

MINUTES

June 12, 2008

CORRECTED (See Item III.)

I. A meeting of the Shingle Creek Watershed Management Commission was called to order by Chair Tina Carstens on Thursday, June 12, 2008 at 12:50 p.m., at Lancer at Edinburgh, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present were: Kathleen Carmody, Brooklyn Center; Tina Carstens, Brooklyn Park; Janet Moore, Crystal; Karen Jaeger, Maple Grove; Diane E. Stauner, New Hope; Ken Schreiber, Osseo; Wayne Sicora, Robbinsdale; Charles LeFevere, Kennedy & Graven; Ed Matthiesen and Joe Bischoff, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present: Mark Gustafson, Champlin; Tom Mathisen, Crystal; Tiffany Peterson, Maple Grove; Dan Stauner, New Hope; Derek Asche and Kevin Springob, Plymouth; Richard McCoy, Robbinsdale; Judy Sventek, Metropolitan Council; and Barbara Peichel, Minnesota Pollution Control Agency (MPCA).

Not represented: Minneapolis and Plymouth.

II. Motion by Carmody, second by Sicora to **approve the revised agenda.** Motion carried unanimously.

III. Motion by D. E. Stauner, second by Jaeger to approve the **minutes of the May 8, 2008 meeting.** Motion carried unanimously.

Moore stated that she would not have supported the Crystal Lake project if only minimal phosphorus reduction could be achieved. She also expressed that she wishes to rescind her vote on project review SC2008-04 Victory View Addition, Robbinsdale, where a minimal increase in impervious surface will result. LeFevere advised that her vote could not be rescinded.

McCoy stated that Crystal Lake does not have a natural outlet and the biggest phosphorus load is internal. That is why his city is investigating solutions to deal with internal loading. Most of the loading comes from Minneapolis which has no treatment in the upstream catchment. Robbinsdale has incorporated a rain garden into this project to treat some neighborhood drainage and provide filtration. Given the fact that residents want curbs and trees, there was no room to add rain gardens. Storm sewers get quite deep and it doesn't work to have ten-foot rain gardens. The City has also done considerable reconstruction in the upper lake area, adding ponds.

Matthiesen noted the project exceeded the Commission's requirements for water quality. The Commission rules require water quality improvements for new impervious area. Because this project didn't add impervious surface, any water quality improvements were beyond the Commission rules. Also, Robbinsdale is similar to other Commission cites in adding water quality improvements were they are cost effective.

Bischoff indicated the project is consistent with the TMDL process.

IV. Motion by Carmody, second by D. E. Stauner to approve the **minutes of the May 8, 2008 special meeting.** Motion carried unanimously.

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

VI. Motion by Jaeger, second by Sicora to approve the **June claims.** Claims totaling \$56,589.97 were approved by roll call vote: ayes – Carmody, Carstens, Moore, Jaeger, D. E. Stauner, Schreiber and Sicora; nays - none; absent – Minneapolis and Plymouth.

VII. Open Forum. No one wished to speak.

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

A. May Communications Log. No action required.



B. Announcement of Workshops for Water Resource Protection.

C. Motion by Carmody, second by Sicora to adopt Resolution 2008-03 Nonwaiver of Monetary Limits on Tort Liability. Motion carried unanimously.

IX. The proposed **2009 Operating Budget** was reviewed by the Commission at the last meeting and by the Technical Advisory Committee (TAC) at its May 22, 2008 meeting. The proposed budget continues existing activities while limiting the increase in the total member assessment to the increase in the Consumer Price Index (4.0%). The TAC recommends to the Commission that the P8 model for the watershed be developed starting in 2009. The Commission will not allocate any 2009 operating funds to an account dedicated to funding the upcoming Third Generation Plan but will use reserve funds for that purpose. The Commission received a letter from the City of Brooklyn Center opposing the use of levy funds for planning purposes. Motion by Sicora, second by Carmody to approve an operating budget of \$656,370, with member assessments of \$304,470. Motion carried.

Staff was requested to compare the project review fee schedule and the actual costs of reviewing recent projects to determine if adjustment should be made.

X. Water Quality.

A. Asche made a PowerPoint presentation of **Plymouth's Shoreline Restoration program**. It focused on shoreline restoration and stabilization at locations on Medicine Lake. The City hires a consultant to coordinate the restoration design with the landowners and only natural restorations are eligible under the program. The average cost of the restorations is \$7,500, with 25% of the cost being borne by the landowner and the balance paid by the City.

B. Motion by D. E. Stauner, second by Carmody to approve the **Challenge Grant Agreement with the Board of Water and Soil Resources for the Shingle Creek Reach 7B Restoration project**. Motion carried unanimously. The agreement is in the amount of \$16,025 and extends until June 30, 2009. LeFevere will draft a cooperative agreement with the City of Brooklyn Park for construction of the project restoration.

C. Motion by D. E. Stauner, second by Jaeger to approve the **2008 Citizen Assisted Monitor Program (CAMP) agreement** with Metropolitan Council. Motion carried unanimously. Crystal, Meadow, Ryan, Success, and Lower, Middle and Upper Twin Lakes will be monitored in 2008 at a cost of \$3,850. The Commission will receive a credit of \$350 from the 2007 program.

D. Bischoff presented the **2007 Annual Water Quality Report**. The report presents the findings of the various monitoring programs in the Shingle Creek/West Mississippi watershed, including stream, lakes, biological and wetland monitoring. Ongoing monitoring allows the Commission to evaluate the effectiveness of best management practices, especially as TMDL implementation proceeds, and provides a baseline for reasonable water quality goals. Bischoff also updated the Commissioners on the status of the Chloride, Lakes and Dissolved Oxygen and Biotic Integrity TMDLs. The report can be viewed on the Commission's website.

[Sicora departed 2:38 p.m., Carstens departed 2:50 p.m., and LeFevere departed 2:55 p.m.]

E. Upper Mississippi River Bacteria TMDL Project. The first meeting of the Stakeholder Advisory Team (SAT) and Technical Advisory Committee (TAC) members is scheduled for Tuesday, July 22, 2008 from 8:30-12:30 at the Minneapolis Park & Recreation Board room, 2117 West River Road, Minneapolis.

XI. Project Review.

SC2008-05 Sabre Heating Building, Plymouth. Construction of a building, associated parking lot and utility improvements on a 1.8-acre undeveloped infill site located west of Nathan Lane on 51st Avenue North. The project will create approximately 0.71 acres of new impervious surface, for a total impervious coverage of 61%. A complete Project Review was received on May 22, 2008.

Roof, rear drive and parking lot drainage would be directed into a small pond at the rear of the building. The pond would be connected by an equalizer storm sewer to a small dry pond settling area in the front of the building. That pond area outlets to a Stormceptor before being discharged into city storm sewer. A portion of the front parking



lot would drain into the dry pond and a portion of the front drive and parking lot would drain overland to the street. Parking lot drainage is discharged into the ponds by curb cuts. 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 a similar level of treatment - 80-85% TSS removal and 50-60% TP removal. The rear wet pond is not designed to NURP standards and no calculations were provided as to its dead storage volume, so it is impossible to estimate its removal efficiency. Some additional settling would occur in the dry pond area, but it is likely that sediment accumulated there would be mobilized during larger events and be discharged into the Stormceptor. It is unlikely that the dry pond will contribute to pollutant removal.

The applicant has provided manufacturer's information suggesting that the proposed Stormceptor would provide 86% TSS removal and 10-30% TP removal. However, research at the University of Minnesota St. Anthony Falls Laboratory indicates that devices such as Stormceptors achieve their greatest removal efficiencies with larger particles, and lesser efficiencies with the smaller particles that are most likely to be associated with TSS delivered downstream. This research suggests that TP removal is 10% or less. With the proposed design, the larger particles are likely being removed by the rear pond and by the dry pond, delivering the smaller particles which the Stormceptor is less efficient at removing. The proposed Stormceptor would be more effectively used as a pretreatment device. The BMPs as proposed may achieve the Commission's required 80-85% TSS removal but are unlikely to achieve the 50-60% TP removal requirement. Insufficient information is provided to make that assessment, therefore, the stormwater treatment as proposed does not meet Commission requirements.

Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. The runoff rate for a two year event slightly exceeds the predevelopment condition and, therefore, does not meet Commission standards. Commission rules also require the site to infiltrate 0.5" of runoff from new impervious area, or 0.016 acre-feet, within 72 hours. The plan as proposed does not meet Commission standards. Staff have discussed with the applicant's engineer converting the front dry pond into an infiltration and filtration basin by overexcavating and correcting the C soil to a B soil condition and planting with native vegetation. This could achieve about half the necessary infiltration. They have also discussed planting some of the rear upland area and pond slopes with native vegetation instead of turf to help increase infiltration. These plan revisions would not provide the necessary infiltration, and thus the plan if revised as discussed would not meet Commission standards.

The NWI map shows two Type 3 wetlands on the site. The City of Plymouth is LGU for the Wetland Conservation Act. The City's 1994 wetland inventory and a site visit confirm that significant grading and filling occurred with the construction of adjacent buildings and wetlands no longer exist on this site. Therefore, the City did not require the applicant to delineate wetlands on site. The PWI map shows that a part of Public Water 578W extends on to the site. The City of Plymouth, as part of its 1994 wetland inventory, determined that the portion of this wetland on this site has been filled since the NWI. There is no floodplain on the site. Low floor elevations sufficient to provide at least two feet of freeboard are specified adjacent to the pond.

The Erosion Control Plan includes perimeter silt fence, rock construction entrances, and inlet protection. To meet Commission requirements the applicant should add silt fence around the ponds between the NWL and HWL. Pond slopes should be planted with native vegetation (MnDOT 310, BWSR W2 or equivalent) and the dry pond planted with MnDOT 328, BWSR W4 or equivalent. The curb cuts directing concentrated flow to the ponds are potential erosion sources.

Public notice of the project review application must be made to owners of properties located within the radius for which notice is required by the member city, to a maximum of 300 feet. If notice is not made through a Planning Commission or City Council public hearing, the applicant must obtain those names and addresses and provide mailing labels. No public hearing is required for City of Plymouth approval of this project, therefore, applicant must provide owner address labels for properties located within 300 feet of this property.

Motion by Jaeger, second by D. E. Stauner to advise the City of Plymouth that project 2008-05 is hereby tabled subject to the following conditions:

1. Demonstrate that the site achieves an overall reduction of 80-85% TSS removal and 50-60% TP removal. BMP options to consider would be a pond to NURP design providing dead storage equal to runoff from a 2.5" event; sand filters; biofiltration such as vegetated swales and rain gardens; and filtered treatment devices.
2. Reduce peak runoff rate from the 2-year event to less than the pre-development rate. Increasing infiltration on site and site revisions to reduce the overall post development curve number would likely reduce that peak rate.
3. Demonstrate that BMPs on site have the capacity to infiltrate 0.5" of runoff from new impervious surfaces within 72 hours. Some options to consider are bioinfiltration BMPS such as vegetated swales, rain gardens, and infiltration basins; soil amendment with compost to increase porosity; pervious pavement; reduction in impervious surface; underground storage; and replacing turf with native vegetation.
4. Revise the erosion control plan to provide silt fence around the ponds between the NWL and HWL. Revise the planting plan to seed the wet pond slopes with a suitable native seed mix and the dry pond area with a native seed mix appropriate to infiltration basins. Any concentrated discharge from curb cuts should be routed through a vegetated or stabilized swale to prevent erosion and rilling of slopes.
5. Provide mailing labels for the owners of property located within 300 feet of the subject property.

Motion carried unanimously.

XII. Watershed Management Plan.

A. The Commissioners received the fourth and final draft of the Shingle Creek and West Mississippi WMC **Rules and Standards revisions** as recommended by the Technical Advisory Committee (TAC). The Commissions directed the TAC to review and, if necessary, recommend revisions to the current rules to address the effectiveness of the regulatory program in meeting the TMDL requirements. As a part of this process, the Commissions agreed to review the current pollutant removal performance standard and to consider expanding the current infiltration requirement into a more broad volume management rule that will reduce runoff to the lakes, thereby reducing the associated phosphorus loads.

In general, the TAC recommends that the current infiltration requirement be revised as a volume management requirement, with infiltration one potential means of providing that volume management. There was considerable discussion as to whether this should remain as 0.5" from new impervious or be increased to 1" as several other Metro WMOs have already adopted or are considering adopting. Staff reviewed literature regarding the average pollutant removal through the abstraction of runoff and found that retaining the runoff from a 1" event across a site appears to be the most cost-effective volume management threshold. At depths greater than 1" the amount of additional water quality benefit diminishes rapidly. The Commissions' current 0.5" of runoff from new impervious surface in A and B soils may actually result in more volume management than retaining 1" across the site because A and B soils more readily infiltrate and there is less runoff from a 1" event on the site than a comparable development on C or D soils. For C or D soils, the current requirement is similar to or slightly less than retaining 1" across the entire site. After considerable discussion, the TAC recommends that the current volume management requirement of 0.5" from new impervious be unchanged. It appears that applying this standard on average achieves the goal of retaining the 1" event across all developed sites.

It was the consensus of the Commissioners to begin the rules and standards public review process at this time. Rule M requires that major revisions to the rules be submitted to the member cities for a 45-day comment period, after which the Commissions would consider the comments, make any necessary revisions, and approve the revised rules and standards by resolution.

B. The fieldwork portion of the **wetland functions and value assessment of the priority wetlands** in the Shingle Creek/West Mississippi WMO began in May. Six "reference" wetlands were selected to complete a MnRAM function and value assessment. The wetlands, strategically selected in various locations to obtain the most data possible, are Meadow Lake, New Hope; Brooklyn Park wetland located along the northern border of Brooklyn

Park and southern portion of Champlin; Brooklyn Center wetland adjacent to Shingle Creek in an area of a proposed trail project behind city hall; Plymouth wetland located in the northeast quadrant of 50th and Zachary Lane; Robbinsdale wetland located east of Lower Twin Lake; and a series of wetlands acting as storm water basins located in southern Crystal.

C. 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 (LWMP)** update by the end of 2006. Currently, **Brooklyn Center** and **Minneapolis** have completed and approved plans. **Brooklyn Park, Crystal and Robbinsdale** had anticipated completing their plans by the end of 2007; and **Maple Grove** will complete their LWMP in tandem with their Comprehensive Plan. At the May meeting the Commissioners approved Staff's comments on **Plymouth's** Comprehensive Plan update. They were forwarded to the City on June 16, 2008. The Commission received drafts of the **New Hope** and **Osseo** Local Water Management Plans on May 28, 2008 and June 11, 2008, respectively.

The City of **Minneapolis** submitted its Comprehensive Plan update for review on December 1, 2007. The update includes a Surface Water Management Plan (SWMP) chapter, which provides a general policy overview of the City's Local Water Management Plan (LWMP), which is currently being updated. The Commission had six months in which to review and comment on the Comprehensive Plan update. The six month period runs through June 1, 2008. Staff reviewed the Comprehensive Plan revision and determined there are no proposed revisions to land use or other planning that would negatively impact the water resources in the Shingle Creek watershed. Therefore, to meet the City's deadline Chair Tina Carstens has responded to the City of Minneapolis that the Commission has no comments.

D. The **next TAC meeting** will be held at 8:30 a.m., Thursday, June 26, 2008, at Crystal City Hall.

XIII. Education and Public Outreach Program.

A. Water Quality Education Grants.

1. As part of its upcoming summer session on Shingle Creek **Patrick Henry High School** has requested a \$1,000 grant to cover the expense of water testing kits, programming at the Kroening Interpretive Center at North Mississippi Regional Park, bus for the field trip to stream restoration sites, and art materials and professional artist-facilitator time to create a Shingle Creek-themed permanent art exhibit at the school. Motion by Jaeger, second by D. E. Stauner to approve this grant in the amount of \$1,000. Motion carried, Carmody voting nay.

2. The **Riverwood Association**, which lies between TH 252 and the Mississippi River from I-694 to 73rd Avenue in Brooklyn Center, is an active group of residents involved in many neighborhood improvements. The streets in this neighborhood were reconstructed last year and eight rain gardens were incorporated into the project. The residents are responsible for maintaining the gardens. The Association has submitted a grant request for \$273 to purchase the Blue Thumb rain garden guide and maintenance tools for each of the eight rain gardens; and for \$820 to print and deliver newsletters to the homes in the neighborhood. The Association currently has a newsletter and they propose printing articles on water quality topics in each of four issues. Since there was no detail in the proposal about what the Association hoped to achieve with the news articles, the Education and Public Outreach Committee (EPOC) declined to recommend this part of the grant request, but would be open to funding if the Association set some goals and used the newsletter to provide information on how to achieve those goals. The EPOC noted that since the Commission is a member of Blue Thumb, the Commission could purchase the rain garden guides at almost half the retail cost proposed by the Association. Motion by Jaeger, second by Carmody to approve the EPOC recommendation to provide the Association with eight Blue Thumb rain garden guides and a \$25 allowance per rain garden to purchase specialized maintenance tools, for a total of \$200 cash and eight books from the Commission's supply. Motion carried unanimously. (Included in the revised meeting packet was an invitation to attend Riverwood's Water Quality Day, Thursday June 12, 2008.)

B. Partnership Opportunities.

1. The joint EPOC subcommittee met on May 16, 2008 to begin formulating an education and public outreach program for 2008-09 based on the results of the **opinion survey**. Recommendations will be submitted to the Commissions at a future meeting.



2. **Rain Garden Workshops.** Attendance figures were provided by Metro Blooms. Preliminary numbers show 157 persons attended the three workshops sponsored by the Commissions and 36 persons attended the two seminars. A complete report with demographics will be provided in the fall.

3. **The Great Shingle Creek Watershed Cleanup** was held April 19-26, 2008. Staff is soliciting feedback from the city coordinators. Next year, EPOC will explore ways to “green-up” this event by incorporating a recycling element.

C. The **next EPOC meeting** is scheduled for 8:30 a.m., Tuesday, September 16, 2008, at the City of Plymouth.

XIV. Grant Opportunities.

XV. Other Business. There being no further business before the Commission, motion by Jaeger, second by Carmody to adjourn. The meeting was adjourned at 3:24 p.m.

Respectfully submitted,

Judie A. Anderson
Recording Secretary

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