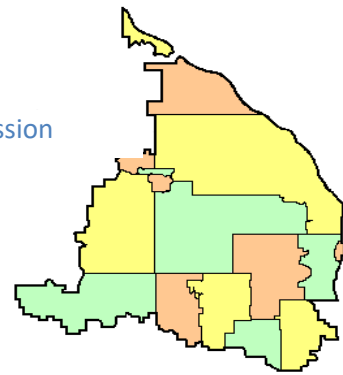




Watershed Management Commission



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MINUTES Regular Meeting and Public Meeting November 14, 2019

(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 12:47 p.m. on Thursday, November 14, 2019, at Edinburgh USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present for Shingle Creek were: Adam Quinn, Brooklyn Park; Burton Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Bill Wills, New Hope; Harold E. Johnson, Osseo; Andy Polzin, Plymouth; Ed Matthiesen and Brian Kallio, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Not represented: Brooklyn Center, Minneapolis, and Robbinsdale.

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

Not represented: Brooklyn Center.

Also present were: Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Derek Asche, Maple Grove; Elizabeth Stout and Shahram Missaghi, Minneapolis; Bob Grant and Megan Hedstrom, New Hope; Ben Scharenbroich and Amy Riegel, Plymouth; Richard McCoy and Marta Roser, Robbinsdale; and Eric Alms, Minnesota Pollution Control Agency (MPCA).

II. Agendas and Minutes.

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

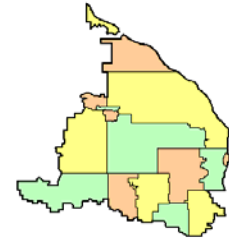
Motion by Chesney, second by Butcher to approve the **West Mississippi agenda**.* *Motion carried unanimously.*

Motion by Wills, second by Orred to approve the **minutes of the October regular meeting**.* *Motion carried unanimously.*

Motion by Johnson, second by Chesney to approve the **minutes of the October regular meeting**.* *Motion carried unanimously.*

III. Finances and Reports.

A. Motion by Johnson, second by Jaeger to approve the Shingle Creek **November Treasurer's Report**.* *Motion carried unanimously.*



Motion by Jaeger, second by Wills to approve the **Shingle Creek November claims.*** Claims totaling \$464,616.68 were *approved by roll call vote*: ayes – Quinn, Orred, Jaeger, Wills, Johnson, and Polzin; nays – none; absent – Brooklyn Center, Minneapolis, and Robbinsdale.

B. Motion by Johnson, second by Chesney to approve the **West Mississippi November Treasurer's Report.*** *Motion carried unanimously.*

Motion by Chesney, second by Johnson to approve the **West Mississippi November claims.*** Claims totaling \$15,703.52 were *approved by roll call vote*: ayes – Chesney, Butcher, Jaeger, and Johnson; nays – none; absent – Brooklyn Center.

IV. Open Forum.

Jaeger passed around an article from the *StarTribune* entitled, "56% of state's lakes and waterways impaired." According to the article, 581 new water bodies were added to MPCA's impaired waters list this year while 14 lakes and two streams were delisted. The leading contaminant of Minnesota waters is mercury. MPCA has also adopted new standards for measuring large rivers.

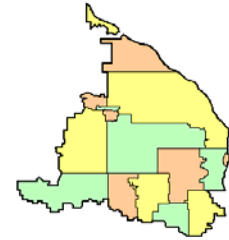
V. Project Review.

WM2019-010 Mississippi Crossing, Champlin.* Construction of an apartment complex with an associated driveway, sidewalk and plaza on a 4.72-acre site located at East River Entry and East River Parkway. Following development, the site will be 64% impervious with 2.73 acres of impervious surface, an increase of 2.60 acres. A complete project review application was received on September 30, 2019.

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, i.e., 85% TSS removal and 60% TP removal. Infiltrating 1.3 inches of runoff, for example, is considered sufficient to provide a similar level of treatment.

Runoff from the majority of the site (3.6 acres or 86% of the site, of which 69% is impervious) is proposed to be routed to an underground, 84-inch corrugated metal pipe infiltration system on the northeastern portion of the site adjacent to East River Parkway. This underground infiltration system has the capacity to infiltrate 1.3 inches of runoff, and a MIDS model indicates the annual TSS and TP loads off the entire site are reduced by 86%, which exceeds Commission requirements. In addition, at each inlet to the underground infiltration system, a sump with SAFL Baffle provides pretreatment to stormwater before it enters the system. (One sump is 5 feet and one is 6 feet. Both provide about 80% removal of suspended solids according to a SHSAM calculation.) A small portion of the site (0.7 acres or 14% of the site, of which 46% is impervious) is proposed to be routed directly to storm sewer associated with East River Entry. However, a 4 ft. sump with SAFL Baffle is proposed for storm sewer draining this area to treat this stormwater before it leaves the site. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site is routed to an underground infiltration system, which limits runoff rates to predevelopment conditions in the 2- and 10-year storm events. In the 100-year storm events, runoff rate is proposed to exceed predevelopment conditions. However, the Commission's engineer is willing to make an exception to this rule due to the site's proximity to an outfall structure at the Mississippi River. (Further, about 92% of all storms are treated by the underground infiltration system, i.e., are 1.3 inches or less, so it is rare that post-development runoff will exceed predevelopment conditions.) The applicant meets Commission rate control requirements.



Commission volume control rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. However, this site must infiltrate 1.3 inches of runoff to additionally meet water quality requirements. The new impervious area on this site is 2.73 acres, requiring infiltration of 0.30 acre-feet (12,874 CF) within 48 hours. The applicant proposes to construct an underground, 84-inch corrugated metal pipe infiltration system, which has the capacity to infiltrate more than the volume of runoff from a 1.3-inch rainfall within 48 hours. The applicant meets Commission volume control requirements.

The erosion control plan includes a rock construction entrance, perimeter silt fence and inlet protection. The erosion control plan meets Commission requirements. The National Wetlands Inventory does not identify any wetlands on site. The applicant also meets Commission wetland requirements.

There are no Public Waters on this site. The applicant meets Commission Public Waters requirements. There is no FEMA-regulated floodplain on this site. The applicant also meets Commission floodplain requirements. The site is not located in a Drinking Water Management Area (DWSMA). The applicant meets Commission drinking water protection requirements.

A public hearing on the project will be conducted on November 18, 2019 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Champlin has not been provided. However, the applicant wrote in an email to Sarah Nalven on October 22, 2019: "The City and Owner have discussed this agreement, but nothing has been developed yet. They will keep you in the loop when this is developed to make sure the watershed has a copy of the draft."

Motion by Butcher, second by Chesney to advise the City of Champlin that project review WM2019-010 is approved with two conditions.

1. Provide a complete O&M agreement between the applicant and the City of Champlin for all stormwater facilities on the project site.
2. Demonstrate by double ring infiltrometer or witness test that the underground infiltration system can meet the design infiltration rate of 0.80 inches/hour.

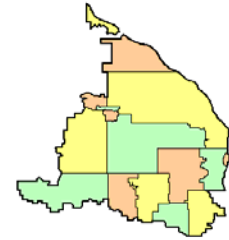
Motion carried unanimously.

VI. Watershed Management Plan.

VII. Water Quality.

A. HUC 8 Modeling.* The Commission's Technical Advisory Committee (TAC) had previously discussed amending the scope of the ongoing HUC 8 hydrologic and hydraulic modeling to include the Twin and Ryan Lake/Creek system. This would include additional detailed analysis of Twin Lakes and Ryan Lake to establish the regulatory High Water Level (HWL). It would also include additional analysis to determine how the proposed HWL will impact nearby structures and how to mitigate risk with additional drainage options.

The TAC reviewed the proposed **Scope of Work*** and recommends that the current HUC 8 project scope be revised to incorporate these additional tasks. The estimated additional cost would be \$13,000. The HUC 8 study is funded by a \$50,000 grant from the DNR and \$25,000 from the Commission's 2019 budget. Staff recommend that the Commission fund this additional work from the Closed Projects Account. The Closed Projects Account balance at the end of 2018 was approximately \$87,670. The Commission had previously in 2019 authorized using \$5,000 of that balance for the Meadow Lake Feasibility Study, leaving a balance of \$82,670. Funding this project would leave a balance of \$69,670.



Excess levy funds left over when the final cost of a capital project is less than estimated are segregated into the Closed Projects Account where they can only be used for other projects.

Motion by Orred, second by Jaeger to authorize the revised Scope of Services for the HUC 8 Study, and allocate \$13,000 from the Closed Projects Account to the HUC8 Study budget.

B. Minutes* of the October 10, 2019 TAC meeting were included in the meeting packet for information. The **next TAC meeting** is tentatively scheduled for a date in January 2020.

VIII. Education and Public Outreach.* The West Metro Water Alliance (**WMWA**) met on Tuesday, November 12, 2019.

A. Special Projects. The member Commissions have approved allocating the 2019 and 2020 Special Projects funding to a new contract coordinator position. Attorney Gilchrist has drafted a professional services agreement* between the Shingle Creek WMC acting as fiscal agent for WMWA and the coordinator, Catherine Cesnik. *Motion by Jaeger, second by Orred to approve the agreement. Motion carried unanimously.*

Cesnik's initial focus be on contacting all the cities in the four watersheds to understand their education and outreach needs and gaps and how WMWA could be of assistance. These results will be used to update the WMWA Education and Outreach Plan (last updated in 2013) and establish a work plan for 2020.

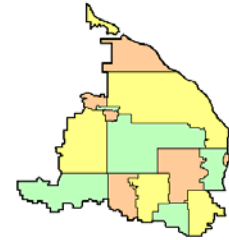
B. Watershed PREP and Education and Outreach Events. Educators are out in the schools providing their lessons. The educators are available to table at city and school events - contact Amy Juntunen at amy@jass.biz to "reserve an educator." The educators are also researching options to make a short, 3-5 minute promotional video for Watershed PREP for use both in marketing to schools in the four watersheds as well as informing other watersheds about the program.

C. Cities are reminded that the Minnesota Pollution Control Agency (MPCA) is in the process of reissuing the municipal separate storm sewer system (**MS4**) **general permit**. The agency has created a proposed new permit and is asking for public comments on the draft by 4:30 p.m., Saturday, January 11, 2020. New activities and progress on TMDLs have been added to the permit. Visit <https://www.pca.state.mn.us/water/reissuing-municipal-stormwater-general-permit> to learn more. Education and public outreach are an integral part of the MS4 permit.

D. Website. Members are reviewing the WMWA website to refresh and update content. Any input is appreciated. westmetrowateralliance.org/

E. WMWA also discussed the **Lawns to Legumes Program** bwsr.state.mn.us/lawns-legumes-program-your-yard-can-bee-change. BWSR received a \$900,000+ grant from the Environment and Natural Resources Trust Fund and plans to offer several subprograms, including grants to watersheds/cities/nonprofits for "demonstration neighborhoods;" how-to workshops across the state; and small grants to individual property owners. Amy Juntunen, JASS, and Diane Spector, Wenck Associates, attended a train-the-trainer workshop on November 8, 2019 to learn more about this developing program.

With lower attendance at the **rain garden/resilient yards workshops**, co-sponsored by WMWA and some of the cities in the watersheds, the steering committee has been discussing whether there is an opportunity to combine potential Lawns to Legumes workshops/grants with an additional focus on the concept of planting for clean water and resiliency.



F. The next **WMWA meeting** is scheduled for Tuesday, December 10, 2019 at Plymouth City Hall.

IX. Grant Opportunities and Updates.

Brian Kallio presented the results of the first year of the **SRP Reduction Project**.* The SRP project is a Section 319-funded research project. Sarah Nalven made a presentation at the July meeting about the project purpose and details about the project design. Brian is the design engineer and devised the instrumentation installed to determine the effectiveness of the project. Sarah is heading up the monitoring portion of the project.

The SRP Reduction Project is testing the effectiveness of three different filter media at reducing soluble reactive phosphorus (SRP) in outflow from Wetland 639W. SRP is the form of dissolved phosphorus that is most readily available to plants such as algae.

Phase 1 of the project consisted of installing a three-compartment filter box at the overflow weir of Wetland 639W. Each compartment was filled with a different medium. Even given the extremely wet year, some interesting and very encouraging results have occurred. One of the media is performing significantly less well than the other two, and one that generally accepted literature says does poorly in saturated, low oxygen conditions is performing comparatively well. When taking volume of flow treated into account, the load reduction can be estimated, and one of the media provides a very reasonable cost per pound removed, while the worst-performing appears to be significantly more expensive per pound.

Monitoring conditions in 2019 have been very challenging, and this is not an average water year. Most of the high flow at the overflow weir bypassed the filter box and thus was not treated. At this point it is unclear if these results are representative of how the media perform, or whether different results in a more average or even low-precipitation year may occur. The grant project calls for two more years of monitoring.

Kallio presented a more technical and design detail-oriented presentation at the TAC meeting, held prior to this meeting. The Commission presentation focused on the results. Learn more at <http://www.shinglecreek.org/srp-reduction-project.html>

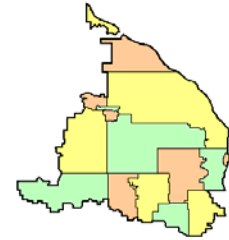
X. Communications.

A. November **Communications Log**.* No items required action.

B. Included in the meeting packet was a copy of a July 26, 2019 letter* to Mike Trojan at the MPCA regarding verification and certification of **Stormwater Manufactured Treatment Devices (MTDs)**. Also included was a copy of an email from Laura Jester, Bassett Creek WMC Administrator, responding to questions from Trojan. A meeting of interested parties may be scheduled in the future to discuss this topic in more detail.

C. Metropolitan Council has named award winners of their **Stormwater Grants**. Autumn Ridge Participatory Landscape Design and Installation (\$73,787) and the Brooklyn Center Workforce and Senior Affordable Apartments \$25,000) were among the recipients.

D. The **Conservation Corps** is accepting applications for 2020 field projects. They have published their Request for Proposals for Clean Water Funds for Crew Labor, with applications due December 15, 2019.



XI. Other Business.

The terms of representatives from **Champlin** and **Minneapolis** expired January 31, 2019. Staff have not received updated appointments as of this date. **The Commissioner position from the City of Minneapolis has become vacant and a new representative must be appointed by that city.**

XII. Adjournment. There being no further business before the Commissions, the joint meeting was adjourned at 1:45 p.m.

Respectfully submitted,

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

Judie A. Anderson
Recording Secretary
JAA:tim

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