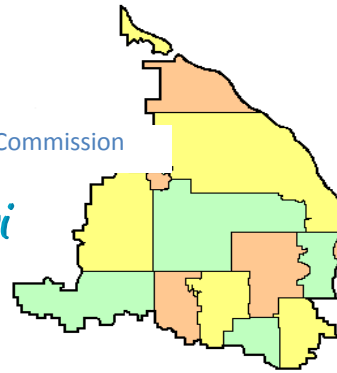


Watershed Management Commission



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## MINUTES Regular Meeting March 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 12:52 p.m. on Thursday, March 14, 2019, at the Clubhouse at Edinburgh, USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present for Shingle Creek: David Vlasin, Brooklyn Center; John Roach, Brooklyn Park; Burton Orred, Jr., Crystal; Gary Anderson, Minneapolis; Bill Wills, New Hope; Andy Polzin, Plymouth; Ed Matthiesen, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Not represented: Maple Grove, Osseo and Robbinsdale.

Present for West Mississippi: David Vlasin, Brooklyn Center; Steve Chesney, Brooklyn Park; Gerry Butcher, Champlin; Ed Matthiesen, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Not represented: Maple Grove and Osseo.

Also present: Andrew Hogg, Brooklyn Center; Mitchell Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Derek Asche, Maple Grove; Liz Stout, Minneapolis; Bob Grant and Megan Hedstrom, New Hope; Leah Gifford, Plymouth; Marta Roser, Robbinsdale; Drew McGovern, Hennepin County, for Project Review SC2019-004; and Rich Harrison and Laura Scholl, Metro Blooms, for item VI.A.1.

### II. Agendas and Minutes.

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

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

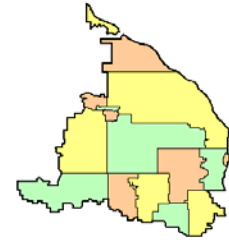
Motion by Wills, second by G. Anderson to approve the **minutes of the February meeting**. \* Motion carried unanimously.

Motion by Butcher, second by Chesney to approve the **minutes of the February meeting**. \* Motion carried unanimously.

### III. Finances and Reports.

A. Motion by Orred, second by Wills to approve the **Shingle Creek March Treasurer's Report**. \* Motion carried unanimously.

Motion by Orred, second by Wills to approve the **Shingle Creek March claims**. \* Claims totaling \$56,910.68 were approved by roll call vote: ayes – Vlasin, Roach, Orred, G. Anderson, Wills, and Polzin; nays – none; absent – Maple Grove, Osseo and Robbinsdale.



**B.** Motion by Chesney, second by Butcher to approve the **West Mississippi March Treasurer's Report.**\* *Motion carried unanimously.*

Motion by Butcher, second by Chesney to approve the **West Mississippi March claims.**\* Claims totaling \$12,092.30 were *approved by roll call vote: ayes – Vlasin, Chesney, and Butcher; nays – none; absent – Maple Grove and Osseo.*

**IV. Open Forum.**

**V. Project Reviews.**

**A. SC2019-003 Windsor Ridge, New Hope.\*** Construction of 32 single-family residential homes on 8.7 acres located at 51st and Pennsylvania Avenues North. Following development, the site will be 36.6 percent impervious with 3.2 acres of impervious surface, an increase of 3.2 acres. A complete project review application was received February 14, 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 - 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. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

Runoff from the majority of the site is proposed to be routed to a NURP pond connected to an infiltration basin. According to the MIDS calculator, this treatment pond removes 91% TSS and 87% TP. Stormwater entering this pond is pretreated with a 6-ft. diameter/6-ft. depth sump, which removes 85% TSS according to SHSAM. 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 majority of the site is proposed to be routed to a NURP pond connected to an infiltration basin. The applicant meets Commission rate control requirements.

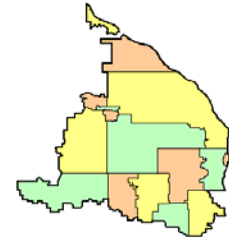
Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 3.2 acres, requiring infiltration of 11,580 CF within 48 hours. Runoff from the majority of the site will be routed to a NURP pond connected to an infiltration basin. In addition, a small portion of the site will be routed to a second infiltration basin. Together these infiltration basins have the capacity to infiltrate the required volume within 48 hours. In fact, soils have measured infiltration rates of 31 inches/hour, which is higher than 8.3 inches/hour, the highest infiltration rate the Minnesota Stormwater Manual allows for water quality purposes. The applicant proposes to amend in-place sandy soils with 1 ft. of topsoil to slow infiltration rates to 8.3 inches/hour. The applicant will test infiltration post-construction to confirm desired infiltration rates. The applicant meets Commission volume control requirements.

The National Wetlands Inventory does not identify any wetlands on site. The applicant 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 lowest opening elevations of houses are at least two feet higher than the high-water elevation of the ponds according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.

An erosion control plan was submitted with the project review and includes rock construction entrances, perimeter silt fence, silt fence surrounding basins, inlet protection, rip rap at inlets, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

A public hearing on the project was conducted on March 5, 2019 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

The City plans to own Outlot A and maintain the pond within it; therefore, an O&M agreement is not necessary.



Motion by Wills, second by G. Anderson to advise the City of New Hope that approval of project SC2019-003 is granted, subject to the following conditions:

1. Demonstrate by double-ring infiltrometer or witness test that the site meets the design infiltration rate of 8.3 inches/hour.
2. Provide evidence that work within the railroad right of way is allowed.

*Motion carried unanimously.*

**B. SC2019-004: CSAH-81 (Bottineau Boulevard), Crystal and Brooklyn Park.\*** Reconstruction and expansion of CSAH 81 on 50.2 acres (1.6 miles) to provide a consistent six-lane roadway, stormwater structures, and a multi-use trail that is part of the future Crystal Lake Regional Trail. The site location is 200 feet north of CSAH 8 (West Broadway Ave) in Crystal to 200 feet south of 83rd in Brooklyn Park. Following development, the site will be 65 percent impervious with 32.7 acres of impervious surface, an increase of 5.7 acres. A complete project review application was received on February 18, 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 - 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. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

Runoff from the site is proposed to ultimately be routed offsite at seven different discharge points. All inlets to filtration basins will receive pretreatment via a 4-foot-deep sump structure in the manhole/catch basin immediately upstream. The applicant submitted SHASAM model results demonstrating that the water quality requirements will be met by the SAFL baffle/Preserver structures. The applicant meets Commission water quality requirements.

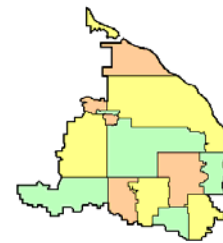
Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site ultimately flows into Shingle Creek. Runoff leaves the site via various adjacent ditches. Overall, the project results in a decreased discharge rate offsite. However, due to limited right-of-way space, rate control is not met at every individual discharge location. For the drainage areas that did not meet rate control, slight increases in overall discharge volume are anticipated.

Rena Weis from Wenck called Brooklyn Park City Engineer Jesse Struve on March 6, 2019. Struve did not see an issue with the slight increase in rate and volume within the right-of-way during the 100-year event from Drainage Area 6 since the water will flow south along Highway 81 to Shingle Creek. The applicant meets Commission rate control requirements.

Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The project site is located within a Drinking Water Supply Management Area and, therefore, proposes filtration instead of infiltration. The new impervious area is 5.7 acres, requiring filtration of 0.48 acre-feet (20,691 CF) within 48 hours. The applicant proposes to construct five filtration basins that have the capacity to filtrate the required volume within 48 hours. The applicant meets Commission volume control requirements.

A wetland assessment was completed in February 2018 by Hennepin County, which identified ten wetlands within the project boundary. The Shingle Creek WMC is LGU for WCA administration in Brooklyn Park. The applicant proposes to encroach on 0.4 acres of wetland and provide compensation through wetland bank credits. The applicant meets Commission wetland requirements, contingent on wetland credits being purchased.

Shingle Creek is a DNR Public Water that crosses CSAH-81. It is impaired for aquatic life and aquatic recreation due to chloride, dissolved oxygen, and E. coli concentrations and poor aquatic macroinvertebrate bioassessment scores. The proposed project is anticipated to improve the water quality of the creek by bringing the



site up to current standards and installing Best Management Practices where they didn't previously exist. The applicant meets Commission Public Waters requirements.

There is FEMA 100-year floodplain where CSAH-81 crosses Shingle Creek. There are no proposed buildings as part of this project. This project proposes to replace the Shingle Creek culvert beneath CSAH-81, which involves 81 feet of transverse encroachment of the floodplain. Approximately 5.8 CY of fill will be placed within the floodplain. The project proposes the creation of approximately 10.2 CY of compensatory storage, which will be in the CSAH-81 project area and hydraulically connected to the Shingle Creek floodplain, resulting in a net increase of approximately 4.4 cubic yards of storage. The applicant meets Commission floodplain requirements.

The project proposes replacement of the Shingle Creek culvert underneath CSAH-81. The new culvert will have the same cross section as the existing culvert and will be 5 feet longer than the existing culvert. HEC-RAS modeling was submitted to show that the water surface elevation will not be changed.

An erosion control plan was submitted with the project review, and includes erosion control blanket, perimeter silt fence/biolog, biologs surrounding detention ponds/infiltration basins, inlet protection, rip rap at inlets, and native seed specified on the filtration basin slopes. The erosion control plan meets Commission requirements.

Hennepin County mailed letters to residents and business owners along the project corridor to update them on the reconstruction timeline and stages in January 2019. The City of Brooklyn Park held an Open House for this phase of the CSAH-81 redevelopment on Tuesday, October 3, 2017. These activities meet the Commission public notice requirements.

Operations & Maintenance (O&M) for this site is covered under Hennepin County's MS4 permit.

Motion by Roach, second by Wills to advise the cities of Brooklyn Park and Crystal that approval of project SC2019-004 is granted, subject to the following conditions:

1. Purchase of wetland bank credits.
2. Revision of plans to show all erosion and sediment control practices that were indicated on hand-annotated plan submittal.

*Motion carried unanimously.*

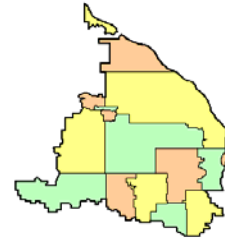
## **VI. Watershed Management Plan**

**A. Cost Share Applications.** The Commissions have on hand approximately \$100,057 (2018 audit hasn't been completed) in the Partnership Cost Share account, with another approximately \$50,500 levied to be received in 2019. Prior to this meeting the Technical Advisory Committee (TAC) met to discuss the following projects.

**1. Autumn Ridge Apartments.\*** The City of Brooklyn Park has submitted a Partnership Cost Share application on behalf of Sherman Associates and Metro Blooms for Phase II of improvements on the Autumn Ridge multi-family housing site at 63rd and Boone Avenues North. The amount requested is \$50,000. The proposed project is additional on-site water quality treatment, including 7-8 new rain gardens, additional pollinator habitat, and educational signage. The project also includes extensive resident education and participation, both in the design process and in installation and planting. In addition, the project includes Smart Salting education and training for the on-site property managers. The TAC recommended approval of this application.

Motion by Willis, second by G. Anderson to approve this application at the requested amount. *Motion carried unanimously.*

**2. Speed Thru Car Wash.\*** The City of New Hope has submitted a Partnership Cost Share application on behalf of LAMA Holdings LLC, Chris Robbins, for a capture and reuse project at the Speed Thru Car Wash at 7201 Bass Lake Road. The amount requested is \$50,000. The proposed project is the installation of five 20,000-gallon storage tanks and a filtration system to capture runoff from the site for reuse as car wash water. The site drains to the Bass Lake Road trunk storm sewer and then to Upper Twin Lake. Runoff



from nearly all impervious surface on site will be collected and routed to the storage tanks which will be treated by aerobic bacteria. All petroleum-based products will be consumed, and the only byproducts are CO<sub>2</sub> and water. After bacteria treatment the water will be further purified using a reverse osmosis system before being dispensed in the car wash tunnel. The TAC recommended denial of this application pending receipt of additional information from the applicant.

Motion by Wills, second by Roach to table action on this application. *Motion carried unanimously.*

**3. Enhanced Street Sweeper.\*** The TAC has previously debated the use of capital or cost share funds for high performance street sweeping equipment. While the TAC and Commissions are favorable of this idea, it is ultimately the decision of Hennepin County as to whether this meets the state statutes regulating their capital bonding. Staff have been in contact with Karen Galles at Hennepin County Energy and Environment, who is supportive of the idea. She has been discussing this idea with various upper level managers and county attorneys.

The City of Plymouth is requesting the Commission to add a regenerative air sweeper to its 2020 CIP. This item is on the City's CIP. According to their application, the City is bringing its street sweeping program in-house in 2019 and is committed to expanding the program to address water quality concerns going forward. All water resources within and downstream of the City of Plymouth could be affected by the enhanced street sweeping effort. Enhanced street sweeping was identified in the Bass, Schmidt & Pomerleau TMDL, the Cedar Island, Pike and Eagle Lake TMDL, and the Pike Lake Subwatershed Assessment as a cost-effective BMP for nutrient reductions. The TAC recommended to the Commission approval of this application conditioned that before-and-after performance reporting parameters be developed.

Motion by Orred, second by Roach to approve the TAC's recommendation. *Motion carried unanimously.*

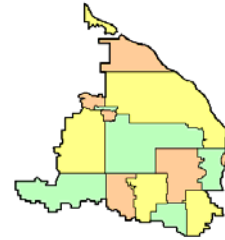
**B. Minor Plan Amendment.\*** The Commissions have previously discussed revising some of the provisions of the CIP program, namely increasing the voluntary \$500,000 annual levy limit and lifting the \$250,000 per project maximum. On February 21, 2019 BWSR Board Conservationist Steve Christopher concurred this could be completed by Minor Plan Amendment. Since this is an issue that cities may wish to take some time to discuss, Staff recommend that the Commissions provide 60 days for local review rather than the standard 30 days.

CIP revisions may also be completed by Minor Plan Amendment. At this time the only CIP action proposed by a member city that requires a Minor Plan Amendment (MPA) is rescheduling the generic "Lake Internal Load" project in 2020 to 2019, revising its cost to \$370,500, and specifying that the project is the Crystal Lake Management Project. The Commission applied for a Section 319 grant for that project. The \$370,500 shown in the CIP is the full cost of the project; should the Commission be awarded a grant, the actual amount levied would be less than that.

If the Commissions choose to go forward with the MPA, Staff recommend setting May 9, 2019 as the public meeting at which it would be discussed. At that May 9 meeting, the Commissions would discuss any other 2019 CIP projects proposed and establish a maximum levy for 2019. The Minor Plan Amendment and maximum levy would then be forwarded to Hennepin County for consideration by the Hennepin County Board. A copy of the notice, noticing requirements, proposed revisions to the CIP policy, and the CIP program itself, are included in Staff's March 8, 2019 memo.

Motion by G. Anderson, second by Vlasin to proceed with the public meeting as described above. *Motion carried unanimously.*

Motion by Chesney, second by Butcher to proceed with the public meeting as described above. *Motion carried unanimously.*



## VII. Water Quality.

A. The January 24, 2019 Technical Advisory Committee (TAC) minutes\* are included in the meeting packet.

B. The next TAC meeting is scheduled for 8:30 a.m., Thursday, April 25, 2019, at Crystal City Hall.

## VIII. Education and Public Outreach.

A. **2018 NPDES Report.\*** A copy of the draft *2018 NPDES Phase II Education and Public Outreach Program Annual Report* is included in the meeting packet. It serves both as a report to the Commissions and a report to the member cities that they can use in the preparation of their annual NPDES reports. The report formats information about 2018 activities in a way that will help the MS4s meet the reporting requirements under the State of Minnesota General Permit for Municipal Stormwater.

Motion by G. Anderson, second by Roach to accept the 2018 NPDES report and directing Staff to forward it to the member cities. *Motion carried unanimously.*

Motion by Butcher, second by Chesney to accept the 2018 NPDES report and directing Staff to forward it to the member cities. *Motion carried unanimously.*

B. **Environmental Initiative Nomination.\*** As directed at the February meeting, Staff prepared a nomination to the Environmental Initiative Awards for the Shingle Creek Biochar- and Iron-Enhanced Sand Filters Project. Several Commissioners were able to review and provide helpful feedback prior to its submittal. The final version of the nomination is included in the meeting packet. Award recipients will be announced in March.

Environmental Initiative ([environmental-initiative.org/](http://environmental-initiative.org/)) is a nonprofit organization comprised of leading Minnesota businesses, environmental advocacy nonprofits, and state agencies with a goal of developing collaborative solutions to Minnesota's environmental problems.

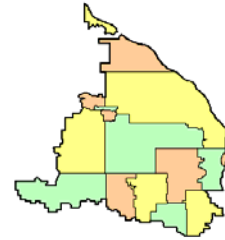
C. The West Metro Water Alliance (WMWA) met on March 12, 2019.

1. **Watershed PREP and Education and Outreach Events.** Educators are currently scheduling spring classroom visits and are also available to table at city and school events. Contact Amy Juntunen at [amy@jass.biz](mailto:amy@jass.biz) to schedule these events. In 2019 the educators will also be putting together some potential presentations for lake associations.

2. **Ten Things You Can Do Brochure.** The brochure is in final edits and the group is working with Hennepin County to update the design and layout. It is expected the County will print the brochure at no cost to the watershed organizations.

3. **Special Projects.** Each year the four watersheds budget \$8,000 to undertake a larger project. The group discussed whether the watersheds should update the public opinion survey conducted in 2008. That was a professional, scientific phone survey that contacted 400 households in the four watersheds to obtain baseline information about the level of water and natural resources knowledge in the area and what barriers to implementing household practices might be. That survey was \$10,000 ten years ago, and would likely cost more today. It was the consensus of the group that while this information is helpful, updating the survey would not likely change the education and outreach being currently provided, and that the money would better be used to fund implementation practices. It was also the consensus that it would be useful to have a scientific survey done to see if awareness has been raised in the ensuing ten years. It was agreed that this should be done on a Metro scale, and that WMWA should request that Watershed Partners, a consortium of agencies, cities, and watersheds across the Metro, consider this.

4. The group also discussed **purchasing educational displays** and noted that the native plant root puller display is extremely popular among both adults and youth. The nonprofit Blue Thumb has these custom displays made for about \$3,500. The displays educate users about one of the many features of native plants, their root



lengths compared to turf grass. This makes them ideal for stabilizing streambanks and lakeshores and for promoting infiltration by creating deep root channels. The display allows the user to pull out a string that is as long as the roots are deep. The strings are spring-wound, which then automatically retracts the strings back into the display. It was the consensus to get more information and a quote to be considered at the next WMWA meeting. The display can be used at booths and city events, and it was suggested that it could also be a movable display, set up at city halls or community centers on a rotating basis. It would help support the Pledge to Plant campaign as well. It was also noted that Blue Thumb is a valuable source of information, including educational materials, how-to guides, a plant finder tool, and more. <http://www.blue-thumb.org/public-resources/>

**5. Website/Social Media.** The website Google Analytics for February 2019, along with the Facebook insights for the last 28 days for both the Shingle Creek Commission and WMWA, are included in Staff's March 13, 2019 memo.\*

**F.** Motion by Roach, second by Orred to fund sponsorship of the **Freshwater 2019 Water Summit** for \$500, to be taken from the Education budget. *Motion carried unanimously.*

*Motion by Chesney, second by Vlasin to match this contribution. Motion carried unanimously.*

**G.** The **next WMWA meeting** is scheduled for 8:30 a.m., Tuesday, April 9, 2019, at Plymouth City Hall.

**IX. Grant Opportunities and Updates.**

**A.** The final application for the **Crystal Lake Management Plan Section 319 Grant\*** was Included in the meeting packet. The total project cost is \$370,506; grant funds requested total \$216,066.

**B.** Matthiesen provided verbal updates of the following:

- 1. Bass and Pomerleau Lakes Alum application.**
- 2. Twin Lake Carp removal.**
- 3. SRP Reduction project.**

**X. Communications.**

**A.** **February Communications Log.\*** No items required action.

**XI. Other Business.**

**A.** The terms of representatives from **Champlin**, Maple Grove, and **Minneapolis** expired January 31, 2019.

**B.** Hogg reported that the Commission engineering staff and Brooklyn Center city staff met with a representative from the Board of the Mallard Creek Townhomes at Unity Avenue. The townhouse association was looking for information on water quality issues for stormwater facilities that outlet to Shingle Creek. Staff provided grant information along with engineering contacts for the board to begin forming a plan for improvements.

**XII. Adjournment.** There being no further business before the Commissions, the meetings were adjourned at 1:47 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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