MINUTES
Regular Meeting
June 8, 2017

(Action by the SCWMC appears in blue, by the WMWMC in green and shared information in black.
*indicates items included in the meeting packet.)

I. A joint meeting of the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission was called to order by Shingle Creek Chairman Andy Polzin at 12:45 p.m. on Thursday, June 8, 2017, at the Clubhouse at Edinburgh, USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present for Shingle Creek were: David Mulla, Brooklyn Center; John Roach, Brooklyn Park; Janet Moore, Crystal; Karen Jaeger, Maple Grove; Gary Anderson, Minneapolis; Bill Wills, New Hope; Harold E. Johnson, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Troy Gilchrist, Kennedy & Graven; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson, JASS.

Present for West Mississippi were: David Mulla, Brooklyn Center; John Roach, Brooklyn Park; Gerry Butcher, Champlin; Karen Jaeger, Maple Grove; Harold E. Johnson, Osseo; Troy Gilchrist, Kennedy & Graven; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present were: Dave Vlasin and Andrew Hogg, Brooklyn Center; Steve Chesney and Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray and Burt Orred, Crystal; Rick Lestina, Maple Grove; Liz Stout, Minneapolis; Shawn Markham, New Hope; Ben Scharenbroich, Plymouth; Richard McCoy and Marta Roser, Robbinsdale; and Eric Lund, Barr Engineering, for Project Review SC2017-003.

II. Agendas and Minutes.

Motion by Jaeger, second by G. Anderson to approve the Shingle Creek agenda.* Motion carried unanimously.

Motion by Butcher, second by Roach to approve the West Mississippi agenda.* Motion carried unanimously.

Motion by Moore, second by Jaeger to approve the minutes of the May regular and public meetings.* Motion carried unanimously.

Motion by Roach, second by Johnson to approve the minutes of the May regular and public meetings.* Motion carried unanimously.

III. Open Forum.

A. Johnson requested clarification of buffer requirements in the metro area v. the rural areas. Matthiesen explained the Commissions’ requirements.

B. Matthiesen was interviewed by KSTP Channel 5 yesterday about the BioBox at the Webber Park biochar site. The piece was aired on the 5:00 and 6:00 news.

IV. Finances and Reports.

A. Motion by G. Anderson, second by Jaeger to approve the Shingle Creek Treasurer’s Report.* Motion carried unanimously.
Motion by Jaeger, second by Sicora to approve the Shingle Creek June claims.* Claims totaling $80,101.10 were approved by roll call vote: ayes – Mulla, Roach, Moore, Jaeger, G. Anderson, Wills, Johnson, and Polzin; nays – none; absent - Robbinsdale.

B. Motion by Butcher, second by Roach to approve the West Mississippi Treasurer’s Report.* Motion carried unanimously.

Motion by Jaeger, second by Johnson to approve the West Mississippi June claims.* Claims totaling $20,871.75 were approved by roll call vote: ayes – Mulla, Roach, Butcher, Jaeger, and Johnson; nays – none.

[Sicora arrived 1:01 p.m.]

C. The Commissioners received the 2017 Audit Reports* prepared by Johnson and Company, Ltd. The reasons for the negative unrestricted/unassigned fund balance in the Shingle Creek report were discussed by J. Anderson and depicted in the accompanying project worksheets.* The joint Technical Advisory Committee will further discuss this shortfall and consider revisions to the Closed Account Policy to adjust for levy shortfalls and associated administrative expenses at their June 22, 2017 meeting.

Motion by Jaeger, second by Wills to accept the 2017 Audit Report as presented. Motion carried unanimously.

Motion by Butcher, second by Jaeger to accept the 2017 Audit Report as presented. Motion carried unanimously.

V. Project Reviews.

A. SC2017-003 Joslyn Superfund Site OU5, Brooklyn Center.* Remediation of contaminated soils through excavation and onsite consolidation and cover. The project is located at the intersection of Zelia and Lakebreeze Avenues. A complete project review application was received May 17, 2017.

The proposed project is the remediation of contaminated soils through excavation and onsite consolidation and cover. 8.3 acres of the 11.7-acre site will be excavated. Of the 8.3 acres, approximately 3.5 acres will be excavated and consolidated; 1.3 acres of contaminated soil will remain in place under the consolidation area and 4.8 acres will be disposed in a Subtitle D Landfill. No new impervious areas area will be added to the site as a result of this project, and the site will remain 0 percent impervious.

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. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture. Runoff from the site is proposed to be routed to several low-lying wetland areas, which remove approximately 95% TSS and 66% TP, according to a P8 model. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff be limited to existing rates for the 2-, 10-, and 100-year storm events. Runoff from the site is proposed to be routed to the southern wetland. Proposed runoff rates fall below existing runoff rates due to proposed increased storage within the southern wetland. The applicant meets the Commission’s rate control requirements.

Commission rules require the site to infiltrate 1.0” of runoff from new impervious area within 48 hours. There is no new impervious area proposed for this site. Therefore, the applicant meets Commission volume control requirements.

The NWI identifies a wetland on site. The Commission is LGU for WCA administration. A wetland delineation was carried out on October 17, 2007 and updated on October 23, 2012. A 9.01-acre wetland was delineated. The proposed project requires 5.50 acres of temporary impacts to this wetland, which qualify for No-Loss Criteria, and 0.78 acres of permanent wetland impacts, which will be mitigated through the purchase of wetland credits. In addition, wetland buffers averaging 30 feet in width are provided. All buffers are a minimum of 20 feet, with
two exceptions that cannot be avoided. The first exception is in the southern portion of site, near the corner of the fence line adjacent to Twin Lake Avenue. Due to the location of the existing road, the 20-foot minimum buffer cannot be met in this corner. The second exception is in the northern portion of the site. The wetland extends beyond the work area into the railroad right-of-way. Joslyn has no access to the adjacent upland buffer within this right of way and, therefore, cannot designate this area as a buffer strip. The applicant meets Commission wetland requirements.

Middle Twin Lake is listed as a Public Water on site, and the applicant has submitted a Work in Public Waters permit application to the MDNR.

There is floodplain on this site, and the proposed project will result in 4,897 CY of permanent fill within the 100-year floodplain. However, 5,554 CY of compensatory storage will be provided through excavation, exceeding the floodplain fill volume by approximately 660 CY. The applicant meets Commission floodplain requirements.

An erosion control plan was submitted with the project review, and includes a rock construction entrance, perimeter silt fence, flotation silt curtain, and sheet piling, as well as several permanent erosion control measures. The erosion control plan meets Commission requirements.

A public hearing on the project was conducted on April 12, 2017 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

Motion by Sicora, second by Mulla to advise the City of Brooklyn Center that Project SC2017-003 is approved with no conditions. Motion carried, Polzin abstaining.

B. SC2007-004 Mill’s Creek, Maple Grove.* Construction of a 66-lot, detached-home residential development and associated sidewalks and drive areas on a 15-acre site located at 8600 Forestview Lane. Following development, the site will be 40% impervious, an increase of 5.97 acres. A complete project review application was received May 30, 2017.

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. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

Runoff from the site is proposed to be routed to existing ponds and basins to the south and east of the site. The applicant meets Commission water quality treatment requirements. Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site is proposed to be routed to existing ponds and basins to the south and east of the site. The applicant meets the Commission’s rate control requirements.

Commission rules normally require the site to infiltrate 1.0” of runoff from new impervious area within 48 hours. However, this site is located in the Five-year Time of Travel Wellhead Protection Area and infiltration is not allowed. The applicant meets volume control requirements.

The National Wetlands Inventory (NWI) shows two wetlands located within the property boundaries. The site was inspected on January 27, 2017 for the presence and extent of wetland, and two small wetlands were delineated. However, the two delineated wetlands were located in an area that was historically mined for gravel. Maple Grove is LGU for WCA administration and determined that these wetlands were incidentally created and are not regulated under WCA. The applicant meets Commission wetland requirements.

There are no Public Waters or floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high-water elevation of the nearby stormwater ponds, meeting Commission requirements.

An erosion control plan was submitted with the project review, and includes a rock construction entrance, perimeter silt fence, inlet protection, and rip rap at outlet structures. The erosion control plan meets Commission requirements. A public hearing on the project was conducted on February 27, 2017 as part of Planning
Commission and City Council review of this project, meeting Commission public notice requirements.

Motion by Jaeger, second by G. Anderson to advise the City of Maple Grove that Project SC2017-004 is approved with no conditions. _Motion carried unanimously._

C. **WM2017-006 The Cove at Brittany Park, Champlin.*** Development of 11 low-density residential lots, with new impervious area including roads, trails, buildings and garages, and infiltration basin to accommodate new impervious surface. The site, located at 11091 Douglas Drive, is 4.62 acres in size. Following development, the site will be 28% impervious, an increase of 1.11 acres. A complete project review application was received May 25, 2017.

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. Runoff from the site is proposed to be routed to a proposed infiltration basin in the northeast area of the site that has the capacity to infiltrate 1.3” of runoff before discharging to the City storm sewer. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. There is no runoff from the site from the 2, 10 or 100-Yr storm events. The basin is connected to City storm sewer along Douglas Drive for emergency overflow needs. The applicant meets the Commission’s rate control requirements.

Commission rules require the site to infiltrate 1.0” of runoff from new impervious area within 48 hours. The new impervious area on this site is 1.3 acres, requiring that 0.11 acre-feet be infiltrated within 48 hours. The applicant proposes to direct stormwater to a proposed infiltration basin that has the capacity to infiltrate the required volume within 48 hours, meeting Commission requirements.

The NWI does not identify any wetlands on site. There are no Public Waters or floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high water elevation of the infiltration basins according to Atlas 14 precipitation, meeting Commission requirements.

An erosion control plan was submitted with the project review, and includes rock construction entrance, perimeter silt fence, slope checks, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

A public hearing on the project has been conducted as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

Motion by Mull, second by Butcher to advise the City of Champlin that Project WM2017-006 is approved conditioned that the seed specs be updated to reference MN State Mixes numbers. _Motion carried unanimously._

VI. **2018 Operating Budgets.**

A. **Shingle Creek.** Staff’s June 3, 2017 memo presented a proposed 2018 budget* for Commission discussion and comment. For the most part, it repeats the information provided to the Commissioners at their May meeting. The budget is separated into an operating budget and a project budget and continues the same activities at the same level of effort as in 2017. The annual operating budget revenue source is primarily city assessments, and funds the Commission’s core activities. Projects and studies are funded through a variety of grant and other sources, most of which do not proceed on an annual fiscal-year basis.

The assessment cap in the Commission’s JPA limits the annual city assessment increase to the June-to-June increase in the Consumer Price Index-Urban (CPI-U), using the assessment in 2004 as a base. For the 2018 assessment, the increase is limited to the CPI-U change between June 2016 and June 2017. However, since the CPI-U for June of the previous year is not available, the June to March change (1.2%) is used to set the assessment. Because of the accumulated inflation lag, the Commission could assess up to $348,710. This recommended draft 2018 budget assumes an assessment of $348,710, an increase of 2.4%. 
The format of the 2018 proposed budget has changed slightly. The USGS site monitoring has been removed from the general stream monitoring line item and shown separately to acknowledge the partnership more clearly. This budget also shows a separate line item for Stream Biomonitoring to fund fish and invertebrate surveys at four monitoring sites. This expense is partially offset by reducing River Watch and WHEP monitoring in 2018. It also shows a separate line item for DO Aeration System Operations. This new line item is the electrical costs for operating the aeration structures at three locations on Shingle Creek and does not reflect the expected rebate for reselling excess solar power to the grid, which would be credited toward those costs.

WMWA accounting will also be shown differently in the budget. Shingle Creek acts as the fiscal agent for WMWA. In past budgets WMWA programs and projects have been shown within the Commission’s budget. Beginning in 2018 WMWA will be established as a segregated fund. The Commission’s budget will show only its contributions to WMWA. The exception is the line item for Raingarden Workshops, which are funded by the cities and invoiced through the Commission as a convenience.

Along with member assessments,* revenue in the proposed 2018 budget includes $24,000 in project fees, $6,000 in education reimbursements, and $1,000 in interest and dividends, for a total of $379,710. Expenses include $84,500 for administration, $121,000 for technical services, and $24,700 for legal and other general expenses. Programming includes Monitoring ($83,010), Water Quality Education ($35,500), Management Plans ($21,000), and Projects ($10,000). Expenses total $379,710, with no monies taken from reserves.

Motion by Roach, second by Wills to approve the proposed 2018 operating budget. Motion carried unanimously.

B. West Mississippi. Staff’s June 3, 2017 memo presented a proposed 2018 budget* for Commission discussion and comment. Again, the memo largely repeats the information provided to the Commissioners at their May meeting. As with Shingle Creek, the budget is separated into an operating budget and a project budget and continues the same activities at the same level of effort as in 2017. The annual operating budget revenue source is primarily city assessments, and funds the Commission’s core activities. Projects and studies are funded through a variety of grant and other sources, most of which do not proceed on an annual fiscal-year basis.

An assessment cap is also included in the West Mississippi Commission’s JPA. The Commission could increase member city assessments for 2018 to $158,530. (The 2017 assessment was $145,000.) The draft 2018 budget assumes an assessment of $150,000, an increase of 3.4%. In past years the Commission supplemented the assessments with a contribution from the cash reserves to draw down what was a substantial balance. The unrestricted fund balance at the end of 2016 is estimated to be about $77,490, and Staff recommends that assessments be increased by steps over a few years to fully fund the operating budget without that supplement.

Along with member assessments,* revenue in the proposed 2018 budget includes $20,000 in project application fees and $500 in interest and dividends, for a total of $170,500. Expenses include $36,000 for administration, $58,500 for technical services, and $17,500 for legal and other general expenses. Programming includes Monitoring ($26,000), Water Quality Education ($29,500), Management Plans ($11,000), and Contribution to Construction/Grant Match ($5,000). Expenses total $183,500, with $13,000 taken from reserves.

The Technical Advisory Committee (TAC) recommends that the Commission consider segregating an amount in the reserves specifically for the Fourth Generation Plan, and Staff recommends that amount be $25,000 and that no contribution from the annual budget be made.

Motion by Butcher, second by Jaeger to approve the proposed 2018 operating budget. Motion carried unanimously.

Staff will report the Commissions’ budgets to the member cities by July 1, 2017.

VII. Watershed Management Plan.

Minneapolis Stormwater Plan.* The City of Minneapolis and the Minneapolis Park and Recreation Board are co-permittees holding a National Pollutant Discharge and Elimination System (NPDES) Municipal Separate Storm Sewer...
System (MS4) Phase I Permit from the State of Minnesota. Phase I MS4s are cities over 100,000 in population, and Phase I permits have additional requirements beyond Phase II permits.

The City and MPRB are currently taking input on their Stormwater Management Program in preparation for preparing their Annual Report. The comment period extends through June 16, 2017. Comments will assist the City and MPRB with future modifications to the Program.

Staff have reviewed the Program and find that it is consistent with the standards set in the Commission’s Third Generation Watershed Management Plan. They recommend the Commission submit comments on Table A-6 of the Program’s Appendix. This table sets forth Public Education Activities by Other Entities, and for WMWA and Shingle Creek it contains several outdated programs and does not reflect newer initiatives. The following comments are recommended:

1. Update WMWA’s website reference: westmetrowateralliance.org/
2. Eliminate the following programs which are no longer offered: Educate Policymakers, Workshop Series, and Patrick Henry High School Program
3. Add the following programs:
   a. Citizens Assisted Lake Monitoring Program (CAMP) - Shingle Creek (same description as Bassett Creek; Ryan Lake is monitored through CAMP)
   b. Watershed PREP - A fourth-grade elementary school program developed and delivered by WMWA educators to meet science standards in classroom curricula and teach kids how to help improve the quality of their local lakes and streams. (Audience is students and metrics are number of classrooms and students served.)
   c. Pledge to Plant for Pollinators and Clean Water – A campaign developed by WMWA to encourage landowners to replace turf grass and impervious surface with native vegetation. (Audience is property owners and metrics are number and size of plantings.)

Motion by G. Anderson, second by Jaeger to forward the recommended comments and WMWA’s latest Annual Report to Minneapolis and MPRB. Motion carried unanimously.

VIII. Water Quality Monitoring.

A. Pike Lake Subwatershed Assessment.* On February 11, 2016 the Commission approved the City of Plymouth’s request to complete a subwatershed assessment in that part of Plymouth that is tributary to Pike Lake. Since that time staff has worked with Plymouth staff to model that subwatershed and identify potential BMPs to help reduce nutrient and sediment loading to the lake. The Pike Lake TMDL requires a 37% reduction in phosphorus loading from the watershed, or approximately 165 lbs./year.

The study area is 354 acres with a mix of land uses, and contains areas with treatment and areas with some or no treatment. The study area does not include approximately 650 acres in Maple Grove that also contributes to Pike Lake. The current condition P8 model for the study area estimates average loading of approximately 91 lbs. of TP annually.

The subwatershed assessment identifies twenty potential BMPs, estimates load reductions, and presents planning-level cost estimates. If all were implemented the City would achieve an estimated 49 lbs. TP load reduction, or a 53% reduction, at an estimated cost of $886,000. The most cost-effective option is to increase the frequency of street sweeping, which would remove almost 7 lbs./year at an estimated cost of $112 per pound. Retrofitting two existing ponds with iron-enhanced sand filter benches would accomplish nearly 20 lbs. of TP removal at a cost of less than $1,000 per pound. Three neighborhood rain gardens together could accomplish about 7 lbs. of load reduction at a cost of less than $1,000 per pound, but other potential rain garden locations are less cost-effective and would remove only fractions of a pound.

This report has been reviewed by Plymouth City staff and is presented to the Commission for discussion and acceptance.

Motion by Wills, second by Roach to receive the report. Motion carried unanimously.
B. **Commissioner Water Quality Presentation.** As was discussed when the Commissions received the 2016 Annual Water Quality Report, Staff has developed a short presentation for use by Commissioners to update their City Councils on the Status Of Waters in their communities. The intent is that, for those Commissioners who would like to make such a presentation to their Councils and/or advisory commissions, Staff can create a customized slide showing the status of lakes in their city. They will also include some talking points in the comments sections of each slide to assist in making a presentation.

IX. **Education.**

A. A copy of the June 2017 *Water Links* was included in the meeting packet.

B. The next WMWA meeting is scheduled for 8:30 a.m., Tuesday, July 11, 2017, at Plymouth City Hall. Commissioners are encouraged to attend.

X. **Grant Opportunities and Updates.**

A. **Becker Park.** The Commission was recently awarded a $150,000 grant from the Met Council’s Stormwater Grant program. The Met Council recently opened up the application period for a new grant program for green infrastructure. Applications close on July 17, 2017. The Met Council has $1,000,000 available in this first year of this program. There is no maximum grant size, although the applicant must provide at least a 1:1 match.

The purpose of this new grant program is to support integrated solutions directed at solving water-related problems in ways that provide multiple benefits, maximize the extent of positive impacts, and are technically sound.

1. Protect the quality and quantity of the region’s water resources
2. Prioritize the need for improving aging infrastructure
3. Protect the economic vitality of the region, cities, and neighborhoods
4. Protect natural ecosystems and park systems

Staff’s June 2, 2017 memo* listed example of water-related problem solutions eligible for funding. Proposals will be evaluated based on the extent and degree to which they identify or address the following criteria:

1. **Multiple Benefits:** Extent to which the proposed project: solves-addresses multiple regional or community water-related problems; shows the connectedness of all water; protects, maintains, or restores water quality and quantity
2. **Extent of Impacts:** Extent to which the proposed project: results in long-term benefits to the community or region; positively impacts lower income areas
3. **Technical Basis:** Extent to which the proposed project: reflects technological knowledge, standards, and best practices; measures impacts of solutions (beyond those required)
4. **Project Timeline:** readiness of the project to start. All projects need to be completed by December 31, 2019

The Becker Park project has the following relevant benefits:

1. Recharging aquifers. The project would infiltrate an estimated 108 acre-feet of water annually.
2. Inadequate infrastructure. The existing storm water system downstream is overcapacity. This helps ease that. Also the cost to build another pipe to relieve this is not feasible.
3. Using green space to manage flooding.
5. The project is being used as a catalyst to revitalize Becker Park.

Preliminary design is underway, Phase 1 and Phase 2 environmental studies have been completed, funding is being assembled, and the project is anticipated to be bid in 2018 for construction in 2019.
The City of Crystal is requesting that the Commission prepare an application in the amount of $400,000 for the Becker Park project. Staff would prepare an application and bring it back to the Commission at the July 13, 2017 meeting for final review and authorization to submit.

Motion by Moore, second by Jaeger to approve this request. *Motion carried unanimously.*

[Butcher departed 2:11 p.m.]

B. **Iron and Biochar-Enhanced Sand Filter Retrofit Project.** In anticipation of applying for a Minnesota Stormwater Research Council research grant, Staff is determining the costs associated with the rock magnetation process from the U of M to analyze interactions of bacteria and nutrient update in the strata depths of the iron/biochar filters.

Included in the meeting packet is a printout from the Minneapolis Park Board website featuring the biochar project at Shingle Creek Falls in Webber Park.*

C. **Art Reaeration Project.** The costs for the art piece for the Park Center site are still being determined.

D. **639W Aeration Project.** Matthiesen asked the Commission for authorization to prepare a grant application to the Minnesota Stormwater Research Council to request $15,000 to fund Commission research into evaluating alternative media and aeration practices to contain the soluble phosphorus leaving Wetland 69W. The Commission approved the request by consensus.

E. Matthiesen reminded the Commissioners of a DNR grant available to update the Commissions’ floodplain maps. There will be no match required. He will have more details in the coming months.

XI. **Communications.**

A. **May Communications Log.*  
1. Mulla requested an update on the Topgolf project, which Hogg provided.

B. Moore announced that this is her last Commission meeting as the representative from Crystal. Everyone wished her good luck in the future.

XII. **Other Business.**

Motion by Jaeger, second by Moore to approve the nonwaiver of monetary limits on tort liability insurance. *Motion carried unanimously.*

Motion by Roach, second by Mulla to approve the nonwaiver of monetary limits on tort liability insurance. *Motion carried unanimously.*

XII. **Adjournment.**

There being no further business before the Shingle Creek Commission, motion by Moore, second by Jaeger to adjourn. *Motion carried unanimously.*

There being no further business before the West Mississippi Commission, motion by Jaeger, second by Roach to adjourn. *Motion carried unanimously.* The meeting was adjourned at 2:44 p.m.

Respectfully submitted,

Judie A. Anderson  
Recording Secretary

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