

MINUTES
March 13, 2008

I. A meeting of the Shingle Creek Watershed Management Commission was called to order by Secretary Kathleen Carmody on Thursday, March 13, 2008, at 12:47 p.m., at Lancer at Edinburgh, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present were: Kathleen Carmody, Brooklyn Center; Janet Moore, Crystal; Karen Jaeger, Maple Grove; Craig Cooper, Minneapolis; Diane E. Stauner, New Hope; Ken Schreiber, Osseo; Peggy Willenberg, Plymouth; David Mathias, Robbinsdale; Charles LeFevere, Kennedy & Graven; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present: Shelley Schwaninger, Brooklyn Center; Mark Gustafson, Champlin; Tom Mathisen, Crystal; Tiffany Peterson, Maple Grove; Daniel W. Stauner, New Hope; Ned Carroll, Plymouth; Richard McCoy, Robbinsdale; and Boa Lee, *Sun Post Newspaper*.

Not represented: Brooklyn Park.

II. Motion by Cooper, second by Jaeger to **approve the agenda**. Motion carried unanimously.

III. Motion by Jaeger, second by Schreiber to approve the **minutes of the February 14, 2008 meeting**. Motion carried unanimously.

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

V. Motion by Jaeger, second by Carmody to approve the **March claims**. Claims totaling \$84,304.23 were approved by roll call vote: ayes – Carmody, Moore, Jaeger, Cooper, Stauner, Schreiber, Willenberg and Mathias; nays - none; absent – Brooklyn Park.

VI. Open Forum. No one wished to speak.

VII. Communications. The Commissioners received copies of the following:

A. February Communications Log. No action required.

B. Results of a Board of Water and Soil Resources (BWSR) survey of demographic make-up of watershed management organizations.*

C. Announcement of **Shallow Lakes Forum V**,*March 27-28, 2008, in Fergus Falls.

D. Announcement that the Chloride TMDL Implementation Plan has received one of five American Public Works Association (APWA) national **Excellence in Snow and Ice Control Awards**. The Minnesota Chapter of APWA nominated the “Shingle Creek Chloride TMDL Partnership” (the Commission, the nine cities in the watershed, Hennepin County, MnDOT, and the Minnesota Pollution Control Agency) for this award. It will be presented at the North American Snow Conference in April. Every member of the partnership will receive a plaque commemorating this award.

E. Request from Hennepin County Taxpayer Services to return over-settlement of moneys for the **Brooklyn Park shoreline restoration project**. LeFevere is reviewing the request.

F. March Waterfront Bulletin. <http://www.pca.state.mn.us/water/tmdl/waterfront/index.html>

VIII. Water Quality.

A. On February 28, 2008 Staff met with Pat Olek, a representative of the Cedar Island Lake Association. Olek had seen the **Cedar Island Lake TMDL** posted on the Commission’s website and contacted the Commission to learn more about the TMDL and to be sure that the voluntary lake management activities the association is undertaking



are consistent with the TMDL. He requested advice as to what activities should be pursued in the short term and how that relates to long-term plans for the lake and TMDL implementation.

The association has funded treatment for curly-leaf pondweed for the past three years. The lake has a very large population of black bullheads, which is contributing to lake water clarity problems. This spring they will be hiring a consultant to conduct a fish survey and prepare a long-term vegetation management plan. These activities are identified in the Cedar Island Lake TMDL as recommended ongoing management activities.

Staff discussed the TMDL process with Olek. The Commission will schedule at least one more stakeholder meeting with residents prior to finalizing the TMDL and the Implementation Plan. The Association will be invited to participate in that public input process. Long term, the TMDL draft implementation plan identifies a possible lake drawdown to eradicate the rough fish population, reduce the incidence of curly-leaf pondweed, consolidate sediments, and encourage the growth of native aquatic vegetation, as well as an alum treatment to reduce the internal phosphorus load. The Association has been working with the Department of Natural Resources, which may be interested in applying chemical treatment to the lake, feeder ponds and wetlands to help eradicate the rough fish. A number of technical and policy issues would need to be resolved before those types of activities could be considered. Staff told Olek that the Commission will be coordinating with the City of Maple Grove before proceeding. The Association would like to be part of those discussions.

B. 2008 Water Quality Monitoring. The Shingle Creek and West Mississippi Commissions each year undertake monitoring activities, including routine stream monitoring and volunteer lake, stream and wetland monitoring. Water quality and quantity monitoring on Shingle Creek is performed by Wenck staff and the US Geological Survey (USGS). Stream flow and water quality are monitored at two locations -- downstream of Humboldt Avenue in Minneapolis and just downstream of Brooklyn Boulevard at the Brooklyn Center/Brooklyn Park border. A third site at Queen Avenue in Minneapolis is monitored for flow by the USGS as a part of its ongoing National Assessment of Water Quality (NAWQA). Stream monitoring is scheduled to begin April 1, 2008 and continue through October 31, 2008. Staff recommended that the 2008 Commission monitoring program continue to focus on dissolved oxygen and turbidity data in support of the biotic and dissolved oxygen TMDLs. They also recommended sampling for both E. coli and fecal coliform at the outlet because the State standard is switching from fecal coliform to E. coli. The 2008 budget for stream monitoring is \$39,000. The Commission also partners financially with the USGS in the operation of the Queen Avenue monitoring station and that continued participation has been approved separately.

For the **biological monitoring** program Staff recommends continued participation in Hennepin County Environmental Services' (HCES) River Watch program. Student volunteers provide macroinvertebrate monitoring at three locations on Shingle Creek and one location on Mattson Brook in West Mississippi. Three Rivers Park District monitors an additional site on Shingle Creek in the North Mississippi Regional Park. The 2008 budget in Shingle Creek is \$3,000 and for West Mississippi is \$1,000.

The Metropolitan Council's **Citizen Assisted Lake Monitoring Program (CAMP)** trains volunteers to take surface water samples and make water quality observations from late spring to early fall. CAMP is the Commission's primary means of obtaining ongoing lake water quality data and is also an NPDES Education and Outreach BMP. CAMP volunteers monitor the lakes biweekly, measuring surface water temperature and Secchi depth and collecting surface water samples that are analyzed by the Met Council for total phosphorous, total Kjeldahl nitrogen, and chlorophyll-a. The volunteers also judge the appearance of the lake, its odor and its suitability for recreation. The annual budget for this program is \$7,000, which includes the Met Council cost plus the cost for Wenck to coordinate volunteers, collect their samples and incorporate the CAMP data into the Commission's water quality database and annual water quality report. Lakes are monitored on a rotating schedule. This year Staff proposes to monitor Crystal, Meadow, Ryan and Success Lakes and all three basins of Twin Lake.

In 2007 the two Commissions began participating in HCES' **Wetland Health Evaluation Program (WHEP)**. Volunteers monitored two wetlands in Brooklyn Park (one in the Environmental Preserve, the other north of Brookdale Drive near Xerxes), Wetland 639W in Crystal, and one wetland in Plymouth (Timber Shores Park at the outlet of Bass Lake). For 2008 Staff recommended that the wetlands in Brooklyn Park and Plymouth be repeated. For the fourth site, either Wetland 639W or a mitigation wetland will be monitored. It is their recommendation that two wetlands in each watershed be monitored in 2008. The budget for WHEP monitoring is \$2,000 in Shingle Creek and \$1,000 in West Mississippi.



Motion by Stauner, second by Carmody to approve the 2008 monitoring program as recommended, Motion carried unanimously.

C. At their last two meetings the Commission approved the **Wetland 639W Restoration** work plan and discussed a schedule for proceeding with the feasibility study. The work plan includes monitoring to be undertaken in 2008 to supplement the monitoring conducted in 2002. The estimated cost of this monitoring is \$30,000. Last month Staff recommended that the Commission consider going forward with this monitoring in 2008 as the Commission match to the Wetland 639W grant. This would be funded with available funds in the grant match fund, which would then be reimbursed in 2009 from the county tax levy for the 639W project. Staff's March 6, 2008 memo provided a monitoring plan for this project. It has been reviewed and approved by the Minnesota Pollution Control Agency (MPCA) and the Environmental Protection Agency (EPA) and includes additional flow and water quality monitoring at the inlet, midpoint, and outlet of the wetland, groundwater well level monitoring, and analysis of the soil cores excavated when installing the groundwater monitoring wells.

The purposes of this monitoring are to obtain an additional year of flow and water quality data and to obtain groundwater level data and sediment core chemistry analysis in order to better understand the hydrology and hydraulics of this flow-through wetland and the biogeochemistry and ecological status of the wetland. The groundwater monitoring will provide data to more fully understand the water budget of the wetland, and how fluctuations in the groundwater table influence the ability of the wetland soil to adsorb phosphorus.

Later, after the grant funding becomes available, additional field work will be completed under the grant budget. This work will include a wetlands functions and values assessment, wetland delineation, floristic (vegetation) quality assessment, and macroinvertebrate collection. Surveys of the channel profile and cross sections, and wetland elevation data will also be obtained to better determine how water flows through the wetland. Motion by Cooper, second by Mathias to approve the 2008 monitoring plan for this project as outlined. Motion carried unanimously.

D. Twin Oak Pond. This grant was originally awarded from the Section 319 federal funding program. After the grant was awarded, the MPCA determined that this type of project was not eligible for 319 funding because it was treating stormwater and funding should have come from another source. They were able to work with the BWSR to rearrange funding sources for various grant projects and nearly fully fund the grant from other sources. The original grant was in the amount of \$77,500. The agencies were able to assemble \$73,080 from other grant sources, so the City of Crystal must make up the \$4,420 difference. The grant agreement has been submitted to the Commission's attorney for review and he has forwarded some technical revisions to BWSR contract staff. Motion by Cooper, second by Stauner to authorize execution of the grant agreement, subject to review and approval of the final agreement by the Commission's attorney. Motion carried unanimously.

The work plan attached to Staff's March 6, 2008 memo has been approved by the MPCA and BWSR. It includes final design of the pond; preparing construction documents; providing construction management services; and performing post-construction monitoring to evaluate the actual annual phosphorus and sediment load removed by the pond. Motion by Cooper, second by Jaeger to approve the work plan. Motion carried unanimously.

IX. Project Reviews. There are no projects.

X. Watershed Management Plan.

A. The **major plan amendment revising the Capital Improvement Program** has been distributed for 60-day review. The amendment adds the Crystal Twin Oak Pond project to the 2008 CIP and splits the Wetland 639W project into two phases over two years. Two 2009 projects would be moved to 2010. The earliest BWSR can approve the plan amendment is at its August meeting and the earliest the Commission can hold project hearings on the Twin Oak Pond and Wetland 639W projects is September.

B. NPDES Permit Requirements. Cities in the watershed that are MS4s (Municipal Separate Storm Sewer System) must revise their National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevent Programs (SWPPPs) by August 2008 with new or revised best management practices (BMPs) that reflect TMDL implementation activity. MPCA staff Barb Peichel and Anna Kerr were present at the Commissions' February 27, 2008 Technical Advisory Committee (TAC) meeting to provide an overview of the process the MS4s should follow and what the MPCA will be looking for in the SWPPPs. In summary, MS4s do not need to revise their SWPPPs though a formal

public review process. MPCA requires the MS4 to submit an addendum to the permit that includes a narrative of how the MS4 intends to implement the TMDL and any new or revised BMPs. The MS4 should attempt to estimate the load reduction that would result from each BMP and include a discussion of how they will track performance. MS4s should also include BMPs and narrative information that explains what they are already doing that is consistent with the TMDL implementation plan, to “take credit for” existing activities.

As indicated in the TMDL implementation plan, the Commission is responsible for data collection and ongoing evaluation. The Commission will provide language for the MS4s to use in their narratives that explains the role of the Commission and how it relates to the implementation activities of the MS4. The Commission will also investigate standardized reductions for BMPs so these are consistent between MS4s.

C. At the February TAC meeting members also reviewed a draft of the **revised rules and standards** incorporating comments from their previous meeting. Major revisions proposed include revising the infiltration requirement into a volume management requirement; specifying pollutant removal performance standards rather than specifying a NURP pond for stormwater treatment; and revisions to areas excluded from infiltration.

Volume Management. The TAC spent considerable time discussing the feasibility of increasing the one-half inch infiltration requirement to a one-inch volume management requirement. It was noted that areas with sandy soils would have less trouble meeting this requirement, but areas with soils that are less conducive to infiltration would be especially burdened by this requirement. Matthiesen presented an example of a project in Plymouth that had been reviewed and approved by the Commission that incorporated one-half inch of infiltration through engineered infiltration basins. He evaluated the feasibility of managing one-inch of runoff through various techniques including planting trees, using pervious pavement in the parking lots, amending the soils with compost to increase permeability and using stormwater stored in the ponds for irrigation. He concluded it was technically possible through these practices alone or in combination to retain one inch of runoff, but it would be more expensive for the developer. The TAC requested more information from the engineer on the additional cost of these practices. In addition, the TAC may consider varying the depth required to be managed based on the type of native soils.

Pollutant Performance Removal. The TAC reviewed and accepted the proposed revisions adopting the standard of 60% removal of Total Phosphorus and 85% removal of Total Suspended Solids through one or more BMPs to replace existing language requiring ponding.

Areas Excluded from Infiltration. The proposed revisions include exempting sites with contaminated soil or groundwater and sites within a delineated 1-year time-of-travel zone in a wellhead protection area. Additional research will be done before agreeing to the 1-year time-of-travel zone exemption. The TAC also asked that the proposed revision requiring pretreatment of runoff prior to discharge into an infiltration area be defined more specifically, perhaps specifying particle sizes to be removed. The TAC will review the rules and standards once more before making a recommendation to the Commissions.

D. The MPCA is proposing revisions to the **NPDES General Construction Permit** and is taking public comment on those revisions until March 26, 2008. This General Permit contains the water quality and erosion control requirements that must be met for construction disturbing one acre and is in addition to any other permits or project reviews required by cities, counties, or watershed organizations. Staff reviewed the proposed revisions for consistency with current rules and the proposed revisions being discussed by the TAC. Of particular interest to the Commissions are the proposed revisions relating to NPDES construction permits issued in areas that discharge to an Impaired Water.

1. **Proposed:** Projects requiring NPDES construction permits that discharge to and are located within *one mile* of an impaired water must meet more stringent special requirements than those that do not. If the project disturbs 50+ acres, the SWPPP prepared for the project must be approved by the MPCA prior to the start of construction. For projects disturbing <50 acres and more than one acre, the SWPPP must be prepared and conformed to but does not need to be reviewed and approved by the MPCA. If the project disturbs 5+ acres, a temporary sedimentation basin must be provided, or if that is infeasible, equivalent sediment control must be provided.

For projects creating one acre or more of new impervious surface and for which a TMDL has not yet been approved or where a TMDL does not specify required BMPs, permanent water quality treatment for *one-inch of runoff* from that new impervious surface must be provided, and *at least one-half inch of that must be infiltrated*. Exceptions are for areas with D soils, areas with less than three feet of separation from seasonal groundwater, areas

proximate to bedrock, and contaminated sites. Where an approved TMDL specifies BMP requirements for permitted projects, the SWPPP must implement those BMPs.

Discussion: Because the Mississippi River impairments are not currently subject to the special provisions, apparently no part of the West Mississippi watershed would be subject to the more restrictive requirements. However, in the future, should the river be listed for one of the impairments noted above, then portions of West Mississippi would be covered. It is not clear how the Lake Pepin TMDL might affect permit requirements for projects discharging to the Mississippi River. The one-mile requirement creates areas of the Shingle Creek watershed where one side of the street would be subject to the more stringent requirement, while the other would not. In developed areas served by storm sewers, channels, and other conveyances, runoff is being discharged into the impaired water whether it is 200 feet from the water or two miles from it.

Response: Staff recommends that the Commissions consider submitting a comment that in areas served by storm drainage systems, rather than the proposed one mile radius, the entire area draining to an impaired water should be subject to the new requirements. Motion by Jaeger, second by Cooper to approve this recommendation. Motion carried unanimously.

2. Proposed: For NPDES-permitted projects that meet Commission review thresholds, the new requirements are actually less stringent than current Commission rules and standards. However, for projects that do not meet Commission review thresholds, for example projects on sites between one and five acres in size, the NPDES construction permit treatment requirement would double from the current one-half inch to the proposed one inch.

Discussion: City staffs currently work with developers to incorporate BMPs as practicable on these small sites. The TAC discussed amending the review thresholds to make these smaller projects subject to Commission rules and standards, but generally preferred to make no change.

Response: Member cities may wish to comment on the proposed impacts to small site development and redevelopment. From a TMDL implementation perspective, these sites would fall under the provision that small sites and homeowners be encouraged to incorporate BMPs as possible, but there is no specific treatment requirement or expectation, and no load reduction is assigned to these practices. No action by the Commission.

3. Proposed: Of the one inch of runoff that is treated, at least one-half inch must be infiltrated.

Discussion: The TAC is currently considering revisions to the Commission rules and standards that would amend the infiltration requirement to be a volume management requirement. This provides developers with flexibility in incorporating a variety of BMPs to retain runoff on site.

Response: Staff recommends that the Commissions consider submitting a comment that, rather than prescribing one-half inch of infiltration, the permit require one-half inch to be retained on site through volume management BMPs. Motion by Cooper, second by Willenberg to approve this recommendation. Motion carried unanimously.

4. Proposed: Sites with D soils are exempt from the infiltration requirement.

Discussion: These sites can still achieve volume management through soil amendment with compost, bioinfiltration with engineered soils, subsurface storage, tree planting, capture and reuse, and other volume management BMPs.

Response: Staff recommends that the Commissions consider submitting a comment that opposes exempting sites with D soils from the volume management requirement. Motion by Cooper, second by Willenberg to approve this recommendation. Motion carried unanimously.

5. Proposed: Some situations exist where sites would be exempt from the infiltration requirement.

Discussion: Not included in that list are sites within wellhead protection areas.

Response: Staff recommends that the Commissions consider submitting a comment that volume management using infiltration be done in accordance with Minnesota Department of Health guidance called "Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas," as amended, and further that infiltration practices be prohibited within a delineated 1-year time of travel zone in a wellhead protection



area, within 400 feet of a community water well, or within 100 feet of a private well. Motion by Cooper, second by Stauner to approve this recommendation. Motion carried unanimously.

6. Proposed: The wet sedimentation basin design in the current and proposed permit is only based on the volume generated by one-half inch of runoff from new impervious surface.

Discussion: Although there is a minimum dead storage specified in the permit, a pond designed in this manner may be hydraulically undersized if the entire contributing basin results in a volume larger than this event.

Response: Staff recommends that the Commissions consider submitting a comment that the required volume be the larger of either one-half inch of runoff from new impervious surface or one-half inch of runoff from the entire contributing watershed. Motion by Cooper, second by Stauner to approve this recommendation. Motion carried unanimously.

E. Except for those with land in the Minnehaha Creek Watershed District or the Mississippi WMO, all member cities were required to complete a **local water management plan** update by the end of 2006. Currently, Brooklyn Center and Minneapolis have completed and approved plans; Brooklyn Park, Crystal, New Hope and Robbinsdale anticipated completing their plans by the end of 2007; and Maple Grove will complete their LWP in tandem with their Comprehensive Plan. On December 26, 2007, the Commission received a copy of the City of Plymouth's 2008 Comprehensive Plan for review and comment. The status of the Osseo plan is unknown.

F. The **next TAC meeting** will be held at 8:30 a.m., Wednesday, March 26, 2008, at Crystal City Hall.

XI. Education and Public Outreach Program. The SCWM Education and Public Outreach Committee (EPOC) met on Tuesday, March 4, 2008.

A. Water Quality Education Grants. One grant application is still pending, awaiting more information from Champlin Park High School. The EPOC also approved the concept for an application for an Eagle Scout composting project at Highway 169 and Bass Creek.

B. Partnership Opportunities.

1. The results of the **Public Opinion Survey** are in the hands of the EPOC subcommittee and will be reviewed on March 17 prior to distribution to Commissioners, member cities and other interested parties. The PowerPoint presentation given on January 31, 2008 will also be included in the final package. Press releases will be issued to local media and the EPOC will pursue the possibility of a presentation on Cable 12. From the results of the survey the EPOC will develop future education and public outreach recommendations for the Commissions to consider.

2. Rain Garden Workshops. Workshops A have been scheduled for Maple Grove, Plymouth and Crystal on April 19, May 15, and June 3, 2008, respectively. Workshops B are scheduled on May 3 and May 31 in Maple Grove and Plymouth. Metro Blooms will provide to the member cities information for their use in newsletters, web postings, etc. A copy of a general press release was included in the meeting packet.

3. Last month the Commissions approved partnership in **Blue Thumb**, an educational program of the Rice Creek Watershed District. Their website includes useful information on rain gardens, native plants, and shoreline stabilization. The Commissions' logos have already been posted and Staff will create additional verbiage about the Commissions for inclusion on the Blue Thumb website <http://www.bluthumb.org/>.

4. The Great Shingle Creek Watershed Cleanup. Cleanup week is April 19-26, 2008. EPOC is in the process of identifying the contacts in the member cities for this event. City contact persons will receive a Planning Guide to assist them in creating a successful event in their communities. Staff has contacted member cities to ask for time at an upcoming Council meeting to talk about the Cleanup and request them to issue a Proclamation. Maple Grove Commissioner Karen Jaeger has volunteered to make these presentations.

5. Plymouth Yard and Garden Expo will take place April 4-5, 2008 at Plymouth Creek Center. The Commissions will have a booth at this event and coordinate displays/activities with the Bassett Creek Commission who will have the adjoining booth. Motion by Cooper, second by Jaeger to approve \$25.00 from each Commission for the booth at the Expo and \$250 from each Commission to purchase promotional materials for use at events such as the Expo and the Cleanup. Native seed packets would be one of the purchases. Motion carried unanimously.



C. The **next EPOC meeting** is a joint meeting with the Elm Creek and Bassett Creek WMOs and is scheduled for 8:30 a.m., Tuesday, April 8, 2008, at Plymouth City Hall.

XII. Grant Opportunities. In January the Commission received official notice that two of its grant applications for Clean Water Legacy Act (CWLA) funds were approved. The 639W project was funded to \$60,000 and the Twin Oak Pond project was funded to \$77,500. (See VIII.C. and VIII.D.)

Because Section 319 funds are federal funding, the work plan for the **Wetland 639W project** must be approved by the EPA. The work plan reviewed by the Commission in January was approved by the MPCA with a few modifications and submitted to the EPA for review and approval. Once it is approved by the EPA it must wait for approval of the federal budget to authorize funding. This will likely not occur until this fall.

Phase I of this project totals \$120,000, including monitoring in 2008 and developing the feasibility report and plans and specifications in 2009. The grant award is specifically for the feasibility study and plans and specifications and not for construction of the project. The CIP amendment currently underway divides this project into feasibility and plans and specifications in 2008-09 and construction in 2009-2010. The cities that contribute/benefit from this project (Brooklyn Center, Brooklyn Park, Crystal, New Hope, and Robbinsdale) have not come to any agreement on whether/when to do this project. The grant is for \$60,000, the Commission's match is \$30,000, and the cities would match \$30,000. Cities could contribute their shares in either 2008 or 2009. Staff recommended that the cities formally commit to funding the \$30,000 by September 2008. Mathisen agreed to lead the effort to determine the contributions from the five cities. The cities have also not come to an agreement on how to share the cost of this first phase or the cost of construction. In February the Commission directed the TAC to meet and report back with an agreed cost share by August 1, prior to the Commission holding a public hearing on the project.

XIII. Other Business.

There being no further business before the Commission, motion by Jaeger, second by Stauner to adjourn. The meeting was adjourned at 1:49 p.m.

Respectfully submitted,

Judie A. Anderson
Recording Secretary

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