MINUTES January 13, 2022

(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 virtual 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, January 13, 2022.

Present for Shingle Creek were: David Vlasin, Brooklyn Center; Alex Prasch, Brooklyn Park; Burt Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Ray Schoch, Minneapolis; Robert Grant, New Hope; John Roach, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Ed Matthiesen, Diane Spector, Katie Kemmitt, Erik Megow, and Todd Shoemaker, Stantec; Troy Gilchrist, Kennedy & Graven; and Amy Juntunen and Judie Anderson, JASS.

Present for West Mississippi were: David Vlasin, Brooklyn Center; Alex Prasch, Brooklyn Park; Gerry Butcher, Champlin; Karen Jaeger, Maple Grove; John Roach, Osseo; Ed Matthiesen and Diane Spector, Stantec; Troy Gilchrist, Kennedy & Graven; and Amy Juntunen and Judie Anderson, JASS.

Also present were: Andrew Hogg, Brooklyn Center; Mitchell Robinson, Brooklyn Park; Heather Nelson, Champlin; Mark Ray, Crystal; Derek Asche, Maple Grove; Liz Stout and Katie Kowalczyk, Minneapolis; Nick Macklem, New Hope; Amy Riegel and Ben Scharenbroich, Plymouth; Richard McCoy, Robbinsdale; Dr. Kenneth Blumenfeld, Minnesota State Climate Office; Doug Baines, Dayton; David Katzner, Rogers; Michelle Pritchard, Anoka County; Justine Dauphinais, Dawn Doering, Britta Dornfeld, Jon Janke, and Trace Vanderbilt, Coon Creek Watershed District; and J. Kosluchar.

Dr. Blumemfeld is a Senior Climatologist with the Minnesota State Climate Office and an Adjunct Assistant Professor at the University of Minnesota. He discussed how the Commissions can plan for changing precipitation. Dr. Blumenfeld will provide his presentation for the Commission website.

II. Agendas and Minutes.

Motion by Schoch, second by Grant to approve the **Shingle Creek agenda*** as amended. *Motion carried unanimously*.

Motion by Butcher, second by Jaeger to approve the **West Mississippi agenda** as amended.* *Motion carried unanimously*.

Motion Schoch, second by Jaeger to approve the **minutes of the December 9, 2021, regular meeting.*** *Motion carried unanimously.*

Motion by Prasch, second by Roach to approve the **minutes of the December 9, 2021, regular meeting.*** *Motion carried unanimously.*



III. Finances and Reports.

- **A.** Motion by Schoch, second by Jaeger to approve the Shingle Creek **January Treasurer's Report* and claims** totaling \$93,359.37. Voting aye: Vlasin, Prasch, Orred, Jaeger, Schoch, Grant, Roach, Polzin, and Sicora; voting nay none.
- **B.** Motion by Butcher, second by Prasch to approve the **West Mississippi January Treasurer's Report* and claims** totaling \$9,675.36. Voting aye: Vlasin, Prasch, Butcher, Jaeger, and Roach; voting nay none.

IV. Open Forum.

V. Project Review.

SC2022-01 5308 Perry Avenue North, Crystal.* The proposed project is comprised of fill in a single family home lot on the southwest corner of Upper Twin Lake. Following development, the 1.32 acre site will be 8 percent impervious with 0.10 acres of impervious surface, an increase of 0.10 acres. A complete project review application was received on January 7, 2022.

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 be routed by overland flow through a 30' native vegetation buffer. 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 building flows over four times the hard surface on a turfed area. The applicant meets Commission rate control requirements.

Commission rules also 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 0.10 acres, requiring infiltration of 0.008 acre-feet (363 cubic feet) within 48 hours. The applicant proposes the lawn and buffer that have the capacity to infiltrate the required volume within 48 hours. The applicant meets Commission volume control requirements.

The erosion control plan is included consisting of a rock construction entrance, perimeter silt fence and WIMCO catch basin inserts. The erosion control plan meets Commission requirements.

The National Wetlands Inventory does not identify any wetlands on the site, but the lake edge corresponds with the NWI. Shingle Creek is LGU for WCA administration. A wetland buffer, a minimum of 20 feet in width and averaging 30 feet in width, is provided. The applicant meets Commission wetland requirements.

There are Public Waters abutting the site. Twin Lake is a DNR Public Water and is impaired for nutrients. The proposed project is not anticipated to negatively impact Twin Lake. The applicant meets Commission Public Waters requirements.

There is FEMA-regulated floodplain on this site. The low floor elevation of the building is at least two feet higher than the high-water elevation of the detention ponds/infiltration basins according to Atlas 14 precipitation. The 100-year FEMA elevation for Twin Lake is 856.0 and the Commission's HUC-8 model from



August 5, 2021, 10-day snowmelt is 856.1 (NAVD88 Datum). The basement floor is 858.5. The applicant 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 is not needed because this is an already platted lot. The applicant, however, will be going through the City of Crystal permitting process. The applicant meets Commission public notice requirements.

A draft Operations & Maintenance (O&M) agreement is needed.

Motion by Schoch, second by Jaeger to advise the City of Crystal that Project SC2022-01 is approved with two conditions:

- 1. Provide on-site verification with photos and seed tags that the vegetation buffer has been planted in the proposed area with the BWSR native species noted on the January 7, 2022, revised drawing.
- 2. Provide an Operations and Maintenance Agreement agreeable to the City of Crystal for upkeep of the buffer.

Motion carried unanimously.

VI. Third Generation Watershed Management Plan.

In their January 7, 2022, memos,* Staff presented the **draft 2022 Work Plans** for both Commissions. While work on the Fourth Generation Plan will be ongoing during the first part of the year, there will also be routine ongoing activities as well as Commission-funded construction projects and water monitoring activities occurring throughout 2022. Activities in calendar form are also provided.

A. Shingle Creek.

1. Continue to implement TMDLs.

- **a.** Complete the 5-year performance review for the Bass and Shingle Creek Biotic and DO TMDL.
- **b.** Complete aquatic vegetation surveys on Bass Lake and provide aquatic invasive species treatment as necessary.
- **c.** Partner with the City of Robbinsdale to continue implementing the Crystal Lake Management Plan, including carp removal, aquatic vegetation management, and alum treatment.
- **d.** Partner with the City of New Hope to implement the Meadow Lake Management Plan, including potential additional vegetation and fish management and preparation for an alum treatment.
- **e.** Partner with the Cities of Brooklyn Park and Brooklyn Center to undertake Connections II streambank improvements for Shingle Creek from Regent Avenue to Brooklyn Boulevard.
- **f.** Partner with the City of Brooklyn Park to undertake Bass Creek Park streambank improvements from Cherokee Drive to I-694.
- **g.** If permission from MAC is secured, extend the SRP Reduction filter along the Wetland 639W overflow channel.



- **h.** Continue to pursue grant funding for TMDL implementation projects.
- i. Expand the Directly Connected Untreated Areas geodatabase to include boundaries of the untreated areas directly connected to the lakes in the watershed. (Streams was completed in 2017.)
 - **j.** Stay abreast of other regional and state TMDLs.
 - 2. Partner with other organizations to increase reach and cost effectiveness.
 - a. Participate in the West Metro Water Alliance joint education and outreach

group.

b. Continue to partner with the USGS to operate the Queen Avenue monitoring

site.

groundwater issues.

- **c.** Partner with the USGS, DNR, and other interested parties to stay abreast of
- **d.** Complete the HUC study in partnership with the DNR.

3. Continue ongoing administration and programming.

- a. Conduct routine Commission lake water quality monitoring and aquatic vegetation and fish surveys on Magda and Ryan Lakes and grant funded monitoring on Crystal and Meadow Lakes.
- **b.** Conduct Commission routine flow and water quality monitoring at SC-0 and SC-3 on Shingle Creek and Bass Creek Park (BCP) on Bass Creek as well as two DO longitudinal studies as part of the Shingle and Bass Creeks Dissolved Oxygen (DO) and Biotic Integrity TMDL 5 Year Review.
- **c.** If available in 2022, sponsor volunteer stream monitoring through RiverWatch and wetland monitoring through WHEP (Hennepin County).
- **d.** Sponsor volunteer lake monitoring through CAMP (Met Council) on Bass, Upper, Middle, and Lower Twin Lakes.
 - **e.** Complete reviews of development and redevelopment projects as necessary.
 - **f.** Prepare an annual water quality report.
- g. Solicit cost-share projects from member cities funded from the Cost Share Fund and the annual \$100,000 levy and the Partnership Cost Share Fund and the annual \$50,000 levy.
- **h.** Review feasibility studies for 2022 proposed capital projects, undertake Plan Amendments, hold public hearings, order projects, and certify levies.
 - i. Prepare a 2023 annual budget.
- **j.** Host a Convene Meeting for the 2022 Watershed-Based Funding awarded to the Shingle Creek Partnership.
- **k.** Complete the Fourth Generation Management Plan and submit for public and BWSR review.
 - **I.** Invite three guest speakers to make lunchtime water resources presentations.
 - **m.** Tour project sites in the watershed.



Motion by Schoch, second by Orred to accept the 2022 draft Work Plan with the addition of the following under section 1:

<u>Partner with the City of Plymouth to complete the Palmer Creek Estates channel restoration project.</u> *Motion carried unanimously.*

B. West Mississippi.

Continue to stay abreast of regional TMDLs.

- **a.** Continue to identify, pursue grant funding for, and implement projects and programs addressing the bacterial impairment in the Mississippi River.
 - **b.** Stay abreast of other regional and state TMDLs.
- **c.** Identify boundaries of the untreated areas directly connected to the Mississippi River or other conveyances.
 - 2. Partner with other organizations to increase reach and cost effectiveness.
- **a.** Participate in the West Metro Water Alliance joint education and outreach group.
- **b.** Partner with the USGS, DNR, and other interested parties to stay abreast of groundwater issues.
 - **c.** Partner with the MWMO to undertake monitoring at the 65th Avenue outfall.
 - **d.** Partner with a member city to complete a subwatershed BMP analysis.

3. Continue ongoing administration and programming.

- a. Undertake routine flow and water quality at two outfalls into the Mississippi River.
- **b.** If available in 2022, sponsor volunteer stream monitoring through RiverWatch and wetland monitoring through WHEP (Hennepin County).
 - **c.** Complete reviews of development and redevelopment projects as necessary.
 - **d.** Prepare an annual water quality report.
- **e.** Solicit cost-share projects from member cities funded from the Cost Share Fund and the annual \$50,000 levy.
- **f.** Review feasibility studies for 2022 proposed capital projects, undertake Plan Amendments, hold public hearings, order projects, and certify levies.
 - g. Prepare a 2023 annual budget.
- **h.** Complete the Fourth Generation Management Plan and submit for public and BWSR review.
- i. Host a Convene Meeting for the 2022 Watershed-Based Funding awarded to the West Mississippi Partnership.
- **j.** Invite three guest speakers to make lunchtime water resources presentations.



k. Tour project sites in the watershed.

Motion by Butcher, second by Jaeger to accept the 2022 draft Work Plan as presented. *Motion carried unanimously.*

VII. Fourth Generation Watershed Management Plan.*

- **A.** Kemmitt provided an overview of the progress on the Fourth Generation Plan update.
- 1. Rules and Standards. Staff are currently working on a draft Rules and Standards update to be presented at the February meeting. The updated rules will align with the new MS4 general permit and the latest guidance in the Minnesota Stormwater Manual. They will also add clarity to how the Commissions will review certain project elements to align with City and surrounding Watershed requirements.
- 2. The Commissions have seen an early-stage **online story map** draft to accompany the Fourth Generation Plan. Work on the story map continues, with updates to layers and data shown. The plan moving forward is to use the story map as a visual, data-driven tool and keep the WMO website as the main source for watershed information. The story map will link back to the website where possible for in-depth information on projects, Commission processes, and more.
- **B. Maintenance and Resilience Funding.*** Staff drafted a Maintenance and Resiliency Funding policy* for TAC and Commission review. The policy addresses the types of work that may be eligible for funding, including any work resulting from capital projects that doesn't fall neatly into either operations or brick and mortar projects. At their meeting earlier today, members of the Technical Advisory Committee spent considerable time discussing the draft policy and requested Staff to return to their February meeting with suggested revisions for further discussion.
- **C. Public Input and Review.** In the coming weeks Staff will contact the member cities to determine which of their active commissions would best serve as a Citizen Advisory Committee to provide input and review of the draft plan as it moves through the development process and to establish a schedule. The request is for two meetings, with a homework assignment prior to the first meeting.

VIII. Water Quality.

HUC8 Study Update.* Shoemaker provided an update on this project which began in September 2018.

The Minnesota DNR initiated the process to update FEMA flood risk maps in 2017. One component of that process was to update the hydrologic and hydraulic computer model for each participating Twin Cities Hydrologic Unit Code (HUC) 8 watersheds (i.e., Shingle Creek, Coon Creek, Minnehaha Creek).

Stantec completed the Shingle Creek HUC8 model update and submitted it to the DNR for review in March 2021. The DNR subsequently held a "Flood Risk Review" (FRR) meeting on April 1, 2021, to discuss model results and implications to property owners and local floodplain administrators. There were two key outcomes from the FRR:

- 1. The effective (current) floodplain map and profile differ by up to ten feet. This is a mapping error in either the effective map or profile, not a calculation error. Regardless, it may create a perceived increase and discrepancy compared to the updated model. The DNR is aware and must be prepared to educate data users.
- 2. There is an increase in flood elevation upstream of Noble Avenue in Brooklyn Center that causes encroachment to properties along Unity Avenue. Structures here appear to have been permitted by



elevating them above the effective flood elevation and receiving approval through FEMA's Letter of Map Change process.

The DNR paused the flood risk map update in mid-2021 due to staffing shortages.

Staff were informed on December 21, 2021, that the process has now resumed. Stantec has confirmed the DNR has the most current Shingle Creek model, submitted as a result of the 2021 Ryan Lake Subwatershed Assessment. At this time, final review of the Shingle Creek model and updated flood risk maps are scheduled to be completed by September 1, 2022.

IX. Grant Opportunities.

A. Crystal Lake Management Plan.*

Carp removals on Crystal Lake in 2021 were extremely successful, with over 3,900 carp removed (an estimated 33% of the lake's population), moving the lake closer to improved water quality. Because of the success of carp removals, Staff is recommending another field season of carp removal efforts in 2022 to bring the lake's carp population below harmful levels. The grant's carp removal task budget has been expended. In addition, one of two alum doses was successfully applied to the lake in September 2021. The alum treatment came in under budget at \$52,776.69. The second alum treatment will be applied in 2022 and is expected to cost a similar amount.

Staff suggest moving some of the projected excess funds from the alum treatment task to the carp removal task to fund 2022 carp removals in the project grant work plan. This change will have no impact on the scope and total cost of the project but will allow additional efforts of carp removal on the lake.

Motion by Schoch, second by Grant to direct Staff to move forward with the proposed grant task change order for carp removal in 2022. *Motion carried unanimously*.

B. Bass Lake Vegetation Improvements.*

The Commission has successfully improved water quality and clarity on Bass Lake in Plymouth through the Bass and Pomerleau Lakes Alum Project. Water quality is the best it has been in decades; however, the native aquatic plant community appears to be limited. Curly-leaf pondweed (CLP) is still present in the lake in significant areas, and overall native species diversity is low.

In January, Staff met with the DNR and the Bass Lake Improvement Association (BLIA) to discuss lake vegetation management options moving forward. The DNR was supportive of continued herbicide spot-treatments of CLP and recommended native plant introductions from a donor lake to increase plant diversity in the lake. The BLIA would like to prioritize CLP management and was supportive of increasing native plant diversity through plant introductions of plants that won't impede recreation. The DNR provided a list of recommended plants to introduce and will be providing Staff with the permitting requirements associated with plant translocation.

Staff discussed pursuing a DNR Conservations Partners Legacy Grant (CPL) in February 2022 for available funds in May 2022 to fund native plant introductions and monitoring efficacy. The DNR CPL grant would fund up to two plant harvest and translocation events and the related pre- and post- monitoring to evaluate efficacy. The BLIA expressed support for pursuing the grant and would be willing to provide volunteer time and designate undisturbed areas of the lake for plant introductions. The DNR would also provide staff support during the translocation events but would not be available to provide all the staff work, which would need to be supplemented by volunteer and Commission staff time.



This would be a relatively low-cost project (<\$25,000) based on the DNR's estimate of the overall level of effort for the plant collection and translocation and follow-up monitoring. The CPL grants require a 10% match. Time spent by volunteers is eligible to serve as a portion of that match as in-kind services. There should be sufficient funds left over in the aquatic vegetation management reserve to provide any additional cash match. If you wish to proceed staff will prepare a draft grant application for your review at the February 10 meeting. The grants are due by February 21.

Motion by Schoch, second by Roach directing Staff to prepare a grant application for Commission review at the February meeting. *Motion carried unanimously*.

X. Education and Public Outreach.

A. The West Metro Water Alliance (WMWA) met on January 11, 2022. Angie Hong of the East Metro Water Resource Education Program (EMWREP) (East Metro Water Education — Washington Conservation District (mnwcd.org)) was the guest speaker to present about her organization and how it is funded, organized, and works. EMWREP is a partnership of local governments in the eastern Metro area, mainly in Washington County but which is now expanding into other counties. EMREP was founded in 2006 with just seven partners and has grown to 25, including all eight of the WMOs in Washington County. The Washington Conservation District is the host organization and contributions from EMWREP partners pay for two full-time educators.

WMWA was particularly interested in learning how EMREP successfully grew and maintained the formal (and financial) participation of so many partners and how they were able to grow to become so successful. Most of the watershed districts in Hennepin County have their own education and outreach staff and education programs and have not been interested in participating formally with WMWA. The WMWA partners agreed to continue brainstorming on how WMWA can be of more value to them.

Blue Thumb/Metro Blooms. WMWA will be forwarding to the cities in the four member WMOs (Bassett Creek, Elm Creek, Shingle Creek, and West Mississippi) information about 2022 potential resilient yards workshops that Metro Blooms now offers virtually. City sponsorship may fulfill an MS4's obligation to provide workshops or other learning opportunities to its residents.

Flyer Update. The four WMOs had previously authorized updating several brochures on topics required by the updated NPDES permits. WMWA has engaged a graphic designer to reformat several brochures into a consistent look and feel on the following topics: pet waste, water softeners, and proper ice melt use. These will be available to all the MS4s in the WMOs to help meet their NPDES permit obligations.

Watershed PREP. The new contracted educator, Jessica Sahu Teli, is on board and is working with the retiring educator to start soliciting classroom opportunities for this spring. Given the current pandemic, she is prepared to do both in-person and virtual learning depending on the needs and desires of the individual school.

The **next WMWA meeting** will be held via Zoom at 8:30 a.m., February 8, 2022.

B. Shingle Creek Website. Staff are working on refreshing the website in concert with the Fourth Generation Plan process. Included in the meeting packet are the 2021 metrics* showing the unique page views for the top 25 ages. The most visited pages continue to be pages for the Commission and TAC meeting materials and project review applications. Other pages average 10-20 hits per month. Staff are hopeful that the refresh and addition of an online interactive map will be an efficient and layperson-friendly way to navigate information.



C. Social Media. The Shingle Creek Facebook page currently has 213 followers. It has been a struggle to keep content and posts fresh and engaging. Many of the Commission posts are shares of posts from other watersheds or partners. Engagement has been most successful when Staff have posted project-related content on the Shingle Creek Facebook and then shared that post on another more focused page, such as sharing Crystal Lake posts onto a Robbinsdale resident's Facebook page. Staff will attempt to be more active and engaging in 2022.

XI. December Staff Report.*

A. General Updates.

Staff is working with BWSR to get guidance on how to proceed with the Watershed Based Funding convene meeting and process. The amount allocated to the Shingle Creek partnership is \$95,501 and to West Mississippi is \$75,000. Cities, counties, and WMOs within the watershed are eligible to receive this funding, as determined by the members of the partnership. More information will be provided at the February meeting.

B. Project Updates

- 1. Crystal Lake Management Plan. Work has concluded for the season and Staff are working with the MPCA on a change order to reallocate some of the alum treatment savings to additional carp management. See item VIII.A. of these minutes for more details.
 - 2. Bass and Pomerleau Lakes Management Plan. See Item VIII.B. of these minute.
- **3. Meadow Lake Management Plan.** The Meadow Lake drawdown has been completed and pumping infrastructure removed for the winter. Staff have scheduled an on-site visit with the contractor and City the week of January 10.
- **4. Connections II and Bass Creek Restoration Projects.** Both these projects were bid in December for construction in spring-summer 2022. Bid prices came in below the Engineer's Estimate.
- **5. SRP Extension Project.** This project is temporarily on hold as the City of Crystal continues to work with MAC to obtain permission to construct the project on MAC property. Once that is secured it is expected that work will proceed starting approximately in March depending on the weather and be complete by mid-summer 2022.

XII. Communications.

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

XIII. Other Business.

- **A. Annual appointments** of commissioners are due from the cities of Champlin, Maple Grove, Minneapolis, and New Hope.
 - **B. Election of officers** will occur at the February meeting. Current officers are:
 - **1. Shingle Creek:** Polzin, Chair; Sicora, Vice Chair; Jaeger, Secretary; and Orred, Treasurer.
- **2. West Mississippi:** Butcher, Chair; Harold Johnson, Vice Chair; and Jaeger, Secretary/Treasurer.

Jaeger volunteered to serve as the Nominating Committee for Shingle Creek. West Mississippi's Nominating Committee is a committee of the whole.



C. Matthiesen announced that he will be taking a professional **leave of absence** after the February meeting.

XIV. Adjournment. There being no further business before the Commissions, the joint meeting was adjourned at 2:41 p.m.

Respectfully submitted,

Judie A. Anderson, Recording Secretary

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