grant application will assist the Association with implementing Year 1 of its Lake Management Plan, focusing on research, communication, and education. The Association plans to undertake surveys of lakeshore and watershed residents to better understand their level of knowledge about the lake and water resources in general and to learn their ideas and preferences for the lake. Members will also conduct research about the habitat needs of the species that are desired in the lake and its environs. The Association also plans to publish a periodic newsletter and brochures of information about actions the lakeshed's residents can undertake to help improve the lake. Finally, the Association plans to undertake some education activities including installing yard signs in the watershed, sponsoring a catch basin stenciling project with Meadow Lake Elementary School, conducting a shoreline restoration workshop, and a potential demonstration project in Meadow Lake Park. Motion by Jaeger, second by Moore to approve this application for funding of \$1,000 (\$500 each from the Shingle Creek and West Mississippi commissions). *Motion carried, Stauner abstaining.*

2. The Victory Neighborhood (ViNA)* grant application is to expand the successful 2009 Rain Garden Party for 2010, increasing the goal to 20 rain gardens (15 were installed in 2009). ViNA proposes to contract with Metro Blooms for the design of rain gardens and individual property stormwater management plans, and with the Metro Conservation Corps (see below) for the excavation of the rain gardens. Residents are responsible for providing plants, mulch, and compost; and planting and maintaining the rain gardens for at least 10 years. Volunteers from the ViNA Environment Committee will coordinate the project and master gardeners will provide a fall workshop on rain garden and native landscaping maintenance. Motion by Jaeger, second by Moore to approve this application for funding of \$1,000 (\$500 each from the Shingle Creek and West Mississippi commissions). *Motion carried unanimously.*

3. In addition to the education grant application above, ViNA is submitting an application to the **Minnesota Conservation Corps (MCC)*** for the excavation of the rain gardens. The MCC received Clean Water funding to provide labor on projects that address water quality and water management issues. The application is for up to six days of crew assistance to excavate the proposed 20 rain gardens. This application must be submitted by a watershed organization on their behalf and is very similar to the 2009 ViNA project as well as the project proposed by the City of Plymouth for the Schmidt Lake area and approved by the Commission at the March 11, 2010 meeting. The rain gardens will be excavated by an MCC crew with oversight provided by Metro Blooms landscape design assistants. Motion by Jaeger, second by Swanson to sponsor the ViNA grant application to the MCC. *Motion carried unanimously.*

B. Following discussion with LeFevere, the **West Metro Water Alliance (WMWA)** has decided to draft a cooperative agreement to formalize the group. Following approval of the agreement by the current WMWA representatives, prospective members will be asked to:

1. Adopt the agreement.

2. Recognize WMWA as a consortium of organizations working to provide coordinated education and outreach on water resource issues in the West Metro Area.
3. Authorize participation in WMWA.
4. Designate a formal representative from the Commission to WMWA.
5. Provide comments on the vision, mission, goals, draft Plan, and administrative structure.

The next meeting of WMWA is scheduled for 8:30 a.m., Tuesday, May 11, 2010, at Plymouth Creek Center.

XIII. Grant Opportunities.

At the March meeting the Commission approved submitting an application to the Metropolitan Landscape Restoration Program for the proposed **Crystal Lake BMPs project**.* The Hennepin Conservation District (HCD) rated this application the highest of those received and recommended to the Association of Metropolitan Soil and Water Conservation Districts that it be funded, which it was.

On April 6, 2010 Staff met with McCoy; Ellen Sones, Hennepin County Environmental Services (HCES); Stacey Lijewski, HCD; and Shawn Tracy, Metro Conservation Districts (MCD). Tracy presented an overview of the process that will be used to evaluate portions of the Crystal Lake watershed for retrofit BMPs. The Stormwater Retrofit Protocol is an intensive but structured standardized assessment methodology developed by the MCD, drawing heavily on materials developed by the Center for Watershed Protection. The SRP method systematically identifies, evaluates, and prioritizes the most feasible and effective types and locations of retrofit BMPs. The outcome of this assessment is a subwatershed map that identifies priority areas as well as areas that, for one reason or another, were identified as low priority.

The MCD received \$1,000,000 from Clean Water Legacy funds to expand this existing program over two years. The award to the Commission and Robbinsdale includes both a cash component of up to \$50,000 as well as funds to purchase design assistance from MCD. The MCD expects that grantees will provide some level of in-kind staff time to assist in the assessment. That staff time may include subwatershed assessment, site assessment, design, modeling, property owner contacts, project coordination, etc. The MCD estimates about 120-150 hours of staff time between the City and the Commission would be required to complete the assessment, identify and prioritize projects, and prepare conceptual plans and cost and pollutant and volume removal estimates. Robbinsdale will evaluate staff availability, but likely will not be able to provide 120-150 hours of time to this project. Wenck staff have worked with MCD on a pilot project in 2009 to perform this analysis in the Coon Creek watershed, are familiar with the process, and can provide technical assistance to Robbinsdale if the city is unable.

This project is intended to serve as a demonstration of this in-depth site assessment methodology. The results will be available to the Commission and all the member cities, and staff will make progress reports to the Commission and TAC on the assessment process.

The Commission's 2010 budget includes a \$7,000 contingency line item. Staff recommends that the Commission allocate \$5,000 of that contingency for staff time to assist Robbinsdale with the technical assessment and up to \$5,000 from the Engineering line item if necessary. Motion by Jaeger, second by Stauner to approve the budget adjustments as proposed. *Motion carried unanimously.*

XIV. Other Business.

A. Motion by Young, second by Swanson to accept the Commission's **2009 Activities Report*** pending review and comment by April 16, 2010. *Motion carried unanimously.* Young noted a correction to her phone number.

B. Motion by Jaeger, second by Swanson to accept the Commission's **2009 Audit Report**.* *Motion carried unanimously.*

C. Commissioners were reminded of the **budget work session** at 11:00 a.m., Thursday, May 13, 2010, prior to the regular meeting.



D. Adjournment. There being no further business before the Commission, motion by Jaeger, second by Moore to adjourn. The meeting was adjourned at 1:59 p.m.

Respectfully submitted,

A handwritten signature in black ink that reads "Judie A. Anderson".

Judie A. Anderson
Recording Secretary

*item included in meeting packet
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