

**REGULAR MEETING  
 MINUTES**

**November 10, 2022 corrected (See Item II.)**

(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 12:50 p.m. on Thursday, November 10, 2022, in the Aspen Room, Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

Present for Shingle Creek were: Alex Prasch, Brooklyn Park; Burt Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Ray Schoch, Minneapolis; Bill Wills, New Hope; John Roach, Osseo; Andy Polzin, Plymouth; Diane Spector, Katie Kemmitt, and Todd Shoemaker, Stantec; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS. Not represented: Brooklyn Center and Robbinsdale.

Present for West Mississippi were: Alex Prasch, Brooklyn Park; Gerry Butcher, Champlin; Karen Jaeger, Maple Grove; John Roach, Osseo; Diane Spector, Katie Kemmitt, and Todd Shoemaker, Stantec; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS. Not represented: Brooklyn Center.

Also present were: James Soltis, Brooklyn Center; Mitchell Robinson, Brooklyn Park; Heather Nelson, Champlin; Mark Ray, Crystal; Mark Lahtinen, Maple Grove; Bob Grant and Nick Macklem, New Hope; Amy Riegel and Ben Scharenbroich, Plymouth; and Richard McCoy and Mike Sorensen, Robbinsdale.

**II. Agendas and Minutes.**

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

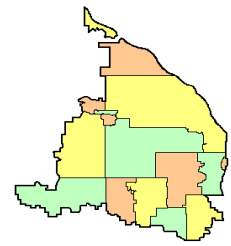
Motion by Roach, second by Prasch to approve the **West Mississippi agenda**.\* *Motion carried unanimously.*

Motion by Schoch, second by Orred to approve the **minutes of the October 13, 2022, regular meeting and public hearing**.\* *Motion carried unanimously.*

Motion by Jaeger, second by Roach to approve the **minutes of the October 13, 2022, regular meeting and public hearing**.\* *Motion carried unanimously.*

**III. Finances and Reports.**

A. Motion by Schoch, second by Orred to approve the Shingle Creek **November Treasurer's Report\* and claims** totaling \$88,880.36. Voting aye: Prasch, Orred, Jaeger, Schoch, Wills, and Polzin; voting nay: none; absent: Brooklyn Center and Robbinsdale.



**B.** Motion by Roach, second by Jaeger to approve the **West Mississippi November Treasurer's Report\* and claims** totaling \$9,166.59. Voting aye: Prasch, Jaeger, and Roach; voting nay: none; absent – Brooklyn Center and Champlin.

**IV. Open Forum.**

Orred stated that there is no water in the MAC wildlife refuge in Crystal.

**V. Project Reviews.**

**A. Linear Project Review Thresholds.\***

New project review requirements are now in effect (as of October 1, 2022) for the Shingle Creek and West Mississippi Commissions. One of the changes is that linear projects that create or disturb one acre or more of impervious surface are now subject to Commission requirements. Under the previous rules, linear projects were subject to Commission requirements only if they created one acre or more of impervious surface.

Under the new requirement, most neighborhood street projects could come to the Commissions for review because they almost always disturb more than one acre. Staff recommends maintaining the threshold for Commission review – when a linear project creates more than one acre of new impervious surface. This clarification can be made to the Rules as a housekeeping update with no plan amendment required.

This topic was discussed at the Technical Advisory Committee (TAC) meeting earlier today. Discussion centered on two issues – the differentiation between “create” and “disturb,” and the impact of underlying soils. It was recommended by the members that the Commissions follow the MPCA guidance. It was also recommended that definitions be added to the rules; otherwise, they should remain as currently written. The TAC will continue this discussion at its December meeting.

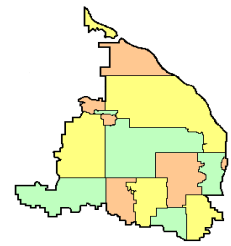
*[Butcher arrived 1:14 p.m.]*

**B. Chloride Management Requirements for Project Applicants.\***

The Shingle Creek and West Mississippi TAC and Commissions have a thorough understanding of how road salt (chloride) use for winter safety can negatively impact water bodies. Shingle Creek is impaired for chloride and its condition has not improved since the Shingle Creek Chloride TMDL was published. Road salt can contaminate drinking water, have negative impacts on aquatic organisms, and corrode infrastructure, among other impacts.

To help minimize sources of chloride in the watershed, the TAC and Commissions have been more frequently recommending to cities approval of development projects pending submittal of a chloride management plan from developers. The purpose of a chloride management plan is to ensure proper winter maintenance BMPs are used for developments in the watershed to minimize the amount of excess chloride applied to pavement and to reduce the amount of chloride that makes its way to water bodies in the watersheds.

There are some difficulties with requiring chloride management plans from project applicants. The entity submitting project plans for permitting often doesn't have a strong relationship with the entity who will ultimately be doing winter maintenance, making it difficult to ensure management plans get upheld and implemented. Winter maintenance crews are often contracted out especially for large developments. Requiring



chloride management plans, however, may help increase awareness of chloride issues in the watershed and be an additional tool to educate people on the negative impacts of salt use.

Staff have researched chloride management plan requirements from various cities and watersheds in the Metro Area to understand what is currently being done, what is working well, and what options exist for Shingle Creek and West Mississippi to require a chloride management plan with project applications. They reviewed chloride management requirements from Nine Mile Creek and Coon Creek Watershed Districts, Mississippi Watershed Management Organization, and the cities of Edina, Bloomington, and Plymouth, as well as the draft Winter Maintenance Management Plan templates created for the Hennepin County Chloride Initiative by Fortin Consulting (included in the meeting packet). Chloride management plans, as a requirement for development, are a relatively new idea and haven't been implemented in many places, so there was not much overall feedback from the watersheds and cities on how requiring chloride management plans have been going.

Based on the review described above, Staff proposed four potential options for the Commissions to implement a chloride management requirement with project submittals ranging from 1 (easier to implement) to 3 (more difficult/resource intensive to implement):

1. Do not add a chloride management plan requirement and instead continue efforts on chloride education and outreach in the watersheds.
2. Require project applicants to name an individual or multiple individuals responsible for winter chloride management onsite.
3. Require project applicants to submit a Chloride Management Plan using the templates provided in the Winter Maintenance Management Plan created for the Hennepin County Chloride Initiative by Fortin Consulting. Project applicants would use the calculator to choose which template to use: basic, intermediate, or detailed.
4. Add chloride management requirements to the Operations and Maintenance agreements between the site owner and the City.

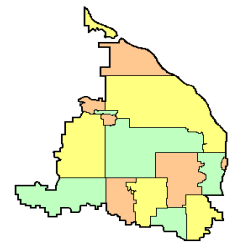
Staff recommends Option 1, the Commission refrain from adding any additional requirements to project review submittals and continue to focus on chloride education and outreach in the watersheds.

Members of the TAC concurred. This topic will be addressed as part of the "Low Salt No Salt" campaign next year and added to the Commissions' 2023 Work Plans which will be considered at the January 12, 2023, meeting.

#### **VI. Fourth Generation Watershed Management Plan.\***

**A.** A review draft of the Fourth Generation Watershed Management Plan was posted on the Commissions' website in early October, and a notice was emailed to Commissioners, TAC members, city staff members, and other stakeholders that it was available for review. The Commission received comments from the Board of Soil and Water Resources, Minnesota Pollution Control Agency, and Metropolitan Council. In addition to providing links to resources and commending the Commissions for emphasizing a commitment to climate change and environmental justice, agencies provided a few informal comments that are summarized below. No comments warrant any significant changes to the Plan.

1. The Plan should clearly state how a municipality could adopt the whole Plan or portions to act as their Local Surface Water Management Plan [Met Council]



2. Consider more commitment to reducing chlorides [MPCA]
3. Consider adding protection strategies for lakes that have been delisted [MPCA]

**B.** The next step in the planning process is to proceed to the 60-day review period. During this period, the member cities and other review agencies will be asked for formal comments on the Plan. Upon completion of the 60-day review, the Commissions must hold a public hearing to take further public comment. Following any revisions in response to the comments, the Commissions must then send the revised Plan, a compilation of all the comments received, the responses, and a summary of how the Plan was revised in response to comments to the Board of Water and Soil Resources. BWSR staff will review the Plan and then make a recommendation to BWSR’s Metro Water Planning Committee, who will review the Plan and make a recommendation to the full BWSR Board to either approve the Plan or require revisions. After approval by the BWSR Board, the Plan will come back to the Commissions for final adoption. The law provides BWSR 90 days for this review process, but it can be completed in less time.

*Motion by Schoch, second by Roach to initiate the 60-day review process. Motion carried unanimously.*

*Motion by Butcher, second by Jaeger to initiate the 60-day review process. Motion carried unanimously.*

**C.** The updated **draft plan** is available on the Shingle Creek and West Mississippi website homepage under “What’s New” (<http://www.shinglecreek.org/>). [Notice of the formal review was emailed on November 16, 2022.]

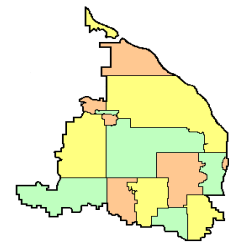
#### **VII. Watershed Boundaries.\***

With the Commission’s review of the proposed updated legal boundaries at the September Commission meeting, the proposed boundary line and draft letters of concurrence were sent to the neighboring watershed organizations for their review and concurrence. Staff have received comments from Mississippi WMO, Elm Creek WMC, and Bassett Creek WMC with clarifications on drainage patterns along the shared boundary.

The Stantec team met with representatives from Mississippi WMO and Bassett Creek WMC to discuss the recommended revisions to the proposed boundary and has responded to the comments received through the review by Elm Creek WMC’s member cities. Comments received were based on specific local knowledge of municipal storms sewer networks and drainage patterns and presented meaningful refinement to the accuracy of the proposed boundary. Staff is in the process of making the recommended edits to distribute a final draft boundary to each of the neighboring watershed organizations. Review by municipalities will follow the neighboring watershed concurrence. The meetings targeted for boundary review and concurrence at upcoming Watershed Commission meetings are: Bassett Creek – November 16; Elm Creek – December 14; and Mississippi – January 10.

After watershed and municipal concurrence, the boundary update will be submitted to Hennepin County, so the County can update the watershed’s special taxing district. Submittal by July 1st of an updated boundary map and a list of parcels within the new boundaries will ensure the update is included in the following year’s taxes.

#### **VIII. Grant Opportunities.**



**A. Minneapolis Cost Share Request.\***

Representatives from the City of Minneapolis and Houston Engineering were present at the TAC meeting to submit a cost share request from the City of Minneapolis to the Shingle Creek Commission for improvements proposed adjacent to 46th Avenue and Shingle Creek. The proposed improvements would replace a failed and eroded outlet to Shingle Creek and incorporate green infrastructure to manage and convey runoff to the creek rather than through traditional pipes. The green infrastructure consists of two rain gardens, a dry swale, and a step pool system consisting of three pools discharging into the creek. In their application received last month, the City requests the maximum cost-share amount of \$50,000.

The City prepared preliminary designs for two options with the estimated cost of the stormwater work at between \$151,000 (Option B) and \$163,000 (Option A). The higher cost of option A is due to the incorporation of larger step-pools adjacent to Shingle Creek.

Staff reviewed the preliminary plans and noted the following benefits of the project:

1. Replacing failed “gray” infrastructure (pipe) with the more natural aesthetic of green infrastructure.
2. This is a “pilot project” for Minneapolis and may serve as an example for future outfall stabilization projects.
3. Improving water quality (Table 1) for an area with no existing stormwater management.
4. Adding green space for the surrounding community.

**Table 1. Water quality benefits of the proposed project.**

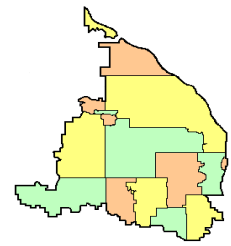
	<b>Volume Captured (cf)</b>	<b>TSS Reduction (lb/yr)</b>	<b>TP Reduction (lb/yr)</b>	<b>Normalized Cost (\$/lb TP)</b>
<b>Proposed Green Infrastructure*</b>	<b>2,134</b>	<b>216</b>	<b>1.2</b>	<b>\$4,200-\$4,600</b>

\*Water quality benefits represent both Options A and B.

Staff recommends that the City address the following comments as the project proceeds to final design:

1. Document plunge pool stability:
  - a. Effect of Shingle Creek flows
  - b. Effect of pipe flows
2. Provide MIDS BMP parameters/MIDS file to confirm modeling corresponds to the design.
3. Conduct soil borings to verify design infiltration rates.
4. Provide pretreatment to ensure the functionality of the credited system.
5. Provide a reinforced EOF at the dog leg of swale for 100-yr event.
6. Provide a revegetation plan (native species recommended).
7. Verify that a public easement (or equivalent) is dedicated.
8. Execute and record an O & M Agreement prior to release of any funds.

With the revisions above, Staff recommended approval of this cost share application. TAC members concurred with this recommendation. Upon Commission approval, the City will submit 90% design plans. The TAC has also requested the City to look at the velocities for a 100-year flow event to make sure the step pools are properly sized.



Motion by Schoch, second by Orred to approve this project subject to the recommended design changes. *Motion carried unanimously.* At January 1, 2022, the balance in the City Cost Share Fund was \$329,210.

**B. MPCA Climate Resilience Grants.\***

The Minnesota Pollution Control Agency (MPCA) is taking applications for the Planning Grants for the Stormwater, Wastewater, and Community Resilience program. \$395,000 is available to support climate-planning projects in communities across Minnesota. This funding will help communities assess vulnerabilities and plan for the effects of Minnesota's changing climate in three areas: (1) Improving stormwater resilience and reducing localized flood risk; (2) Improving the resilience of wastewater systems; and (3) Adapting community services, ordinances, and public spaces.

This was a new grant program in 2021, and the Commission approved submitting a grant application to use the Shingle Creek HUC8 model to estimate the potential impacts of future precipitation patterns. Unfortunately, it was not funded. Supposedly the DNR is currently doing some modeling for at least some parts of the West Mississippi watershed, but Staff have not seen it and can't say whether it is suitable for such a modeling exercise.

Staff recommend that Shingle Creek reapply this year using the same general work plan as last year. Last year the grant program funded grants to a few other WMOs and cities to undertake essentially the same activities:

1. Model and map midcentury precipitation scenarios to create projected flood inundation areas for the 1%+ 24-hour rainfall event and the 1%+ 10 day event. A 'plus' is a rainfall depth taken from the 90th percentile estimate for the given rainfall frequency. FEMA often evaluates not only the 1% storm event but also the 1%+ storm event as a way to provide perspective on the range of values one COULD expect in the 1% event. The State Climatology Office also suggests using the 90th percentile as a proxy for midcentury precipitation.

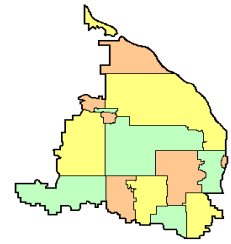
2. Identify potential future flooding risks in the watershed by reviewing known flooding areas, infrastructure, structures, and emergency vehicle routes in or in close proximity to predicted future hazardous flood conditions.

3. Develop policy recommendations for using the scenario data. For example, this modeling could be used to help the cities and county better understand how to properly design new infrastructure such as culverts, bridges, etc. that would be expected to have a mid-century useful life.

Completing this type of resiliency modeling is called out in the Fourth Generation Plan as a priority implementation action. The cost of undertaking this work was estimated last year as just under \$25,000, with a grant request of about \$22,000 and a 10% local match of about \$2,500. Staff have not yet updated the estimate but believe it will be in that ballpark.

Applications are due January 12, 2023. The TAC has recommended moving forward with an application. If the Commission approves pursuing this grant, Staff will bring a draft workplan and application to the Commission at their December meeting. The level of effort to prepare the application and associated documents will be minimal since much of what was prepared last year can be reused.

Motion by Schoch, second by Orred directing Staff to develop an application to pursue this grant for consideration at the December meeting. *Motion carried unanimously.*



**C. Watershed Based Implementation Funding.** The Shingle Creek and West Mississippi Convene Groups' recommendations have been submitted to the Board of Water and Soil Resources (BWSR), which is currently reviewing the associated work plans.

**IX. Education and Public Outreach.**

**A.** The **West Metro Water Alliance (WMWA)** will meet via Zoom at 8:30 a.m., December 13, 2022.

**B.** At the November meeting the members discussed the shared employment individual's duties. The County Board will consider this position at their meeting at the end of November, after which time a job description will be written.

**C.** It was reported that the WMWA educator, Jessica Sahu Teli, has been busy with classroom and community-based activities. She is a passionate individual and has been very enthusiastically accepted by her audiences.

**D.** The West Metro Water Alliance (WMWA), which is a partnership of Shingle Creek and West Mississippi, Elm Creek, and Bassett Creek WMOs, contracts with a licensed teacher to provide education and outreach, primarily to 4th graders through the Watershed PREP program, but also at other school and community events. The professional services agreement\* with the current educator has expired and is in need of renewal. Shingle Creek acts as the fiscal agent for WMWA, so the agreement is between Shingle Creek and that individual, who is an independent contractor. The Commission's attorney has drafted the agreement and Staff recommend that the Commission authorize its execution.

Motion by Prasch, second by Schoch to renew the Education Agreement

**X. Communications.**

**A. Staff Report.** No report this month.

**B. October Communications Log.\*** No items required action.

**XI. Other Business.**

**XII. Adjournment.** There being no further business before the Commissions, the joint meeting was adjourned at 1:50 p.m.

Respectfully submitted,

Handwritten signature of Judie A. Anderson in black ink.

Judie A. Anderson  
Recording Secretary  
JAA:tim

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