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May 4, 2023

Commissioners and

Technical Advisory Committee Members Shingle Creek and West Mississippi Watershed Management Commissions Hennepin County, Minnesota The agenda and meeting packets are available on the Commission's web site.

http://www.shinqlecreek.org/minutes--meetingpackets.html and

http://www.shinglecreek.org/tac-meetings.html

Dear Commissioners and Members:

Regular meetings of the Shingle Creek and West Mississippi Watershed Management Commissions will be held Thursday, May 11, 2023, in the Aspen Room at Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

Lunch will be served at 12:00 noon and the meetings will convene concurrently at 12:45.

The Technical Advisory Committee (TAC) will convene at 10:30, prior to the regular meeting.

Please make your meal choice from the items below and email me at <a href="mailto:judie@jass.biz">judie@jass.biz</a> to confirm your attendance and your meal selection by <a href="mailto:noon">noon</a>, <a href="mailto:Tuesday">Tuesday</a>, <a href="mailto:May 9">May 9</a>, <a href="mailto:2023">2023</a>. Thank you.

Regards,

Judie A. Anderson

Administrator

cc: Alternate Commissioners

Member Cites

Troy Gilchrist

TAC Members

Stantec Consulting Services

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BWSR

MPCA

HCEE

Order your deli sandwich box lunch. Sandwiches come with lettuce, tomato and mayo. As an alternative you may specify your sandwich with wheat bread or as an unwich (lettuce wrapped).

**1** Pepe – Ham and cheese

2 Big John – Roast beef

**3** Totally Tuna – Tuna salad and cucumber

4 Turkey Tom – Turkey

5 Vito – salami. capocollo, cheese, onion, oil and vinegar, oregano-basil (no mayo)

**6** The Veggie – double cheese, avocado spread, cucumber

**14** Bootlegger Club – Roast beef and turkey

Please also indicate

if you would like a beverage: (W) Water (P) Pepsi (DP) Diet Pepsi (S) Sprite (N) No thank you.

A combined regular meeting of the Shingle Creek (SC) and West Mississippi (WM) Watershed Management Commissions will be convened Thursday, May 11, 2023, at 12:45 p.m. Agenda items are available at <a href="http://www.shinglecreek.org/">http://www.shinglecreek.org/</a> minutes--meeting-packets.html. Black typeface denotes SCWM items, blue denotes SC items, green denotes WM items.

### A G E N D A | May 11, 2023

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1	Cal	l to	Order	

**SCWM** 

a. Roll Call.

**SCWM** 

- Approve Agenda.\*
- **SCWM**
- Approve Minutes of Last Meeting.\*
- Reports.

**SCWM** 

- **a.** Treasurer's Reports and Claims\*\* voice votes.
- **SCWM** Open forum.
  - Action Items.

SC

- Project Review SC2023-02 Bass Lake Road Mixed Use, Plymouth.\*
- Fourth Generation Plan.\*
  - 1) L BWSR Board Chair.\*
  - 2) Decision.\*
- SC
- Resolution 2023-01 Adopting the Plan.\*
- W/M
- 4) Resolution 2023-01 Adopting the Plan.\*
- 2024 Operating Budgets.
- SC
- Shingle Creek.\*
- WM
- West Mississippi.\*
- 6. Revised CIP.
- WM
- a. Closed Capital Projects.\*
- **SCWM** SC
- 7. Revised City Cost Share policy.
- Crystal City Cost Share Application.
- SC
- Twin Lake Townhomes Partnership Cost Share follow-up. Water Quality.

252/I-94 Draft Scoping Decision Document Review.\*

- **SCWM SCWM**
- 252/I-94 Future EIS Scope and Budget.\*

**Grant Opportunities.** 

SCWM

- 10. Education and Public Outreach update.\*\*
  - WMWA next meeting June 13, 2023, at 8:30 a.m., via Zoom.
- 11. Communications.
- **SCWM**
- Communications Log.\*
- **SCWM**
- Staff Report.\* b.
  - Highway 252/94 EIS Review.
  - Meadow Lake Drawdown.
  - 3) Legal Boundary Update.
  - 4) Eagle Lake SWA.
- 12. Other Business.
- 5) Gaulke Pond SWA.
- 6) Shingle Creek Brookdale Park Remeander.
- SC Trail Bank Stabilization and Fish Access. 7)
- 8) Presentation Schedule.

SCWM 13. Adjournment.

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Brooklyn Center • Brooklyn Park • Champlin • Crystal • Maple Grove • Minneapolis • New Hope • Osseo • Plymouth • Robbinsdale

# REGULAR MEETING MINUTES | April 13, 2023

(Action by the SCWMC appears in blue, by the WMWMC in green and shared information in black.

\*indicates items included in the meeting packet.)

I. A joint meeting of the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission was called to order by Shingle Creek Chairman Andy Polzin at 12:45 p.m. on Thursday, April 13, 2023, at Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

Present for Shingle Creek: David Mulla, Brooklyn Center; Greg Spoden, Brooklyn Park; Burt Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Ray Schoch, Minneapolis; Bill Wills, New Hope; John Roach, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Diane Spector, Todd Shoemaker, Katie Kemmitt, Kurt Krautmann, and Ali Stone, Stantec; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

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

Also present were: James Soltis, Brooklyn Center; Mitch Robinson, Brooklyn Park; Mark Ray and Ben Perkey, Crystal; Derek Asche, Maple Grove; Katie Kowalczyk, Minneapolis; Bob Grant and Nick Macklem, New Hope; James Kelly, Osseo; Amy Riegel, Plymouth; Wendy Scherer and Mike Sorensen, Robbinsdale; and Maureen Hoffman, Metropolitan Council.

### II. Agendas and Minutes.

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

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

Motion by Jaeger, second by Schoch to approve the **minutes of the March 9, 2023, regular meeting.\*** *Motion carried unanimously.* 

Motion by Roach, second by Butcher to approve the **minutes of the March 9, 2023, regular meeting.\*** *Motion carried unanimously.* 

#### III. Finances and Reports.

- **A.** Motion by Schoch, second by Roach to approve the Shingle Creek **April Treasurer's Report\* and claims** totaling \$58,692.49, with the total of the March expense column being corrected. Voting aye: Mulla, Spoden, Orred, Jaeger, Schoch, Wills, Roach, Polzin, and Sicora; voting nay: none.
- **B.** Motion by Butcher, second by Jaeger to approve the **West Mississippi April Treasurer's Report\*** and claims totaling \$25,812.02. Voting aye: Mulla, Butcher, Jaeger, and Roach; voting nay: none; absent Brooklyn Park.



# IV. Open Forum.

## V. Project Reviews.

A. SC2022-04 Arbor Lakes Phase III, Maple Grove.\* Construction of five industrial buildings and two private streets on 61.07 acres located at 10400-10500 Fountains Drive. A complete project review application was received on April 28, 2022. Five review extension requests have been submitted and approved for this project.

The applicant proposes to develop approximately the northern half of Phase 3 (33.07 acres) and rough grade the approximate southern half and northeast corner (28 acres) for future development. Therefore, the Commission stormwater requirements only apply to the northern half at this time. The northern half of the site will be 100 percent impervious with 33.07 acres of impervious surface, an increase of 33.07 acres. The southern half and northeast corner will be subject to a future project review where the southern pond may be enlarged to serve the full site. 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.

The applicant proposes to use an off-site stormwater pond, SPP-65, owned by the City of Maple Grove to treat 11.86 acres of impervious on the site. City staff reports the off-site pond can accommodate this area. The remaining 23.68 acres of impervious requires 300,100 ft<sup>3</sup> for the 2.5" rainfall event. The proposed pond provides a dead storage volume of 397,415 ft<sup>3</sup>. 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 is proposed to be controlled by SPP-65 regional pond and the onsite NURP pond that discharges to the northeast. 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 site is located within the Maple Grove Gravel Mining Area. In 2010, the Commission reviewed and approved a plan by the City of Maple Grove to obtain infiltration credits for this new development by constructing biofiltration basins adjacent to four existing regional stormwater ponds. Stormwater from areas that developed prior to the infiltration rule is directed to these basins. The Commission agreed that these new infiltration basins are adequate to provide regional infiltration for the 553 acres of undeveloped area (SC2010-04). The subject project is located within that area and, therefore, meets Commission volume control treatment requirements. This has been verified with City staff.

The erosion control plan includes a rock construction entrance, perimeter silt fence/biolog, silt fence surrounding detention ponds/infiltration basins, inlet protection, rip rap at inlets, native seed is specified on the pond slopes, and slope checks. The erosion control plan meets Commission requirements.

The National Wetlands Inventory identifies one wetland on the site, but no wetland characteristics currently exist on the site. The City of Maple Grove is the LGU for WCA administration. 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 low floor elevations of the buildings (920') are at least two feet higher than the high-water elevation of the detention pond (910.79') according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.



The site is located in a Drinking Water Source Management Area (DWSMA). Therefore, infiltration is permitted, but infiltrated water must first filter through one foot of soil, the top four inches of which are amended topsoil, and the bottom eight inches of which are tilled. Infiltration is occurring offsite. The applicant meets Commission drinking water protection requirements.

City staff reports that a public hearing for this site was held on May 4, 2022. The applicant meets Commission public notice requirements.

A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Maple Grove was not provided. [Asche indicated that this item is resolved.]

Motion by Schoch, second by Jaeger to advise the City of Maple Grove that this project is approved with no conditions. *Motion carried unanimously.* 

**B. SC2023-01 Crystal Airport, Crystal.\*** Construction of two service roads and reconstruction of a taxiway on 4.07 acres. The project site is located at 5800 Crystal Airport Road. The parcel is 326 acres. Following development, the site will be 29 percent impervious with 96 acres of impervious surface, an increase of 1.88 acres. A complete project review application was received on April 4, 2023.

Commission rules require linear projects to infiltrate the larger of one-inch times the new impervious surface or one-half inch times the sum of the new and fully reconstructed impervious surface within 48 hours. The Metropolitan Airport Commission (MAC) requires drawdown within 24-hours. The new impervious area is 1.88 acres, which requires 6,824 cf of volume. The new and fully reconstructed impervious is 3.03 acres, which requires 5,499 cf. Therefore, the required water quality volume is 6,824 cf.

Two proposed basins, one in the north (51P) and one in southwest (43P), are proposed to treat the required water quality volume. The applicant meets Commission volume control requirements.

To comply with the Commission's water quality treatment requirement, there must not be an increase in TP or TSS from pre- to post-development land cover. Satisfying the infiltration requirement can meet this standard. The applicant has satisfied the infiltration requirement and, therefore, meets Commission water quality treatment requirements.

Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year, 24-hour, and 100-year, 10-day critical storm events. Runoff from the site is routed through a series of infiltration basins. In the north, Basin 51P is routed to Basin 19P, and in the southwest, Basin 43P is routed to 41P. The applicant meets Commission rate control requirements.

The erosion control plan includes rock construction entrances, inlet protection, rip rap at inlets, slope checks, perimeter silt fence/biolog, and silt fence surrounding infiltration basins. The erosion control plan meets Commission requirements.

The National Wetlands Inventory identifies one probable wetland in the south-central portion of the site and the larger Wetland 639W to the east. The City of Crystal is the LGU for WCA administration. Wetland buffers a minimum of 20 feet in width and averaging 30 feet in width are provided. The applicant meets Commission wetland requirements.

Wetland 639W is a Public Waters Wetland located on the northeast side of the site. The proposed work will not adversely impact or alter Wetland 639W. The applicant meets Commission Public Waters requirements.



The Shingle Creek PCSWMM model shows the floodplain for Wetland 639W is 958.9'. No new buildings are being proposed and existing structures have a low floor of 968' or greater according to MNDNR LiDAR. The applicant meets Commission floodplain requirements.

The site is not located in a Drinking Water Supply Management Area (DWSMA). The applicant meets Commission drinking water protection requirements.

The MAC prepared a Long-Term Comprehensive Plan for improvements at Crystal Airport. This plan initiated a joint Federal Environmental Assessment / State Environmental Assessment Worksheet to study the environmental effects of the proposed improvements. As part of that process, the MAC hosted a public information meeting on October 30, 2018, at the Crystal Community Center. The proposed work was outlined in the Long-Term Comprehensive Plan. Commission public notice requirements have been met.

An Operations & Maintenance (O&M) agreement was provided.

Motion by Schoch, second by Spoden to advise the City of Crystal that this project is approved on condition that the applicant can demonstrate by double ring infiltrometer or witness test that the site can meet the design infiltration rate of 1.5 inches/hour for the northern basin (53P) and southwest basin (41P). *Motion carried unanimously.* 

C. WM2023-02 Tessman Apartments, Brooklyn Park.\* Construction of two multi-family apartments with a childcare center on a 6.15-acre lot located on the northeast corner of 85th Avenue and College Parkway. The site will be developed in two phases. In the first phase, the central building and associated parking lot will be constructed along with the stormwater management designed for the full 6.15-acre development. In the second phase, the southeast apartment building, childcare center, and associated parking lots will be constructed. Following development of both phases, the site will be 55 percent impervious with 3.36 acres of impervious surface, an increase of 3.28 acres. A complete project application was received on March 2, 2023.

Commission rules require the site to abstract 1.1 inches of runoff from new- and reconstructed impervious area within 48 hours. The new and reconstructed impervious area on this site is 3.36 acres, requiring an infiltration volume of 13,416 cf within 48 hours. The site is located within the High Vulnerability Drinking Water Supply Management Area (DWSMA) and, therefore, infiltration is prohibited. The applicant proposes filtration using an underground system and manufactured treatment device (MTD).

- Infiltration Volume Retention Required:
   146,362 ft² x 1.1 inches x 1 ft/12 inches = 13,416 ft³
- 2. <u>Filtration Volume Retention Required:</u>
  146,362 ft<sup>2</sup> x 1.1 inches x 1.82 x 1 ft/12 inches = 24,418 ft<sup>3</sup>

The applicant meets Commission volume control requirements.

To comply with the Commission's water quality treatment requirement, the site must provide treatment so there is no net increase in TP or TSS from pre- to post-development land cover. Meeting the infiltration or, in this case, filtration requirement is considered sufficient to provide a similar level of treatment. The applicant has met the filtration volume requirement. 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, 24-hour, and 100-year, 10-day critical storm event. Runoff from the site is routed through an underground system and ultimately discharges to an existing regional pond. The regional pond was approved



under project review WM2002-08 by the Commission to control runoff from the site. The applicant meets Commission rate control requirements.

The erosion control plan includes a rock construction entrance, perimeter silt fence/biolog, silt fence surrounding detention pond, native seed specified on pond slopes, inlet protection, and rip-rap at outlets. The erosion control plan meets Commission 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 low floor elevation of the proposed building is 879.5' which is at least two feet higher than the high-water elevation of the underground system (872.52') and the detention pond (869.80') according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.

The site is located in a High Vulnerability Drinking Water Supply Management Area. Therefore, infiltration is prohibited. The applicant proposes filtration. The applicant meets Commission drinking water protection requirements.

A public hearing on the project was held on October 2022 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 Brooklyn Park has not been provided.

Motion by Butcher, second by Roach to advise the City of Brooklyn Park that this project is approved with two conditions:

- **1.** Provide a signed O&M agreement between the applicant and the City of Brooklyn Park for all stormwater facilities on the project site.
- **2.** Provide the mechanical plans showing connection from the trench drain to the storm sewer system as noted in keynote 3 of sheet C-502.

Motion carried unanimously.

- **D. DLI Code Interpretation.\*** Stantec staff recently learned of a new interpretation of the plumbing code by the Minnesota Department of Labor and Industry (*DLI*, Attachment A, Notice of Final Interpretation). This interpretation allows DLI to regulate storm sewer design in communities where plumbing plan review agreements are not in place (*DLI*, Attachment B, Municipalities authorized to perform plumbing plan review in lieu of a review by the *DLI*). The interpretation will likely impact public and private projects statewide.
- **1. Code Interpretation.** As stated in Attachment A, the new interpretation "does not allow storm sewers to be surcharged" because of the following analysis:

The Plumbing Code states that: '[n]o fitting, fixture and piping connection, appliance, device, or method of installation that obstructs or retards the flow of water, wastes, sewage, or air in the drainage or venting systems ... shall be used unless it is indicated as acceptable in this code or is approved in accordance with Section 301.2 of this code." The Board determined that this provision prohibits storm sewers from being surcharged.



DLI defines a "drainage system" to include all the piping within public or private premises that conveys sewage, rainwater, or other liquid wastes to a legal point of disposal, but does not include the mains of a public sewer system or a public sewage treatment or disposal plant.

To Staff's knowledge, there was no change in the State or Uniform Plumbing Code – only this new interpretation. Further, there does not seem to be a predominance of flooding problems on new construction sites because of undersized or storm sewer obstructed by downstream high water. Engineers commonly design the hydraulic grade line for the 10-year storm to not surcharge structures; modeling programs analyze tailwater from the ponds to understand the impact of surcharge; and overland emergency overflows are commonly set one foot for more below the first-floor elevation to minimize or eliminate any chance of building impact. As reviewers for the Commissions, Stantec engineers review overflow routes to ensure that runoff will continue to the downstream basin if/when surcharging from storm sewer occurs. We also review high water level computations to ensure adequate freeboard exists to adjacent structures.

**2. Ramifications.** Storm sewer is often designed to convey the 10-year, 24-hour storm event (approximately 4.2 inches in the Twin Cities) without surcharging. The DLI interpretation does not define the design storm event, thereby allowing the DLI reviewer to potentially choose an arbitrary design event for each project.

Under this new interpretation, Stantec notes the DLI has required the invert of all storm sewer within a site to be above the 100-year high water level of the on-site pond. This will require additional fill on the site to elevate parking lots and buildings, and, in turn, may then cause the building to be elevated higher than allowed by city ordinance above the adjacent street.

Another ramification is a greater potential for erosion or more significant erosion protection between the storm sewer outlet and the pond normal water level.

Following the current design practice, designers usually locate the storm sewer outlet at or just above the pond normal water level, which enables the water in the pond to provide some energy dissipation along with riprap.

**3. Next Steps.** Stantec staff participate in the American Council of Engineering Companies (ACEC), City Engineers Association of Minnesota (CEAM), the American Public Works Association (APWA, Minnesota Chapter), Minnesota Watersheds (formerly Minnesota Association of Watershed Districts, MAWD), and the Minnesota Cities Stormwater Coalition (MCSC). These groups are aware of the new interpretation and are considering formal responses to DLI.

#### VI. Action Items.

A. Preliminary 2023 CIP.\* The Commissions each revised their Capital Improvement Programs (CIP) as part of the Fourth Generation Watershed Management Plan. The Shingle Creek CIP includes four stream projects, five lake projects, four stormwater BMPs, as well as the city and partnership cost share programs and the Maintenance Fund. Total project costs/Commission shares for the years 2023-2028 are:

**2023** - \$1,995,000/\$1,555,000 **2024** - \$2,068,000/\$1,432,000 **2025** - \$6,450,000/\$550,000 **2026** - \$924,000/\$343,500 **2027** - \$650,000/\$500,000 **2028** - \$3,405,000/\$2,013,800

The West Mississippi total project costs/Commission shares for the same period are:

**2023 -** \$480,000/\$195,000 **2024 -** \$300,000/\$150,000 **2025 -** \$300,000/\$150,000 **2026 -** \$300,000/\$150,000 **2027 -** \$300,000/\$150,000 **2028 -** \$1,500,000/\$750,000



The projects include one rain garden and the city and partnership cost share programs.

Members are asked to review the CIP and amend it as necessary to add, delete, or revise projects as opportunities arise, priorities change, or costs are re-evaluated. The Commissions can move projects between years, delete a project, or update the cost estimates without needing to undergo the plan amendment process. However, if the updated cost of any project increases more than 25%, or if a city requests adding a new project to the CIP, a Minor Plan Amendment will be required.

The amendment process requires notifying various agencies and the member cities of the proposed amendment, allowing them 30 days to comment, and then considering and adopting the amendment at the following public meeting. If any proposed revisions are requested, the Commissions would, at their May meeting, initiate the Minor Plan Amendment and consider adopting the amended CIP at their June meeting. For projects to be ordered in 2023 for levies in 2024, a public hearing would be called in August and held in September.

It was suggested at the TAC meeting that the Shingle Creek Commission levy half of the Brooklyn Park Brookdale Park Natural Channel project in 2023 and the remainder the following year. In addition, the Maple Grove Stormwater BMP projects will be re-ordered to better match their anticipated construction dates. Staff will return to the May TAC and Commission meetings with the revised CIP.

**B. 2022 Annual Water Quality Report.\*** Stone and Krautmann presented the findings of the 2022 monitoring activities. The full report and technical appendices are available on the Commissions' website, <a href="http://www.shinglecreek.org/water-quality.html">http://www.shinglecreek.org/water-quality.html</a>.

2022 was a dry year, with 26.0 inches of precipitation compared to the historic average of 33.5 inches. The dry year contributed to low volume of runoff and a reduction in pollutant load to Shingle and West Mississippi streams. Typically, total phosphorus (TP) and total suspended solids (TSS) values are below state standards except during storm events, when wash-off from the watershed increases those concentrations above the standards. Winter chloride concentrations remain high in Shingle Creek.

Lake conditions (water quality, plankton, vegetation) were monitored in four lakes in the watershed. Schmidt Lake and Lake Magda were sampled as part of the ongoing lake monitoring program. Crystal and Meadow Lakes were monitored as part of ongoing grant projects. Schmidt and Magda Lake both had good water quality in 2022, with seasonal averages meeting the State impairment standards for TP, chlorophyll-a, and clarity (Secchi depth). Meadow Lake had very high TP concentrations and poor water clarity, especially towards the end of the summer. Crystal Lake had poor water quality with very high chlorophyll-a concentrations and poor water clarity, though the first alum treatment had significantly reduced phosphorus release rates from sediment as shown by sediment cores taken in 2022.

The Water Quality Report provides summary information for each of the water resources within the three management units of Shingle Creek and for West Mississippi as a whole. More detailed information as well as historical and trend data is presented in the appendices.

Motion by Schoch, second by Jaeger to accept the 2022 Water Quality Report. *Motion carried unanimously*.

Motion by Mulla, second by Roach to accept the 2022 Water Quality Report. *Motion carried unanimously*.

[Butcher departed 1:52 p.m.]



#### VII. Education and Public Outreach.

- A. The Conservation Education and Implementation Partnership Program will be coordinated by a new limited-duration education and outreach coordinator shared with Hennepin County, WMWA, and the Richfield-Bloomington WMO. Watershed-Based Implementation Funding (WBIF) to help fund the program has been approved by the Board of Water and Soil Resources (BWSR). The Hennepin County Board approved the new position and County Staff are in the process of working though the hiring process. Over 100 applicants expressed interest in the position. The coordinator is proposed to be in place by Earth Day.
- **B.** Included in the meeting packet was a copy of the **2022 Annual National Pollutant Discharge Elimination System (NPDES) Phase II Education and Public Outreach Program Report.\*** It describes the programs and activities undertaken by the Commissions in 2022 in fulfillment of their Third Generation Plan education and public outreach goals. The report will be disseminated to members of the TAC and to the persons in each member city responsible for those activities. The report can be used by the cities in fulfillment of their MS-4 permit requirements and will be available on the Commissions' website.

Motion by Schoch, second by Spoden to accept the 2022 NPDES Report. *Motion carried unanimously*.

Motion by Jaeger, second by Roach to accept the 2022 NPDES Report. *Motion carried unanimously*.

**C.** Also included in the packet is the West Metro Water Alliance **(WMWA) 2022 Annual Activity Report.\*** It describes the activities of the member organizations - the Bassett Creek, Elm Creek, Shingle Creek, West Mississippi WMOs – and their partners, Three Rivers Park District, Hennepin County Department of Environment and Energy, and the Freshwater Society. A focal activity of WMWA is Watershed PREP, which presents water resources-based classes to fourth grade students as well as education and outreach to citizens, lake associations, and other groups. The report is available on the WMWA website at http://www.westmetrowateralliance.org/annual-reports.html.

Motion by Orred, second by Schoch to accept the 2022 WMWA Report. *Motion carried unanimously*.

- **D.** The **West Metro Water Alliance (WMWA)** will meet via Zoom at 8:30 a.m., May 9, 2023.
- **VIII. Communications.** The following items were included in the meeting packet:
  - A. 2022 Annual Activity Reports.
- **1.** Motion by Schoch, second by Willis to accept the **Shingle Creek 2022 Annual Activity Report.\*** *Motion carried unanimously.*
- **2.** Motion by Mulla, second by Roach to accept the **West Mississippi 2022 Annual Activity Report.\*** *Motion carried unanimously.*

The reports will be forwarded to the Board of Water and Soil Resources by April 30, 2023, per statutory requirement.

- **B.** March Communications Log.\* No items required action.
- C. April Staff Report.\*
  - 1. Fourth Generation Management Plan. The Final Draft has been submitted to the



Board of Soil and Water Resources for approval. Spector and Kemmitt presented the Plan\* to the Central Region Committee on April 6 where it was well-received. The Plan will go to the full Board for approval on April 26. The Commissions should plan to adopt the Plan at their May meeting.

- **2. Meadow Lake Drawdown.** The City of New Hope issued a Request for Quotes in March for the alum treatment on Meadow Lake. They received one quote which is expected to be approved by the City Council. Following Council approval, Stantec will schedule the treatment with the applicator for late April or May. Stantec is also coordinating herbicide treatments of curly-leaf pondweed in the lake. Staff will conduct a delineation in April and request quotes from local applicators. Herbicide treatment should occur in late April or early May.
- **3. 252/94 project.** The SC/WM 252/94 EIS Review Subgroup held virtual meetings on March 21 and April 4, 2023. Invitees included David Vlasin, David Mulla, Ray Schoch, Alex Prasch, Mitch Robinson, Liz Stout, Liz Heyman, and Stantec staff. Future meetings will be scheduled on an as-needed basis.

MnDOT released the draft scoping document for public comment on March 21, 2023. Public meetings since release of the document include the Policy Advisory Committee on March 23 and presentations to the Brooklyn Park (March 27) and Brooklyn Center (April 10, planned) City Councils. Upcoming public meetings include April 18 (in-person) and April 27 (virtual).

The next subgroup meeting is scheduled for April 25. For that meeting, the subgroup directed Stantec to evaluate 1) how many Twin Cities highways bisect Emergency Response Areas (ERAs) and 2) potential criteria for MnDOT to use when evaluating vulnerability of a spill in the ERA.

- 4. Legal Boundary Update. The boundary update has already received concurrence from the three neighboring watersheds. We are now awaiting approval of the boundary change from all member cities with a goal of concurrence by the end of March. The following cities provided a copy of the approved concurrence resolution: Champlin, New Hope, Osseo, Plymouth and Robbinsdale. Approvals are in process for the remainder of the cities. After receiving concurrence from all municipalities, Staff will notify BWSR and file the new boundary with Hennepin County. Hennepin County requires notification of boundary changes for special taxing districts by July 1st.
- 5. Eagle Lake Subwatershed Assessment. This assessment will identify and prioritize potential stormwater management practices in the direct subwatershed to Eagle Lake and evaluate in-lake sediments and aquatic vegetation in Eagle and Pike Lakes. Staff hosted a kickoff meeting with Maple Grove and Plymouth staff on April 22. We are currently evaluating existing conditions and brainstorming sites for potential projects. The next steps will be to work with the municipalities to further evaluate potential project sites. In-lake evaluations will begin after ice-out.
- 6. Gaulke Pond Subwatershed Assessment. This assessment will identify and prioritize potential stormwater volume reduction practices in the Gaulke Pond Watershed. Staff held an internal project kickoff meeting on March 13 and a data review meeting with staff from Crystal and New Hope on March 24. Priority areas were identified and refined with city staff for potential stormwater volume reduction practices. The group will meet again on April 21 for a field visit to the opportunity sites to document existing site conditions and discuss next steps.
- **7. Shingle Creek Brookdale Park Remeander.** This study includes field assessment, topographic survey, soil sediment data collection, and development of concept alternatives, a basis of design memo, and preliminary plans of the selected alternative. The project kickoff meeting and field assessment



with the Stantec team and staff from Brooklyn Park and Minnesota Department of Natural Resources is scheduled for April 12. Staff are currently reviewing existing modeling data and base mapping. The next steps will be to perform a topographic survey and gather field sediment samples from the existing ponding areas and evaluate conceptual alternatives. This work will begin after ice-out.

- 8. Shingle Creek Trail Bank Stabilization and Fish Access Improvements. This study includes field assessment, topographic survey, and development of concept alternatives, a basis of design memo, and preliminary plans of the selected alternative. The project kickoff meeting and field assessment with the Stantec team and staff from Brooklyn Park and Three Rivers Park District is scheduled for April 12. Staff are currently reviewing existing modeling data and base mapping. The next steps will be to perform a topographic survey and evaluate conceptual alternatives, beginning after ice-out.
- **D.** *Mississippi River–Twin Cities Watershed assessment and trends update,\** Minnesota Pollution Control Agency (MPCA).
  - E. 2022 Lake Water Quality Summary, \* Metropolitan Council.
- **F.** Copy of Commission Letter of Support\* for "Pollution of Surface Waters from Chloride in Groundwater." The project description was also included in the packet.
- **G.** Copy of Commission Letter of support\* for placing the **constitutional rededication of lottery proceeds** to the Environment and Natural Resources Trust Fund on the ballot in 2024.
- **H.** Notice of Public Hearing,\* Zoning Code and Land subdivision Test and Map Amendments, City of Minneapolis.

#### X. Other Business.

There being no further business before the Commissions, the joint meeting was adjourned at 2:22 p.m.

Respectfully submitted,

Judie A. Anderson Recording Secretary

JAA:tim

Z:\Shingle Creek\Meetings\Meetings 2023\April13, 2023 meeting minutes.docx

#### SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION

# PROJECT REVIEW SC2023-02: Bass Lake Road Mixed Use

**Owner:** Brian Bochman **Company:** Enclave Companies

Address: 300 23<sup>rd</sup> Ave E, Suite 300, West Fargo, ND 58078

**Engineer:** Brad Wilkening

**Company:** Westwood Professional Services

**Address:** 1900 Medical Arts Ave S, Suite 100, Sartell, MN 56377

**Phone:** 320-253-9495

**Email:** brad.wilkening@westwoodps.com

**Purpose:** Construction of multi-family apartment and commercial lots on 11.32 acres.

**Location:** SE corner of Nathan Lane and Bass Lake Road (Figure 1).

**Exhibits:** 1. Project review application and project review fee of \$3800, dated 3/9/2023, received 3/29/2023.

2. Site plan, preliminary plat, grading (Figure 2), utility, erosion control, and landscaping plans, dated 5/2/2023, received 5/3/2023.

3. Hydrology calculations, by Westwood Professional Services, dated 5/3/2023, received 5/3/2023.

4. Roof Drainage Plans, by Westwood Professional Services, dated 4/5/2023, received 4/21/23.

5. Corrected Effective PCSWMM Model, by Westwood Professional Services, dated 5/3/2023, received 5/3/2023.

#### **Findings**:

- 1. The proposed project is the construction of a multi-family apartment and associated parking lot. The site is 11.32 acres. Following development, the site will be 35 percent impervious with 3.94 acres of impervious surface, an increase of 3.94 acres.
- 2. The complete project application was received on 3/29/2023. To comply with the 60-day review requirement, the Commission must approve or deny this project no later than the 5/11/2023 meeting. Sixty calendar-days expires on 5/28/2023.
- 3. Commission rules require the site to infiltrate 1.1 inches of runoff from new impervious and reconstructed impervious area within 48 hours. The new and reconstructed impervious area on this site is 3.94 acres, requiring infiltration of 15,727 cubic feet within 48 hours. Due to poor soils, the applicant proposes to construct two filtration basins. The basins have the capacity to filter the required volume with 48 hours. A breakdown of the volume requirements and credit for the filtration basins are given below. The applicant meets Commission volume control requirements.

a. <u>Infiltration Volume Retention Required:</u>
171,563 ft<sup>2</sup> x 1.1 inches x 1 ft/12 inches = 15,727 ft<sup>3</sup>

b. <u>Filtration Volume Retention Required:</u>
171,563 ft<sup>2</sup> x 1.1 inches x 1.82 x 1 ft/12 inches = 28,622 ft<sup>3</sup>

Table 1. Proposed volume retention through filtration (ft<sup>3</sup>).

Volume Retention Required (ft <sup>3</sup> )	ВМР	Volume Retention Provided (ft³)	1.1-inch Runoff (ft³)	2.5-inch Runoff (ft³)
	Basin 100	12,942	6,839	15,542
28,622	Basin 200	16,110	8,820	20,045
	Total		29,052	

4. To comply with the Commission's water quality treatment requirement, the site must provide treatment so there is no net increase in TP or TSS from pre- to post-development land cover. Meeting the filtration requirement is considered sufficient to provide a similar level of treatment.

Runoff from the site is proposed to be routed through two filtration basins that meet the volume control requirement. The applicant meets Commission water quality treatment requirements.

5. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year, 24-hour, and 100-year, 10-day critical storm event. The applicant meets Commission rate control requirements (Table 2.)

Table 2. Runoff from site (cfs).

Drainage Area	_	ear ent	10-year event		100-year event 100-year event		100-year 10- day event	
	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
Bass Creek	14.5	6.1	30.3	15.7	68.1	48.1	2.2	2.1

- 6. The erosion control plan includes rock construction entrances, perimeter silt fence/biolog, silt fence surrounding filtration basins, inlet protection, rip rap at inlets, slope checks, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.
- 7. The National Wetlands Inventory identifies one probable wetland in the northwest portion of the site. Plymouth is the LGU for WCA administration. Wetland buffers a minimum of 20 feet in width and averaging 30 feet in width are provided. The applicant meets Commission wetland requirements.
- 8. Bass Creek is a Public Water that is impaired for aquatic life and runs through the northern portion of the site. The project is not expected to negatively impact Bass Creek or the aquatic life within. The applicant meets Commission Public Waters requirements.

9. There is FEMA 100-year floodplain on the north portion of this site. The low floor elevation of the building (908.67') is two feet higher than the FEMA 100-year flood elevation (905.63') and high water level of the basin (904.8'). The applicant has shown there is no fill below the 100-year flood elevation. The applicant meets Commission floodplain requirements.

The project is located directly south of a mapped floodplain (Flood Zone A) on Bass Creek. Due to this location, the applicant conducted a hydraulic analysis of existing and proposed conditions of the floodplain. The proposed project does not increase regional flood elevations. However, the "better" data included by the applicant in the existing model increased high water elevations for PCSWMM model nodes NH-4050S and PL-4060S. When comparing the "effective" model (watershed model provided to Westwood) and the "corrected effective" (model updated by Westwood), there are increases of 0.21' at Node NH-4050S and 0.67' at Node PL-4060S (see below). City of Plymoth staff has been notified of these increases.



- 10. The site is not located in a Drinking Water Supply Management Area (DWSMA). The applicant meets Commission drinking water protection requirements.
- 11. A public hearing on the project was conducted on March 30, 2023 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.
- 12. A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Plymouth was provided.
- 13. A Project Review Fee of \$3800 has been received.

**Recommendation:** Approve subject to the following conditions:

1) Provide a complete O&M agreement between the applicant and the City of Plymouth for all stormwater facilities on the project site.

Stantec Inc. Engineers for the Commission

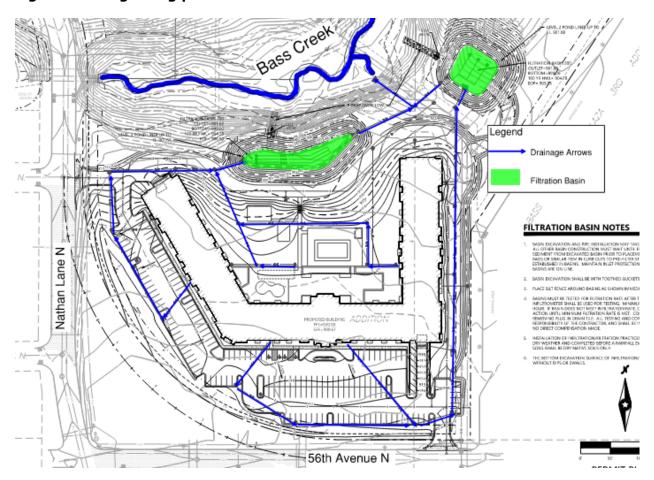
Todd Shoemaker, P.E.

5/3/2023





Figure 2. Site grading plan.





# Memo

To: Shingle Creek/West Mississippi WMO Commissioners

From: Diane Spector

**Katie Kemmitt** 

**Date:** 5/3/2023

**Subject:** Fourth Generation Watershed Management Plan

**Recommended Commission Action**Each Watershed to Adopt the Fourth Generation Watershed Management Plan by Resolution

The Commissions initiated work on their joint Fourth Generation Watershed Management Plan in Fall 2021 by completing a self-assessment of progress toward meeting the goals of the Third Generation Watershed Management Plan. The Plan was developed over the following year during regular meetings. The Commissions and Technical Advisory Committee (TAC) discussed some aspect of the Plan at nearly every regular meeting during that time. During Plan development, the Commissions also updated their Rules and Standards. Highlights of the Plan include an updated surface water monitoring plan, an expanding education and outreach plan, and a new focus on changing precipitation patterns.

The Commission submitted their Fourth Generation Watershed Management Plan to Metro State reviewing agencies in early November 2022. After the 60-day window, Stantec reviewed and compiled the received comments and provided recommended responses. Upon completion of the hearing a record of the hearing and all comments received and responses made were forwarded to the Board of Water and Soil Resources (BWSR), which then has up to 90 days in which to consider approving the Plan. The Metro Committee of BWSR approved the plan on April 6<sup>th</sup>, 2023 and recommended the Plan to the full Board for approval at their April 26<sup>th</sup>, 2023 meeting. The Plan may now be adopted by each Commission by resolution.

Copies of the final Plan will be posted on the Commissions' website.



April 26, 2023

Shingle Creek and West Mississippi Watershed Management Commissions c/o Judie Anderson 3235 Fernbrook Lane North Plymouth, MN 55447

Dear Chairs and Board Members:

I am pleased to inform you that the Minnesota Board of Water and Soil Resources (Board) has approved the Shingle Creek and West Mississippi Watershed Management Commissions (SCWM WMC) revised Watershed Management Plan (Plan) at its regular meeting held on April 26, 2023. For your records, I have enclosed a copy of the signed Board Order that documents approval of the Plan. Please be advised that the SCWM WMCs must adopt and implement the Plan within 120 days of the date of the Order, in accordance with MN Statutes 103B.231, Subd. 10.

The board members, staff, consultants, advisory committee members, and all others involved in the planning process are to be commended for developing a plan that clearly presents water management goals, actions, and priorities of the watershed. With continued implementation of your Plan, the protection and management of the water resources within the watershed will be greatly enhanced to the benefit of the residents. The Board looks forward to working with you as you implement this Plan and document its outcomes.

Please contact Steve Christopher of our staff at 651-249-7519, or at the central office address for further assistance in this matter.

Sincerely,

Gerald Van Amburg

Chair

**Enclosure** 

Cc:

Megan Moore, DNR (via email)

Jeff Risberg, MPCA (via email) Mark Wettlaufer, MDH (via email)

Jeff Berg, MDA (via email)

Maureen Hoffman, Met Council (via email)

Jason Swenson, MN DOT (via email)

Marcey Westrick, BWSR (via email)

Steve Christopher, BWSR (via email)

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St. Paul

520 Lafayette Road North

St. Paul, MN 55155

Phone: (651) 296-3767

#### Minnesota Board of Water and Soil Resources

520 Lafayette Road North Saint Paul, Minnesota 55155

In the Matter of the review of the Watershed Management Plan for the Shingle Creek and West Mississippi Watershed Management Commissions, pursuant to Minnesota Statutes Section 103B.231, Subdivision 9.

ORDER
APPROVING
A WATERSHED
MANAGEMENT PLAN

Whereas, the Board of Commissioners of the Shingle Creek and the West Mississippi Watershed Management Commissions submitted a Watershed Management Plan (Plan) dated February 14, 2023 to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103B.231, Subd. 9, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

#### **FINDINGS OF FACT**

- A. Watershed Management Organization Establishment. Joint Powers Agreements established the Shingle Creek and the West Mississippi Watershed Management Commissions (SCWM WMC) in 1984. Each Commission is comprised of one member appointed from each community by their respective city council. The first Watershed Management Plan was published in April 1990. During the development process of the second-generation plan, both Commissions agreed upon merging the plan preparation, operating policies, and administration for efficiency purposes, but remain separate, politically distinct Watershed Management Organizations. Four out of the five member cities of the West Mississippi Watershed Management Commission are also members of the Shingle Creek Watershed Management Commission. The third-generation watershed management plan was approved by the Board in March 2013. The Plan has also been amended nearly annually to maintain a current Capital Improvement Program.
- B. **Authority of Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.
- C. Nature of the Watershed. The Shingle Creek and the West Mississippi Watershed Management Organizations are located exclusively in Hennepin County in the northwest portion of the Minneapolis St. Paul seven county metropolitan area. They are bound by the Mississippi River to the north and east, on the southeast by the Mississippi Watershed Management Organization, on the south by Bassett Creek Watershed Management Commission and on the west by the Elm Creek Watershed Management Organization. Both watersheds encompass all or part of the following ten municipalities: Brooklyn Center, Brooklyn Park, Champlin, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth, and Robbinsdale. The Shingle Creek and West Mississippi watersheds cover 44.5 square miles and 23 square miles respectively. There are sixteen lakes in the

Shingle Creek watershed, and none in West Mississippi. Combined, the watersheds have approximately 20.5 miles of stream. Both watersheds are predominantly fully developed, with the remaining land being currently developed.

- D. Plan Development and Review. The SCWM WMC initiated the planning process for the 2023-2033 Plan in Fall 2021. As required by Minnesota Rules (MR) 8410, a specific process was followed to identify and assess priority issues. Stakeholders were identified, notices were sent to municipal, regional, and state agencies to solicit input for the upcoming Plan. The SCWM WMC also held a joint workshop with the Bassett Creek Watershed Management Commission addressing Diversity, Equity and Inclusion and how it could be considered for the respective watersheds. The SCWM WMC utilized their existing Technical Advisory Committee and each of the member cities designated a representative from its citizen's advisory commission to provide input on the Plan. The Plan was submitted for formal 60-day review on November 16, 2022. The SCWM WMC received 44 comments on the 60-day draft Plan. All comments on the draft Plan were addressed in writing. After formal review of the Plan, the SCWM WMC held a public hearing on the draft Plan on February 9, 2023. The final draft Plan and all required materials were submitted and officially received by the Board on February 22, 2023.
- E. Local Review. The SCWM WMC distributed copies of the draft Plan to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, Subd. 7. Responses were received from the City of Minneapolis, Minneapolis Parks & Recreation Board, Hennepin County, and the Bassett Creek Watershed Management Commission. The City of Minneapolis requested clarification on several items as well as suggested additional information for inclusion. The Minneapolis Parks & Recreation Board made several editorial comments as well as provide suggested edits to the text. Hennepin County provided suggested edits to the text of the Plan. The SCWM WMC accepted the comments and made the suggested changes and additions to the Plan.
- F. **Metropolitan Council Review.** The Council suggested adding in a numeric goal for the improvement in water clarity for the lakes. Additionally, they supported and commended the SCWM WMC on their development process and Plan. The SCWM WMC revised the Plan to include the proposed addition.
- G. **Department of Agriculture (MDA) Review.** The MDA did not have any comments.
- H. **Department of Health (MDH) Review.** The MDH did not have any comments.
- I. **Department of Natural Resources (DNR) Review.** The DNR provided a letter that commended the SCWM WMC on their Plan.
- J. Pollution Control Agency (PCA) Review. PCA provided a letter that commended the SCWM WMC on their Plan.
- K. **Department of Transportation (DOT) Review.** The DOT did not have any comments.
- L. **Board Review.** Board staff commended the SCWM WMC for their well written plan that includes addressing communities that are often underserved as well as a high level of importance on dealing with climate resiliency. Board staff requested updating the Plan to include a numeric goal for water clarity in lakes and to define a quantifiable goal for Education & Outreach. The SCWM WMC made revisions to the Plan and provided responses to all items.
- M. Plan Summary. The SCWM WMC has identified four main priorities within its Plan. They include 1) Achieve lake and stream goals, 2) Stimulate implementation, 3) Engage and educate, and 4) Develop climate resiliency and sustainability. The Plan accompanies those priorities with measurable goals for the two watersheds to strive for. Both the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission have been successful in the implementation of water resource improvement projects since establishment and have dovetailed their efforts seamlessly with the interests of their member cities. The SCWM

WMC has made considerable progress on the Total Maximum Daily Load studies and this new Plan should continue that advancement.

N. Central Region Committee Meeting. On April 6, 2023, the Board's Central Region Committee and staff met in St. Paul and via teleconference to review and discuss the final Plan. Those in attendance from the Board's committee were Joe Collins (chair), Jill Crafton, Jayne Hager Dee, Mark Zabel, Heather Johnson, Joel Larson, and Grant Wilson. Board staff in attendance were Marcey Westrick, Anne Sawyer, Cecelia Rost, and Steve Christopher. Also in attendance virtually were SCWM WMC Plan Consultants Katie Kemmitt and Diane Spector. Katie Kemmitt and Diane Spector provided highlights of the Plan and process. Board staff recommended approval of the Plan. After presentation and discussion, the committee unanimously voted to recommend the approval of the Plan to the full board.

#### **CONCLUSIONS**

- 1. All relevant substantive and procedural requirements of law and rule have been fulfilled.
- 2. The Board has proper jurisdiction in the matter of approving the Watershed Management Plan for the Shingle Creek and West Mississippi Watershed Management Commissions (SCWM WMC) pursuant to Minnesota Statutes Section 103B.231, Subd. 9.
- 3. The SCWM WMC Watershed Management Plan, attached to this Order, defines the water and water-related problems within the SCWM WMC's boundaries, possible solutions thereto, and an implementation program through 2033.
- 4. The SCWM WMC Watershed Management Plan will be effective April 26, 2023, through April 26, 2033.
- 5. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

#### **ORDER**

The Board hereby approves the attached Shingle Creek and West Mississippi Watershed Management Commissions Watershed Management Plan dated February 2023.

Dated at Saint Paul, Minnesota this 26<sup>th</sup> day of April 2023.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Gerald Van Amburg, Chair

#### SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION

# RESOLUTION NO. 2023-01 ADOPTING THE FOURTH GENERATION WATERSHED MANAGEMENT PLAN

WHEREAS, the Shingle Creek Watershed Management Commission is the Watershed Management Organization responsible for preparing a watershed plan for the Shingle Creek Watershed, pursuant to Minn. Stat. § 103B.231; and

WHEREAS, the Commission has prepared such watershed plan entitled *Shingle Creek* and West Mississippi Watershed Management Commissions Fourth Generation Watershed Management Plan, (hereinafter the "Plan"); and

**WHEREAS,** the Plan has been reviewed in accordance with the requirements of Minn. Stat. § 130B.231; and

**WHEREAS**, the Minnesota Board of Water and Soil Resources on April 26, 2023 did review and approve said plan, declaring it effective for the period April 26, 2023 through April 26, 2033; and

**WHEREAS,** the Commission finds that the adoption of the Plan is in accordance with the requirements of law and in the best interests of the public.

**NOW, THEREFORE, BE IT RESOLVED,** by the Board of Commissioners of the Shingle Creek Watershed Management Commission as follows:

- 1. The Plan is hereby approved in accordance with Minn Stat. § 103B.231, Subd. 10.
- 2. The Secretary is directed to transmit a copy of the Plan to the clerks of all member communities together with a letter expressing the gratitude of the Commission for the assistance of the communities in preparing and reviewing the Plan and advising the communities of their obligation to adopt and amend local water management plans in accordance with Minn. Stat. § 103B.235.

Adopted by the Board of Commissioners of the Shingle Creek Watershed Management Commission this eleventh day of May 2023.

	Chair	
ATTEST:		
Recording Secretary		

# STATE OF MINNESOTA COUNTY OF HENNEPIN

I, Judie A. Anderson, do hereby certify that I am the custodian of the minutes of all proceedings had and held by the Board of the Shingle Creek Watershed Management Commission, that I have compared the above resolution with the original passed and adopted by the Board of said Commission at a regular meeting thereof held on the eleventh day of May, 2023, at 12:45 p.m., that the above constitutes a true and correct copy thereof, that the same has not been amended or rescinded and is in full force and effect.

IN WITNESS WHEREOF, I have hereunto placed my hand and signature this eleventh day of May 2023.

	(NO SEAL)
Judie A. Anderson	
Recording Secretary	

#### WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION

# RESOLUTION NO. 2023-01 ADOPTING THE FOURTH GENERATION WATERSHED MANAGEMENT PLAN

WHEREAS, the West Mississippi Watershed Management Commission is the Watershed Management Organization responsible for preparing a watershed plan for the West Mississippi Watershed, pursuant to Minn. Stat. § 103B.231; and

WHEREAS, the Commission has prepared such watershed plan entitled *Shingle Creek* and West Mississippi Watershed Management Commissions Fourth Generation Watershed Management Plan, (hereinafter the "Plan"); and

**WHEREAS,** the Plan has been reviewed in accordance with the requirements of Minn. Stat. § 130B.231; and

**WHEREAS**, the Minnesota Board of Water and Soil Resources on April 26, 2023 did review and approve said plan, declaring it effective for the period April 26, 2023 through April 26, 2033; and

**WHEREAS,** the Commission finds that the adoption of the Plan is in accordance with the requirements of law and in the best interests of the public.

**NOW, THEREFORE, BE IT RESOLVED,** by the Board of Commissioners of the West Mississippi Watershed Management Commission as follows:

- 1. The Plan is hereby approved in accordance with Minn Stat. § 103B.231, Subd. 10.
- 2. The Secretary is directed to transmit a copy of the Plan to the clerks of all member communities together with a letter expressing the gratitude of the Commission for the assistance of the communities in preparing and reviewing the Plan and advising the communities of their obligation to adopt and amend local water management plans in accordance with Minn. Stat. § 103B.235.

Adopted by the Board of Commissioners of the West Mississippi Watershed Management Commission this eleventh day of May 2023.

	Chair	
ATTEST:		
Recording Secretary		

# STATE OF MINNESOTA COUNTY OF HENNEPIN

I, Judie A. Anderson, do hereby certify that I am the custodian of the minutes of all proceedings had and held by the Board of the West Mississippi Watershed Management Commission, that I have compared the above resolution with the original passed and adopted by the Board of said Commission at a regular meeting thereof held on the eleventh day of May, 2023, at 12:45 p.m., that the above constitutes a true and correct copy thereof, that the same has not been amended or rescinded and is in full force and effect.

IN WITNESS WHEREOF, I have hereunto placed my hand and signature this eleventh day of May 2023.

	(NO SEAL)
Judie A. Anderson	
Recording Secretary	

To: Shingle Creek WMO Commissioners

From: Todd Shoemaker PE

Diane Spector Judie Anderson

**Date:** May 5, 2023

Subject: Preliminary 2024 Budget

Recommended Commission Action

This report presents a proposed 2024 budget for discussion and comment. If comfortable you may adopt a proposed budget at the 5/11 meeting or wait until the 6/8 meeting. The budget must be finalized prior to July 1.

The Joint Powers Agreement (JPA) governing operations of the Commission requires a budget and the resulting proposed city assessments for the coming year to be reported to the member cities by July 1. This memo is the first step in the 2024 budget process. This is the operating budget, which covers the core of Commission activities, including administration, engineering, legal, technical services, monitoring, education/outreach programs and basic operations of the Commission. Capital and cost-share projects are handled separately from the operating budget. Below we will first discuss the sources of revenue to fund operations, and then the proposed expenditures for 2024 compared to previous years.

#### **Revenue Sources**

The primary source of funds for operations is from assessments on the cities having land in the watershed. The cities share proportionally in that cost based 50% on their area within the watershed and 50% on their net tax capacity in the watershed. Tax capacity serves as a proxy for level and density of development. Most, but not all, of the cities fund these assessments from their Storm Utility Funds.

The JPA includes a cost cap that limits the increases in annual city assessments to the *cumulative* increase in the Consumer Price Index, using the assessment in 2004 as a base. This is *not* an annual cap, so if the Commission chooses not to increase the assessment or increases less than inflation, it has the ability in the future to increase the assessment by more than the annual rate of inflation to "catch up."

As Table 1 shows, the Commission has not increased assessment every year, and had a minimal increase between 2020 and 2023. However, the *ability* to increase continues to accumulate with inflation. The draft 2024 budget recommended to you assumes *an assessment of* \$370,000, which is no increase. Table 1 shows that under cap, the Commission could have increased the annual assessments to cities over the years by 64.3% over 2004. However, the total assessment increase was only 40.8%, which shows that the Commission has been a careful steward of the cities' resources over the years.

Other sources of funding are project review fees and interest. These are shown later in this memo, in Table 2. The Commission's interest earnings in 2022 were quite sizable and 2023 is also on track to be significant. While we assume an increase in interest, we kept that expectation moderate and consider those earnings to be a windfall rather than something that will continue.

The proposed allocations to each city are in Table 3 at the end of this memo. At this point they are based on the areas and valuations using the current boundaries. We are working with Hennepin County to determine when we can obtain updated valuations by city using the new watershed boundaries.

#### **Preliminary 2022 Budget Performance**

The 2022 annual expenses, pre-audit, were an estimated \$81,407 less than the total actual revenue. On the revenue side, interest received was significantly more than budgeted due to higher interest rates and the bank balance of levy and grant funds held on behalf of cities prior to project completion.

Administrative costs were well below budget, slightly offset by general engineering costs exceeding the budget. Project review activity was less than expected. WMWA has a pay-as-you-go approach and bills the WMOs in installments based on activity. COVID-19 greatly reduced outreach and education opportunities, although it is back on track now. Rather than build up a big account balance, WMWA elected not to invoice for the full amount budgeted. Once the audit is complete, the actual surplus will be used to replenish the unrestricted cash reserve, which at the end of 2021 was relatively low.

Table 1. Calculation of allowable member city assessments according to the JPA assessment cap.

	June CPI-U	Annual CPI % Change	Cumul. CPI % Change	SC Allowed	SC Actual	Cumul. Assmnt % Change
2003	183.7	70 Griange	70 Onlange	OO Allowed	OG Motual	70 Onlange
2003	189.7			\$262,750	\$262,750	
2005	194.5	3.3%	3.3%	271,330	268,190	2.1%
2006	202.9	2.5%	5.9%	278,200	276,500	5.2%
2007	208.352	4.3%	10.5%	290,210	285,900	8.8%
2008	218.815	2.7%	13.4%	298,010	292,760	11.4%
2009	215.693	5.0%	19.1%	312,980	304,470	15.9%
2010	217.965	-1.4%	17.4%	308,510	304,400	15.9%
2011	225.722	1.1%	18.7%	311,760	304,400	15.9%
2012	229.478	3.6%	22.9%	322,850	321,400	22.3%
2013	233.504	1.7%	24.9%	328,230	321,400	22.3%
2014	238.343	1.8%	27.1%	333,990	329,600	25.4%
2015	238.638	2.1%	29.7%	340,910	337,970	28.6%
2016	241.018	0.1%	29.9%	341,330	337,970	28.6%
2017	243.801	1.0%	31.2%	344,730	340,610	29.6%
2018	251.989	1.6%	33.3%	350,360	348,710	32.7%
2019	254.202	1.9%	37.2%	360,430	356,900	35.8%
2020	258.115	0.9%	39.4%	366,370	363,590	38.4%
2021	264.877	0.6%	40.5%	369,190	363,590	38.4%
2022	287.504*	5.4%	47.9%	378,860	363,590	38.4%
2023	301.836*	9.1%	56.5%	411,220	370,000	40.8%
2024		1.9%	64.3%**	431,720	370,000	40.8%

<sup>\*</sup>March 2023 CPI-U is the latest available \*\*June 2022 to March 2023

#### 2024 Budget

With a few notable exceptions the proposed budget shown in Table 2 generally continues the same activities at the same level of effort as 2023. Each line item is explained in the 2024 Budget Explanation below. Table 3 shows the proposed member assessments by city. Figure 1 shows the proposed 2024 expenditures by category. A few lines require more explanation:

Interest (line 3). As noted above, the Commission has a significant balance in its 4M account of levy and grant proceeds, waiting for reimbursement requests from cities. As inflation has increased in the last 12-18 months, interest rates have also increased, leading to the windfall of interest in 2022. Earnings in 2023 are also on the same pace. However, the 2024 budget assumes that fund balance will decrease in the near future as projects are completed and paid out.

Meeting Expense (line 15). The new meeting location at the Plymouth Community Center charges a monthly room rental, which together with the lunch cost are the primary meeting expenses. This cost is split between Shingle Creek at 70% and West Mississippi at 30%. The budget assumes that in 2024 the Commission will continue to meet in-person.

Stream and Lake Monitoring (lines 16-18). Lake monitoring has expanded to include fish surveys and zoo- and phytoplankton. As we move to a balanced lake ecology focus, these other parameters become important diagnostic tools in determining overall lake health, rather than just focusing on total phosphorus concentration. Stream monitoring includes two dissolved oxygen longitudinal studies.

Education Program (line 20). The Fourth Generation Plan placed a renewed emphasis on education and outreach, especially in two areas: outreach to underserved communities and education regarding chloride management. We recommend the Commission increase its 2024 budget to take on these new activities.

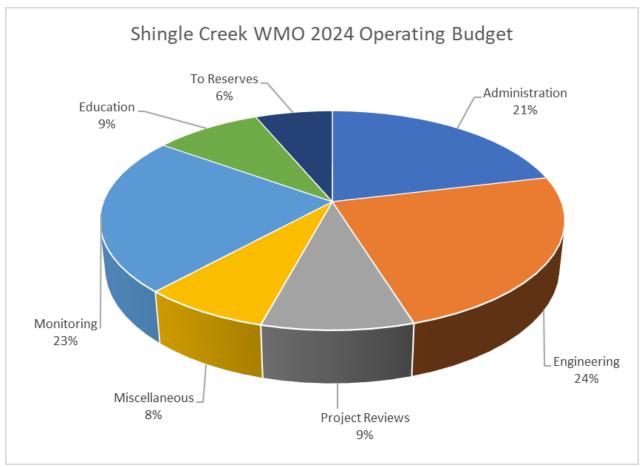


Figure 1. Proposed Shingle Creek 2024 operating budget by category.

Note: "Miscellaneous" includes legal, bookkeeping, insurance, audit, and meeting costs

Table 2. Proposed Shingle Creek WMC 2024 operating budget.

		2022	Unaudited	2023	Proposed
		Budget	2022	Budget	2024
REVI	ENUE				
1	Application Fees	\$20,000	\$16,000	\$15,000	\$15,000
2	Member Assessments	363,590	363,590	370,000	370,000
3	Interest	5,000	41,435	250	20,000
	TOTAL REVENUE	\$388,590	\$421,025	\$385,250	\$405,000
EXPE	ENSES				
	ADMINISTRATION				
4	Administrative Services	\$71,000	\$51,175	\$70,000	\$70,000
5	Engineering Support	17,000	12,930	15,000	15,000
6	Project Reviews/WCA	1,500	929	1,500	1,500
	Subtotal	\$89,500	\$65,034	\$86,500	\$86,500
	ENGINEERING				
7	Engineering Services	75,000	81,046	77,000	80,000
8	Grant Application Writing	12,000	11,981	11,000	12,000
9	Project Reviews/WCA	43,000	38,932	30,000	35,000
10	TMDL 5 Year Reviews	5,000	4,976	5,000	5,000
	Subtotal	\$135,000	\$136,935	\$123,000	\$132,000
	LEGAL				
11	Legal Services	\$5,500	5,404	\$6,000	6,000
	MISCELLANEOUS				
12	Bookkeeping	8,000	6,757	8,000	8,000
13	Audit	6,500	6,200	7,500	7,500
14	Insurance & Bonding	3,200	2,671	3,200	3,200
15	Meeting Expense	5,000	3,208	5,000	6,000
	Subtotal	\$22,700	\$118,836	\$23,700	\$24,700
	PROGRAMS				
	Monitoring				
16	Stream Monitoring	35,000	34,707	34,000	36,000
17	Stream Monitoring-USGS	4,200	7,600	4,200	4,200
18	Commission Lake Monitoring	28,000	27,833	28,000	30,000
19	Citizen Assisted Lake Monitoring	4,800	3,850	5,200	5,000
20	Vol Wetland Monitoring	2,000	0	0	0
21	Vol Stream Monitoring	1,000	0	2,000	2,000
22	Annual Monitoring Report	16,000	16,045	17,500	16,500
	Subtotal	\$91,000	\$90,035	\$90,900	\$93,700
	Education				
23	Education Program	16,500	13,979	17,000	24,000
24	WMWA SC Share	11,500	8,387	11,500	11,500
	Subtotal	\$28,000	\$22,366	\$28,500	\$35,500
	MANAGEMENT PLAN				
25	Plan Amendments	1,000	1,008	0	1,000
26	Subwatershed BMP Assessment	0	0	5,000	0
	Subtotal	\$1,000	\$1,008	\$5,000	\$1,000
	PROJECTS				
27	Contribution to 5 <sup>th</sup> Generation Plan	0	0	0	0
28	To/(From) Reserves	15,890	81,407	21,650	25,600
	Subtotal	\$15,890	\$81,407	\$21,650	\$25,600
	TOTAL OPERATING EXPENSE	\$443,590	421,025	\$388,590	\$405,

# 2024 Budget Explanation

# Revenue (see Table 2)

Line	Explanation
1	The application fee structure is intended to recover the cost of completing current project reviews. While the fees do not fully fund that activity, they are set and periodically reviewed and adjusted to recover most of the cost. It is difficult to predict and budget for project review revenues and fees because it varies based on the economy.
2	Annual assessments to the member cities to pay the operating expenses of the Commission. Assessments are apportioned 50 percent based on land area within the watershed and 50 percent based on tax capacity of land within the watershed. No increase is proposed for the 2024 assessments.
3	The Commission earns interest on its fund balance, which is held in the secure 4M Fund managed by the League of Minnesota Cities. Earnings depend on the interest rate and the fund balance, which varies throughout the year, e.g. city assessments are received early in the year and then expended throughout the year, and levy and grant funds are received and held until project work is complete and the participating cities request reimbursement.

# Expenditures (see Table 2)

-	tures (see Table 2)
Line	Explanation
4-6	These line items are to provide administrative support (scheduling, minutes, etc.) for regular Commission and TAC
	meetings and any Commission, TAC, or other meetings that require support, as well as general administrative
	duties such as notices, mailings, and correspondence. The Engineer continues to request the administrator to take
	on tasks that she can perform more cost effectively.
7-8	These line items include general engineering support, including preparation for and attendance at Commission and
	TAC meetings, general technical and engineering assistance, minor special projects, writing and administering
	grants, etc. There has been an increasing amount of work including more frequent TAC meetings, more technical
	assistance to the member cities, managing the CIP process, etc., so this line item is proposed for increase. technical
	and engineering assistance, minor special projects, writing and administering grants, etc.
9	The Commission conducts reviews of development projects; Local Water Management Plans and Comprehensive
	Plan amendments and updates; environmental assessments; large projects such as the Blue Line Extension and
	general inquiries about past and upcoming projects. It is difficult to predict what the expense for a coming year will
	be, as it is based on the number of project reviews, inquiries, etc. received.
11-15	Legal: general counsel: preparing for and attending meetings, drafting policies and variances, reviewing contracts
	and agreements. Misc: annual audit, bookkeeping services, insurance and bonding, and meeting expenses.
16-17	The Commission's routine stream monitoring program. Flow and water quality are monitored at two sites—SC-0 at
	Webber Park in Minneapolis and SC-3 at Brooklyn Boulevard in Brooklyn Park, and one site on Bass Creek – BC-1 in
	Bass Creek Park in Brooklyn Park. This also includes the Commission's share of operating the USGS real-time
	monitoring site at Queen Avenue in Minneapolis.
18	This line item is the routine lake water quality monitoring and aquatic vegetation surveys as set forth in the Fourth
	Generation Monitoring.
19-21	Volunteer monitoring. Lake monitoring is through the Met Council's Citizen Assisted Monitoring Program (CAMP),
	and the stream macroinvertebrate and wetland monitoring is coordinated by Hennepin County Environmental
	Services. The lake monitoring cycle is set forth in the Management Plan. The stream monitoring program is being
	reconfigured and we hope to sponsor two sites in 2024.
22	This line item is the annual water quality report, which provides a record of all the monitoring results for the year as
	well as analysis of water quality trends and an overview of progress toward the TMDLs. West Mississippi also
	budgets funds for this report.
23	General public information and NPDES education program: develop and coordinate messages with cities; prepare
	materials for distribution by member cities; work with lake associations; work with Watershed Partners; coordinate
	with the West Metro Water Alliance (WMWA) (with West Mississippi, Bassett, and Elm WMOs); work with area
	schools; maintain Web site. The cost of the Education program is split 50/50 with West Mississippi.
24	The Commission participates in the West Metro Water Alliance (WMWA), contributes to funds to support
	classroom activities, joint education messaging, and special projects on a regional basis.
25	The Commission reviews its Capital Improvement Program (CIP) annually, and periodically formally revises the CIP
	through major and minor plan amendments.
26	Completion of subwatershed BMP assessments systematically in the areas of the watershed that could benefit from
	additional treatment. Two subwatershed assessments are being completed in 2023-20224 though grant funding.
27	No contributions are proposed yet to a dedicated 5 <sup>th</sup> Generation Watershed Management Plan account.
28	When expenses are less than collected revenues, the balance is transferred to the cash reserves.
	Then expenses are less than concered revenues, the salable is transferred to the east reserves.

Table 3. Proposed 2024 member city assessments compared to previous years.

Table 3. Propos 2022		_	Cost Al	location	Cos	st Based		
		2021 Tax		on Area		x Capacity		al Cost
Community	Acreage	Capacity	%age	Dollars	%age	Dollars	%age	Dollars
Brooklyn Center	3,720	20,453,640	13.07%	23,762	10.58%	19,230	11.82%	42,993
Brooklyn Park	7,080	44,158,668	24.88%	45,225	22.84%	41,518	23.86%	86,743
Crystal	2,480	14,200,096	8.71%	15,842	7.34%	13,351	8.03%	29,192
Maple Grove	5,020	38,788,473	17.64%	32,066	20.06%	36,469	18.85%	68,535
Minneapolis	1,950	13,204,556	6.85%	12,456	6.83%	12,415	6.84%	24,871
New Hope	2,070	17,617,989	7.27%	13,223	9.11%	16,564	8.19%	29,787
Osseo	300	2,345,474	1.05%	1,916	1.21%	2,205	1.13%	4,121
Plymouth	4,380	31,478,480	15.39%	27,978	16.28%	29,596	15.83%	57,574
Robbinsdale	1,460	11,112,638	5.13%	9,326	5.75%	10,448	5.44%	19,774
Total	28,460	193,360,014	100%	181,795	100%	181,795	100%	363,590
2023			Cost Al	location	Cos	st Based		
		2022 Tax	Based	on Area	on Ta	x Capacity	Tot	al Cost
Community	Acreage	Capacity	%age	Dollars	%age	Dollars	%age	Dollars
Brooklyn Center	3,720	24,644,155	13.07%	24,181	10.46%	19,344	11.76%	43,525
Brooklyn Park	7,080	53,297,576	24.88%	46,022	22.61%	41,835	23.75%	87,857
Crystal	2,480	17,648,187	8.71%	16,121	7.49%	13,853	8.10%	29,973
Maple Grove	5,020	47,582,121	17.64%	32,632	20.19%	37,349	18.91%	69,980
Minneapolis	1,950	15,730,473	6.85%	12,676	6.67%	12,347	6.76%	25,023
New Hope	2,070	21,261,174	7.27%	13,456	9.02%	16,688	8.15%	30,144
Osseo	300	2,799,609	1.05%	1,950	1.19%	2,197	1.12%	4,148
Plymouth	4,380	38,250,294	15.39%	28,472	16.23%	30,024	15.81%	58,495
Robbinsdale	1,460	14,476,873	5.13%	9,491	6.14%	11,363	5.64%	20,854
Total	28,460	235,690,462	100%	185,000	100%	185,000	100%	370,000
2024				location		Cost Based		
		2023 Tax		on Area		x Capacity		al Cost
Community	Acreage	Capacity	%age	Dollars	%age	Dollars	%age	Dollars
Brooklyn Center	3,720	25,567,389	13%	24,181	10%	18,689	12%	42,871
Brooklyn Park	7,080	56,705,102	25%	46,022	22%	41,451	24%	87,473
Crystal*	2,480	18,739,269	9%	16,121	7%	13,698	8%	29,819
Maple Grove*	5,020	53,080,785	18%	32,632	21%	38,801	19%	71,433
Minneapolis	1,950	16,419,161	7%	12,676	6%	12,002	7%	24,678
New Hope	2,070	22,759,451	7%	13,456	9%	16,637	8%	30,093
Osseo	300	3,099,165	1%	1,950	1%	2,265	1%	4,216
Plymouth*	4,380	41,524,951	15%	28,472	16%	30,354	16%	58,826
Robbinsdale	1,460	15,187,729	5%	9,491	6%	11,102	6%	20,593
Total	28,460	253,083,002	100%	185,000	100%	185,000	100%	370,000

<sup>\*</sup>Includes WS 0: parcels with no assigned watershed





To: West Mississippi WMO Commissioners

From: Todd Shoemaker, P.E.

Diane Spector Judie Anderson

**Date:** May 5, 2023

**Subject:** Preliminary 2024 Budget

Recommended Commission Action

This report presents a proposed 2024 budget for discussion and comment. If comfortable you may adopt a proposed budget at the 5/11 meeting or wait until the 6/8 meeting. The budget must be finalized prior to July 1.

The Joint Powers Agreement (JPA) governing operations of the West Mississippi Watershed Management Commission requires a budget and the resulting proposed city assessments for the coming year to be reported to the member cities by July 1. This memo is the first step in the 2024 budget process. This is the operating budget, which includes administration, engineering, legal, technical services, education/outreach programs and basic operations of the Commission. Capital and cost-share projects are handled separately from the operating budget. Below we will first discuss the sources of revenue to fund operations, and then the proposed expenditures for 2024 compared to previous years.

#### **Revenue Sources**

The primary source of funds for operations is from assessments on the cities having land in the watershed. The cities share proportionally in that cost based 50% on their area within the watershed and 50% on their net tax capacity in the watershed. Tax capacity serves as a proxy for level and density of development. Most, but not all, of the cities fund these assessments from their Storm Drainage Utility Funds.

The JPA includes a cost cap that limits the increases in annual city assessments to the *cumulative* increase in the Consumer Price Index (CPI-U), using the assessment in 2004 as a base. This is *not* an annual cap, so if the Commission chooses to not increase the assessment one year or increases less than the rate of inflation, it retains the ability in future years to set an increase greater than the annual rate of inflation to "catch up."

As Table 1 shows, the Commission has not increased assessment every year. However, the *ability* to increase continues to accumulate with inflation. For 2024, the Commission could increase assessments to as much as \$196,270 and stay within the JPA cap. The draft 2024 budget recommended to you assumes *an assessment of* \$160,000, which is a 2.4% increase following several years of no or minimal change in the assessment.

Other sources of funding are project review fees and interest. These are shown later in this memo, in Table 2. The Commission's interest earnings in 2022 were quite sizable and 2023 is also on track to be significant. While we propose an increase in expected interest, we kept that expectation moderate and consider those earnings to be a windfall rather than something that will continue.

The proposed allocations to each city are in Table 3 at the end of this memo. At this point they are based on the areas and valuations using the current boundaries. We are working with Hennepin County to determine when we can obtain updated valuations by city using the new watershed boundaries.

Table 1. Calculation of allowable member city assessments according to the JPA assessment cap.

	June CPI-U	Annual CPI % Change	Cumul. CPI % Change	WM Allowed	WM Actual
2003	183.7				
2004	189.7			\$119,450	\$ 76,200
2005	194.5	3.3%	3.3%	123,350	77,950
2006	202.9	2.5%	5.9%	126,470	80,350
2007	208.352	4.3%	10.5%	131,930	125,600
2008	218.815	2.7%	13.4%	135,480	125,600
2009	215.693	5.0%	19.1%	142,280	130,620
2010	217.965	-1.4%	17.4%	140,250	128,000
2011	225.722	1.1%	18.7%	141,730	128,000
2012	229.478	3.6%	22.9%	146,770	128,000
2013	233.504	1.7%	24.9%	149,220	135,700
2014	238.343	1.8%	27.1%	151,830	135,700
2015	238.638	2.1%	29.7%	154,980	135,700
2016	241.018	0.1%	29.9%	155,170	135,700
2017	243.801	1.0%	31.2%	156,720	145,000
2018	251.989	1.6%	33.3%	159,280	150,000
2019	254.202	1.9%	37.2%	163,850	153,600
2020	258.115	0.9%	39.4%	166,560	153,600
2021	264.877	0.6%	40.3%	167,840	153,600
2022	287.504	5.4%	47.9%	176,670	156,200
2023	301.836*	9.1%	56.5%	186,950	156,200
2024		1.9%	64.3%**	196,270	160,000

<sup>\*</sup>March 2023 CPI-U is the latest available \*\*June 2022 to March 2023

#### **Expenses**

With a few notable exceptions the proposed budget shown in Table 2 generally continues the same activities at the same level of effort as 2023. Some of the line items have been adjusted and reallocations made. Each line item is explained in the 2024 Budget Explanation below. Figure 1 shows the proposed 2024 expenditures by category. A few lines require more explanation:

Meeting Expense (line 15). The new meeting location at the Plymouth Community Center charges a monthly room rental, which together with the lunch cost are the primary meeting expenses. This cost is split between Shingle Creek at 70% and West Mississippi at 30%. The budget assumes that in 2024 the Commission will continue to meet in-person.

Volunteer Stream and Wetland Monitoring (lines 16-17). In the past one site on Mattson Brook site has been monitored for macroinvertebrates by high school students through the Hennepin County River Watch program. However, for the last few years County staff have been unable to recruit a group to participate. They are in the process of trying to recalibrate the program, and, until we know, we recommend the Commission not budget to participate in 2024. The volunteer wetland monitoring program was discontinued in 2022.

Education Program (line 20). The Fourth Generation Plan placed a renewed emphasis on education and outreach, especially in two areas: outreach to underserved communities and education regarding chloride management. We recommend the Commission increase its 2024 budget to take on these new activities.

To (from) reserves (lines 4 and 25). When setting the 2022 budget, to avoid increasing the city assessments the Commission planned to dip into the cash reserves by \$5,000 to balance budgeted costs

and revenues. At the end of 2022, the Commission collected more revenue than expected, mainly in interest earned on its significant fund balance. It also spent less than budgeted, including less on administration than expected, and less for stream monitoring. Therefore, the Commission will not need to allocate any funds from the cash reserve to balance the 2022 budget.

The 2022 actual figures shown on Table 2 are pre-audit. Following completion of the audit, the excess balance, which is estimated at \$41,892, will accrue to the cash reserves.

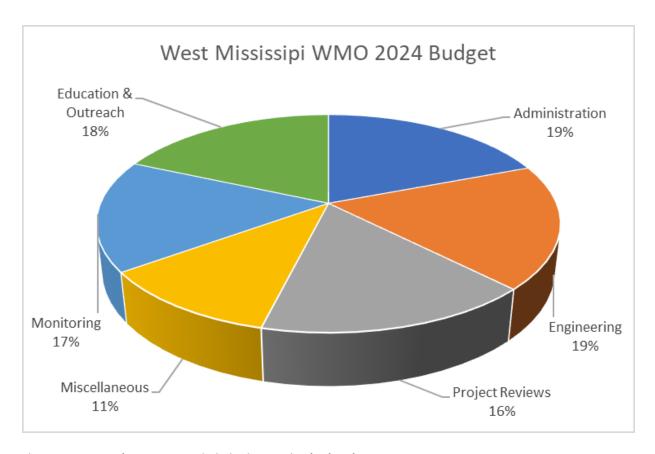


Figure 1. Proposed 2024 West Mississippi operating budget by program area.

Note: "Miscellaneous" includes legal, bookkeeping, audit, insurance, and meeting expense.

Table 2. Proposed West Mississippi Watershed Management Commission 2024 budget.

	2. Proposed West Mississippi Watershed	2022 Budget	2022 Actual (pre-audit)	2023 Budget	Proposed 2024
INCO	ME				
1	Application fees	\$18,000	\$17,800	\$20,000	\$20,000
2	Interest income	2,500	15,029	100	5000
3	Assessment	156,200	156,200	156,200	160,000
4	Reserve - general	5,000	,	0	8,000
	TOTAL INCOME	\$181,700	\$194,331	\$176,300	\$193,000
EXPEN			. ,		
	Administration:				
5	Administrative services	\$32,000	\$23,223	\$32,000	\$32,000
6	TAC/engineering support	4,000	5,427	4,000	4,000
7	Project reviews/WCA	1,500	570	1,500	1,500
<u>'</u>	Subtotal	\$37,500	\$29,220	\$37,500	\$37,500
	Engineering:	<b>\$37,300</b>	<b>\$23,220</b>	<b>437,300</b>	<b>437,300</b>
8	Engineering services	\$33,500	\$33,485	\$32,300	\$35,000
9	Grant writing	500	468	0	500
10	Project reviews/WCA	30,000	29,607	25,000	30,000
	Subtotal	\$64,000	\$63,560	\$57,300	\$65,500
	Legal:	70.7000	400,000	701,000	<b>,</b> ,
11	Legal services	\$4,500	\$4,099	\$5,000	\$5,000
	Subtotal	\$4,500	\$4,099	\$5,000	\$5,000
	Miscellaneous:	<b>+ 1,000</b>	<b>4.</b> ,000	γο,σσσ	40,000
12	Accounting	\$3,300	\$3,792	\$3,400	\$4,000
13	Audit	5,000	4,700	6,500	6,500
14	Insurance & bonding	3,100	2,245	3,000	3,000
15	Meeting expense	2,700	1,375	3,000	3,000
	Subtotal	\$14,100	\$12,112	\$15,900	\$16,500
	Monitoring:	Ψ= :,===	<del></del>	Ψ=5,500	<b></b>
16	Vol stream monitoring	\$0	\$0	\$0	\$0
17	Vol wetland monitoring	2,000	0	2,000	0
18	Outfall & stream monitoring	22,600	14,063	22,600	24,000
<u> 19</u>	Annual monitoring report	8,000	7,903	7,500	8,000
	Subtotal	\$32,600	\$21,966	\$32,100	\$32,000
	Education:	Ψ0=,000	<b>4</b> ,	γου,=σο	<del>φο</del> Ξ,σοσ
20	Education program	\$16,500	\$13,957	\$17,000	\$24,000
21	WMWA implementation activities	11,500	7,000	11,500	11,500
	Subtotal	\$28,000	\$20,957	\$28,500	\$35,500
	Management Plans:	<b></b>	Ψ=0,507	<b>\$25,500</b>	<del>+++++++++++++++++++++++++++++++++++++</del>
22	Plan amendments	\$1,000	\$231	\$0	\$1,000
23	Subwatershed BMP assessment	91,000	0	0	71,000
	Subtotal	\$1,000	\$231	\$0	\$1,000
24	Contribution to 5th Gen Plan	0	0	0	0
25	To reserves (pre-audit)	0	\$41,892	0	0
	L OPERATING EXPENSE	\$181,700	\$194,892	\$176,300	\$193,000

## 2024 Budget Explanation

Income (see Table 2)

Line	Explanation
1	The application fee structure is intended to recover the cost of completing current project reviews.  While the fees do not fully fund that activity, they are set and periodically reviewed and adjusted to recover a majority of the cost. It is difficult to predict and budget for project review revenues and fees because it varies based on the economy.
2	The Commission earns interest on its fund balance, which is held in the secure 4M Fund managed by the League of Minnesota Cities. The amount of interest earned varies based on the interest rate and on the balance, which varies throughout the year as city assessments are received early in the year and then expended throughout the year, and as levy and grant funds are received and held until project work is complete and the participating cities request reimbursement.
3	Annual assessments to the member cities to pay the operating expenses of the Commission.  Assessments are apportioned 50 percent based on land area within the watershed and 50 percent based on tax capacity of land within the watershed. Assessments did not increase 2022-2023. The 2024 assessment is proposed to increase 2.4%.
4	The Commission has in the past maintained a very healthy cash reserve. In previous years, those reserves were used to subsidize the assessments. As the reserves have been drawn down, the assessments are now funding most of the operating expenses. In 2022, the Commission budgeted \$5,000 from cash reserves to limit an assessment increase; in 2024 that amount is proposed as \$8,000.

Expenditures (see Table 2)

	ditures (see Table 2)
Line	Explanation
5-7	These line items are to provide administrative support (scheduling, minutes, etc.) for regular Commission and TAC meetings and any Commission, TAC, or other meetings that require support, as well as general administrative duties such as notices, mailings, and correspondence. The Engineer continues to request the administrator to take on tasks that she can perform more cost effectively.
8-9	This line item includes general engineering support, including preparation for and attendance at Commission and TAC meetings, general technical and engineering assistance, minor special projects, writing and administering grants, etc. There has been an increasing amount of work including more frequent TAC meetings, more technical assistance to the member cities, managing the CIP process, etc., so this line item is proposed for increase.
10	The Commission conducts reviews of development projects; Local Water Management Plans and Comprehensive Plan amendments and updates; environmental assessments; large projects such as the Blue Line Extension and general inquiries about past and upcoming projects. This activity has noticeably increased in the past few years, as there have been more planning and pre-submittal meetings and reviews. It is difficult to predict what the expense for a coming year will be, as it is based on the number of project reviews, inquiries, etc. received.
11- 15	Legal: general counsel: preparing for and attending meetings, drafting policies and variances, reviewing contracts and agreements. Misc: annual audit, bookkeeping services, insurance and bonding, and meeting expenses. The cost of the required annual audit has increased.
16- 17	At this time we are not recommending budgeting for the volunteer stream and wetland programs administered by Hennepin County.
18	Routine flow and water quality monitoring at two stream and/or outfall sites each year on a rotating basis.
19	This line is the Commission's contribution to the Annual Shingle Creek and West Mississippi Water Quality Report that presents data gathered in the previous year and evaluates whether water quantity and quality goals are being achieved

Line	Explanation
20	General public information and NPDES education program: target one or two messages per year; coordinate messages with cities; prepare materials for distribution by member cities; work with lake associations; Great Shingle Creek Watershed Cleanup; work with Watershed Partners; coordinate with the West Metro Water Alliance (WMWA) (with Shingle, Bassett, and Elm WMOs); work with area schools; maintain Web site. The cost of the Education program is split 50/50 between Shingle Creek and West Mississippi.
21	The Commission participates in the West Metro Water Alliance (WMWA), contributes to funds to support classroom activities, joint education messaging, and special projects on a regional basis.
22	The Commission reviews its Capital Improvement Program (CIP) annually, and periodically formally revises the CIP through major and minor plan amendments.
23	Completion of subwatershed BMP assessments systematically in the areas of the watershed that could benefit from additional treatment as recommended in the Third Generation Plan. No assessments have been requested for 2024, thus no funds are budgeted.
24	No contributions are proposed to a dedicated 5 <sup>th</sup> Generation Watershed Management Plan account.
25	When expenses are less than collected revenues, the balance is transferred to the cash reserves.

Table 3. Proposed 2024 member city assessments.

2022		2024 Tou	Cost Allocation Based on Area		Cost Based on Tax Capacity		Total Cost		
Community	Acreage	2021 Tax Capacity	%age	Dollars	%age	Dollars	%age	Dollars	
Brooklyn Center	1,660	9,968,236	10.46%	8,169	11.10%	8,666	10.78%	16,835	
Brooklyn Park	9,880	53,164,616	62.26%	48,623	59.18%	46,220	60.72%	94,843	
Champlin	3,620	21,941,714	22.81%	17,815	24.42%	19,076	23.62%	36,891	
Maple Grove	530	3,264,297	3.34%	2,608	3.63%	2,838	3.49%	5,446	
Osseo	180	1,495,320	1.13%	885	1.66%	1,300	1.40%	2,185	
Totals	15,870	89,834,183	100.00%	78,100	100.00%	78,100	100.00%	156,200	
2023				ocation		Based	Total Cost		
		2022 Tax		on Area		Capacity			
Community	Acreage	Capacity	%age	Dollars	%age	Dollars	%age	Dollars	
Brooklyn Center	1,660	12,143,055	10.46%	8,169	10.41%	8,128	10.43%	16,298	
Brooklyn Park	9,880	70,196,684	62.26%	48,623	60.16%	46,988	61.21%	95,611	
Champlin	3,620	28,305,110	22.81%	17,815	24.26%	18,947	23.54%	36,762	
Maple Grove	530	4,218,843	3.34%	2,608	3.62%	2,824	3.48%	5,432	
Osseo	180	1,811,681	1.13%	885	1.55%	1,213	1.34%	2,098	
Totals	15,870	116,675,373	100.00%	78,100	100.00%	78,100	100.00%	156,200	
2024		2023 Tax	Cost All Based o	ocation on Area	Cost Based on Tax Capacity		Total Cost		
Community	Acreage	Capacity	%age	Dollars	%age	Dollars	%age	Dollars	
Brooklyn Center*	1,660	12,820,589	10.46%	8,368	9.80%	7,840	10.13%	16,208	
Brooklyn Park	9,880	76,834,739	62.26%	49,806	58.73%	46,987	60.50%	96,793	
Champlin*	3,620	30,101,719	22.81%	18,248	23.01%	18,408	22.91%	36,657	
Maple Grove*	530	6,081,491	3.34%	2,672	4.65%	3,719	3.99%	6,391	
Osseo	180	4,979,253	1.13%	906	3.81%	3,045	2.47%	3,951	
Totals	15,870	130,817,791	100.00%	80,000	100.00%	80,000	100.00%	160,000	

<sup>\*</sup>Includes WS 0: parcels with no assigned watershed



**To:** Shingle Creek/West Mississippi WMO Commissioners/TAC

From: Todd Shoemaker PE

Diane Spector Katie Kemmitt

**Date:** May 5, 2023

Subject: 2023 Revised CIP

Recommended Commission Action

Review revised CIP incorporating TAC comments.

The Commissions each revised their Capital Improvement Programs (CIP) as part of the Fourth Generation Watershed Management Plan. The CIP typically is reviewed each year and amended as necessary to add, delete, or amend projects as opportunities arise, priorities change, or costs are reevaluated. The TAC reviewed the preliminary CIP at its April 13, 2023 meeting and suggested some revisions. No new projects are proposed to be added to the CIP so there is no need to undertake a Minor Plan amendment his year. The full CIP as revised is attached for each watershed.

If there are no additional changes to the CIP, then we will proceed as shown in Tables 1 and 2 below for 2023. In June you will establish a maximum 2024 levy for 2023 projects; in August you will receives any outstanding feasibility studies for projects on the CIP and call for a public hearing in September to consider the projects and order a levy.

Table 1. Shingle Creek 2023 CIP Projects (2024 levy).

Project	Total Estimated Cost	City/ Private	Grant	Commission Share
Cost share (city projects)	\$200,000	\$100,000	0	\$100,000
Partnership cost share (private projects)	50,000	0	0	50,000
Maintenance fund	50,000	0	0	50,000
Pike Creek Stabilization	395,000	290,000	0	105,000
Bdale Park Natural Channel ph 1	625,000	0	0	625,000
Subtotal	\$1,320,000	\$390,000	\$0	\$930,000
5% additional for legal/admin costs				46,500
TOTAL LEVY (101% for uncollectable)				\$986,265

Table 2. West Mississippi 2023 CIP Projects (2024 levy).

Project	Total Estimated	City/Private	Grant	Commission Share
Cost share (city projects)	\$100,000	\$50,000	0	\$50,000
Partnership cost share (private projects)	100,000	0	0	100,000
Subtotal	\$200,000	\$50,000	\$ 0	\$150,000
5% additional for legal/admin costs				7,500
TOTAL LEVY (101% for uncollectable)				\$159,075

Table 3. Shingle Creek Fourth Generation Plan CIP.

CAPITAL IMPROVEMENT PROGRAM	2023	2024	2025	2026	2027	2028+	Comments
City Cost Share Program	200,000	200,000	200,000	200,000	200,000	1,000,000	
Commission Contribution	100,000	100,000	100,000	100,000	100,000	500,000	
Local Contribution	100,000	100,000	100,000	100,000	100,000	500,000	
Partnership Cost-Share Program	100,000	100,000	100,000	100,000	100,000	500,000	
Commission Contribution	50,000	50,000	50,000	50,000	50,000	250,000	
Local Contribution	50,000	50,000	50,000	50,000	50,000	250,000	
Maintenance Fund	50,000	50,000	50,000	50,000	50,000	250,000	
Commission Contribution	50,000	50,000	50,000	50,000	50,000	250,000	
Local Contribution	-	-	-	-	-	0	
STREAM PROJECTS							
Shingle Creek Brookdale Park Natural Channel	625,000	625,000				0	
Commission Contribution	625,000	625,000				0	
Local Contribution	-	-				0	
Bass Creek TH 169 to 63rd Avenue		500,000				0	
Commission Contribution		500,000				0	
Local Contribution		-				0	
Minneapolis Shingle Creek Stream Restoration		400,000			300,000	0	
Commission Contribution		400,000			300,000	0	
Local Contribution		-			-	0	
Shingle or Bass Creek Restoration Project						400,000	
Commission Contribution						400,000	
Local Contribution						0	
LAKE PROJECTS							
Pike Creek Stabilization-Ply/MG	395,000					0	
Commission Contribution	105,000					0	
Local Contribution	290,000					0	
Lake Internal Load Project-Eagle/Pike		170,000				0	
Commission Contribution		170,000				0	
Local Contribution		0				0	
Lake Internal Load Project-Cedar Island						200,000	
Commission Contribution						200,000	
Local Contribution						0	

CAPITAL IMPROVEMENT PROGRAM	2023	2024	2025	2026	2027	2028+	Comments
Wetland 639W Weir Wall Enhancement -Twin			100,000			0	
Commission Contribution			100,000			0	
Local Contribution			0			0	
Lake Internal Load Project-Twin						200,000	
Commission Contribution						200,000	
Local Contribution						0	
STORMWATER BMPs							
Mpls Flood Area 5 Water Quality Projects			6,000,000			0	
Commission Contribution			250,000			0	
Local Contribution			5,750,000			0	
Maple Grove Pond P33				574,000		0	
Commission Contribution				143,500		0	
Local Contribution				430,500		0	
Maple Grove Pond P57					648,000	0	
Commission Contribution					162,000	0	
Local Contribution					486,000	0	
Maple Grove Pond P55						855,000	
Commission Contribution						213,800	
Local Contribution						641,200	
				<u> </u>		0	
TOTAL PROJECT COST	1,370,000	2,045,000	6,450,000	924,000	1,298,000	3,405,000	
TOTAL COMMISSION SHARE	930,000	1,895,000	550,000	343,500	662,000	2,013,800	
TOTAL CITY SHARE	440,000	150,000	5,900,000	580,500	636,000	1,391,200	

Table 4. West Mississippi Fourth Generation Plan CIP.

CAPITAL IMPROVEMENT PROGRAM	2023	2024	2025	2026	2027	2028+	Comments
City Cost Share Program	200,000	200,000	200,000	200,000	200,000	1,000,000	
Commission Contribution	100,000	100,000	100,000	100,000	100,000	500,000	
Local Contribution	100,000	100,000	100,000	100,000	100,000	500,000	
Partnership Cost-Share Program	100,000	100,000	100,000	100,000	100,000	500,000	
Commission Contribution	100,000	100,000	100,000	100,000	100,000	500,000	
Local Contribution	0	0	0	0	0	0	
PROJECTS							
New Project							
Commission Contribution							
Local Contribution							
New Project							
Commission Contribution							
Local Contribution							
TOTAL PROJECT COST	300,000	300,000	300,000	300,000	300,000	1,500,000	
TOTAL COMMISSION SHARE	200,000	200,000	200,000	200,000	200,000	1,000,000	
TOTAL CITY SHARE	100,000	100,000	100,000	100,000	100,000	500,000	



To: West Mississippi WMO Commissioners

From: Diane Spector

**Date:** May 4, 2023

**Subject:** Levy Project Closeout

## Recommended Commission Action

By motion terminate any cooperative agreements with Champlin for and closed capital projects WM 2017-04 Mississippi Crossings Rain Garden and WM 2020-08 Mississippi Crossings Phase B Infiltration Vault. Authorize the transfer of accumulated levy funds less administrative costs to the Closed Projects Account.

In 2017 and 2020 the City of Champlin requested Commission cost share funding in two BMP projects associated with the Mississippi Crossings redevelopment project at TH 169 just to the southwest of the Mississippi River Bridge. The first project, 2017-04 Mississippi River Crossings Rain Garden was to share in the cost of a regional rain garden system to treat runoff from public improvements completed with the Applewood Pointe senior housing complex. The second, 2020-08 Phase B infiltration vault was to share in the cost of the construction of an underground storage and treatment system to serve a larger redevelopment that would include public improvements such as a parking lot and amphitheater. The Commission levied \$54,800 for 2017-04 and \$100,000 for 2020-08.

The City has recently informed us that these BMPs, instead of being designed and constructed by the city, were eventually constructed by the developer, who is being reimbursed by the city from redevelopment project TIF proceeds. Therefore, the City respectfully declines this cost share.

The City requests that the cooperative agreement executed for the construction of 2017-04 be terminated. An agreement had not yet been entered into regarding 2020-08.

Staff recommends that you agree to terminate the cooperative agreement and direct that the accumulated levy proceeds for the two projects, less the associated administrative costs, be transferred to the West Mississippi Closed Projects Account. Those funds, estimated to be around \$154,000, would then be available to use for other capital project purposes.



**To:** Shingle Creek/West Mississippi WMO Commissioners/TAC

From: Todd Shoemaker PE

**Diane Spector** 

**Date:** May 5, 2023

**Subject:** Revised City Cost Share Program Guidelines

Recommended TAC/
Commission Action

For TAC review and recommendation. Each Commissions should by motion

**ssion Action** approve revising the guidelines.

During the Fourth Generation Plan process, the Commissions received a comment from one of the cities that the current \$50,000 cap on city cost share projects hadn't increased since the program inception in 2013, and requested that it be considered for review. The TAC at its April 13, 2023 meeting reviewed the awards made to date and noted that nearly two-thirds were either for exactly \$50,000 or just less than that. Given each Commissions' account has a robust balance of over \$350,000 it was agreed to recommend increasing the cap to \$100,000 and evaluate the results in a year or two.

Attached are revised Cost Share Program Guidelines making that change. It will be final reviewed by the TAC at its May 11 meeting, with a recommendation for your consideration.



### Shingle Creek and West Mississippi Watershed Management Commissions Cost-Share Program Guidelines

The Shingle Creek and West Mississippi Watershed Management Commissions will from time to time make funds available to its member cities to help fund the cost of Best Management Practices (BMPs) projects that cost less than \$100,000200,000. The following are the guidelines for the award of cost-share grants from this program:

- Projects must be for water quality improvement and must be for improvement above and beyond what would be required to meet Commission rules. Only the cost of "upsizing" a BMP above and beyond is eligible.
- 2. Priority is given to projects identified in a subwatershed assessment or TMDL.
- Projects should cost less than \$100,000200,000; projects costing more than \$100,000200,000 should be submitted to the CIP. Projects cannot receive funding from both the CIP and the Cost-Share Program.
- 4. Commission will share in funding projects on a 1:1 basis.
- 5. The cost of land acquisition may be included as City match.
- 6. The minimum cost-share per project is \$10,000 and the maximum is  $$5\frac{10}{10}$ 0,000.
- 7. Projects must be reviewed by the Technical Advisory Committee (TAC) and recommended to the Commissions for funding.
- 8. The Commissions will call for projects in December of each year, with potential projects reviewed by the TAC at its end of January meeting.
- 9. Cost-share is on a reimbursable basis following completion of project.
- 10. The TAC has discretion on a case-by-case basis to consider and recommend to the Commissions projects that do not meet the letter of these guidelines, including projects submitted mid-year.
- 11. Unallocated funds will carry over from year to year and be maintained in a designated fund account.
- 12. The standard Commission/Member Cooperative Agreement will be executed prior to project construction.

Adopted February 2015 Revised February 2019 Revised May 11, 2023

Brooklyn Center • Brooklyn Park • Champlin • Crystal • Maple Grove • Minneapolis • New Hope • Osseo • Plymouth • Robbinsdale



### Shingle Creek and West Mississippi Watershed Management Commissions Cost-Share Program Application

- 1. Describe the BMP(s) proposed in your project. Describe the current condition and how the BMP(s) will reduce pollutant loading and/or runoff volume. Note the estimated annual load and volume reduction by parameter, if known, and how they were calculated. Attach figures showing project location and BMP details including drainage area to the BMP(s).
- 2. If this request is for cost share in "upsizing" a BMP, explain how the upsize cost and benefit were computed.
- 3. Show total project cost, amount of cost share requested, and the amount and source of matching funds.
- 4. What is the project schedule, when will work on the BMP(s) commence and when will work be complete?

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To: Shingle Creek WMC TAC

From: Todd Shoemaker, PE, CFM

**Date:** May 3, 2023

**Subject:** City of Crystal Community Center Cost Share Request

Recommended	For discussion
<b>Commission Action</b>	For discussion.

The City of Crystal requests \$50,000 from the Commission City Cost Share Fund to expand an underground infiltration system at the Crystal Community Center (Figures 1 and 2). The underground infiltration system is being installed per Commission stormwater management requirements due to the total reconstruction of the south parking lot. If approved, the \$50,000 will allow the City to further expand the underground system to capture storm water runoff in excess of the minimum requirements. The existing proposed infiltration system has a design volume of 17,451 cubic feet (130,542 gallons). The expansion would increase the volume by 15% to 20,137 cubic feet (150,625 gallons).

The catchment area that drains to this system is only the 1.96-acre parking lot. No additional storm pipes connect to this system as it is basically the headwaters for the storm pipe network leaving this area.

Stantec has reviewed the proposal with Mark Ray (City of Crystal) and the City's design consultant (SRF Consulting). They note the following aspects of the expansion:

- Increasing the volume of runoff captured from the equivalent to 1.39-inches over the impervious surfaces within the construction limits to 1.57-inches (an increase of 0.18-inches).
- Increasing total phosphorus removal by 0.02 lb/yr.
- Negligible additional maintenance cost because it's an addition to the required system.
- Runoff from this site drains to Twin Lake and then to Ryan Lake. Therefore, maximizing infiltration in this watershed reduces runoff and potential flooding on Ryan Lake.

Table 1. Water quality benefits of the proposed project.

	Additional Volume Reduction (cf)	Volume Reduction (\$/cf)	TP Reduction (lb/yr)	30-Year Normalized Cost (\$/lb TP)
Additional Storage	2,686	\$18.61	0.02	\$83,333

The City Cost Share Fund has a balance of approximately \$330,000, not including the \$100,000 levy it will receive this year.

Figure 1. Project Location



CONNECT TO EXISTING STRUCTU RIM 875.02 6° N INV: 872.66 15° S INV: 871.99 15° W INV: 872.24 ٥. 68 LF 15" RCP @1.0% -Ġ. - Cost Share Request EXISTING 15" RCP DESIGN SPECIAL 4 STORMITECH MC3500 CHAMBERS OR APPROVED EQUAL BOTTOM OF FOUNDATION STONE 867.92 SEE CHAMBER DETAILS WITH SAFL BAFFLE (DESIGN SPECIAL 3) PRETREATMENT IN 60-4020, C-3
RIM 875.19
INV 18" N 871.49
INV 24" E 871.40
INV 18" S 872.00
SUMP 865.40 DESIGN SPECIAL 5
30° DUAMETER NYLOPIAST STRUCTURE
SEC CHAMBER DETAILS
RIM 875.64
INV 24" N 968.84
INV 24" S 868.84
INV 24" S 868.84
INV 24" S 871.12
MH 114
MH 124
MH 124
MH 124
MH 124
MH 134
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MH 136
MH 24" S 871.06 13 LF 18" CP @0.5% CB 112 SD-96, M-11 CASTING RIM 875.22 INV 245 (SE) 870.92 INV 24" (NW) 870.92 INV 24" (W) 871.02 85 LF 24" RCP @1.0% - DESIGN SPECIAL 5 30" DIAMETER NYLOPIAST STRUCTURE SEE CHAMBER DETAILS RIN 875.16 INV 24" N 868.84 INV 24" W 871.24 INV 24" E 869.84

Figure 2. Design plan showing cost share request area (labeled and shaded gray).



**To:** Shingle Creek/West Mississippi WMO Commissioners

From: Katy Thompson, PE, CFM

Todd Shoemaker, PE, CFM

**Date:** May 3, 2023

**Subject:** Highway 252 / I-94 Draft Scoping Decision Document Review

Recommended Commission Action

Authorize submittal of comments to MnDOT by May 19, 2023.

As discussed and directed by the Shingle Creek and West Mississippi Watershed Management Commissions (SC/WM Commissions or Commissions) at the February 9, 2023, the SC/WM Highway 252 / I-94 EIS Review Subgroup (subgroup) was formed to track and review the Minnesota Department of Transportation (MnDOT) Environmental Impact Statement (EIS) process for the proposed Highway 252 / I-94 project. The subgroup met four times to discuss the Highway 252 / I-94 project purpose and need, the Commissions' role and authority, project updates and concerns, and selection criteria used to evaluate the project build alternatives.

Since the last Commission update, MnDOT released the Highway 252 / I-94 EIS Scoping Document & Draft Scoping Decision Document (DSDD) for public comment on March 21, 2023. While the Commissions previously submitted project comments as part of an informal public agency comment period in January 2023, the current public comment review is a required step and part of the federal National Environmental Protection Act (NEPA) process.

From the subgroup meetings and the public comment review, we received comments from Commissioners representing Minneapolis (Ray Schoch) and Brooklyn Center (David Mulla), attended virtual public meetings hosted by MnDOT, and developed comprehensive comments on behalf of the SC/WM Commissions for review and acceptance. If authorized by the Commissions, Stantec will submit the final comments to MnDOT via email prior to the close of the public comment period on Friday May 19, 2023.

### **SC/WM Commission Draft Comments:**

- Since this is a transportation-focused project, we understand why the Purpose and Need
  Statement emphasizes transportation criteria such as traffic volume and transit time. However,
  the impacts of these alternatives on the natural environment, especially the increased
  stormwater runoff and pollutant loading from the additional impervious surfaces, should have
  been included to ensure the selected project alternatives do not harm downstream water
  resources, both surface and groundwater.
- 2. We support the importance of crash reduction and improved safety as part of the project's Purpose and Need Statement. We ask MnDOT consider elevating crash reduction as a selection



criterion for its build alternatives, as alternatives that reduce crashes not only improve safety, but also aid in protecting groundwater and drinking water supplies by reducing the likelihood of hazardous spills polluting the underlying groundwater or neighboring surface water resources from vehicular crashes.

- 3. The project corridor is within an area that is naturally very sensitive to pollution, as evidenced by the data in the Minnesota Well Index from the Minnesota Department of Health (MDH), the MDH Source Water Protection Map, the Metropolitan Council's Vulnerability of Surface-Water Features to Groundwater Pumping, and the Vulnerable Groundwater Area Map from the Minnesota Department of Agriculture. We recommend the MnDOT Geologic Unit and/or Geotechnical Engineering Section evaluate the soils, strata, and bedrock separating the Highway 252 / I-94 corridor from the underlying aquifer to assess the existing subsurface conditions, ambient groundwater quality, transmissivity potential for contamination, and any encroachments upon wellhead protection areas, consistent with the Federal Highway Administration (FHWA) NEPA water quality impact guidance.
- 4. The groundwater data sources also show the potential existence of numerous existing wells and a few springs near the corridor, indicating the possibility of high groundwater and seeps in the area. We recommend the MnDOT Geology Unit be consulted to establish ambient subsurface and groundwater conditions and that MnDOT use this information to further evaluate build alternatives.
- 5. We recognize that MnDOT has its own Municipal Separate Storm Sewer System (MS4) permit from the Minnesota Pollution Control Agency (MPCA) and is required to protect downstream surface and groundwater resources from discharges through its system, accidental or otherwise. As such, we recommend MnDOT evaluate the project build alternatives and future project designs using existing best practices from the MnDOT maintenance manual for emergency responses, which may provide a proactive solution to mitigating the impact of any hazardous spills occur during the corridor's lifespan.
- 6. MnDOT has stated that groundwater protection will be studied for each build alternative in the Draft EIS, including identification of mitigation measures. To effectively evaluate the risk of the project alternatives to groundwater resources, we recommend using the approach outlined in ISO 21365 Soil Quality—Conceptual Site Models for Potentially Contaminated Sites before identifying mitigation measures. ISO 21365 recommends developing a preliminary risk assessment and conceptual site model to identify potential:
  - Sources of groundwater contamination, such as construction stormwater runoff or spills, additional lane-miles and increased impervious surface, increased traffic volumes, etc.
  - b. Pathways for contaminants to reach surface and groundwater resources, like rainfall washoff of pollutants like chloride and total suspended solids from the increased impervious areas, storm sewer as a transmission mode for potential spills during



- freeway use, sealed and unsealed wells as a direct connect to groundwater aquifers, and surface infiltration of potential spills during freeway use, etc.
- c. Receptors that could be impacted by contamination, like groundwater aquifers, springs, Shingle Creek, Mississippi River, fish and wildlife habitat, etc.
- 7. One of the Commissions' primary statutory authorities is to "protect and improve surface water and groundwater quality." Shingle Creek is under a TMDL for chloride and biotic integrity and previous studies have suggested that groundwater wells in Brooklyn Center may also have elevated chloride concentrations. The build alternatives should be evaluated to consider how each alternative may impact chloride concentrations in Shingle Creek and the underlying groundwater, especially within the Brooklyn Center Drinking Water Supply Management Area (DWSMA) and Emergency Response Area (ERA), as part of a chloride management plan.
- 8. Please note that with the potential groundwater impacts and concerns from the construction of this project, consistent with the Minnesota Construction Stormwater Permit and Commission rules, no infiltration practices will be permitted within the ERAs.



To: Shingle Creek/West Mississippi WMO Commissioners

From: Katy Thompson, PE, CFM

Todd Shoemaker, PE, CFM

**Date:** May 3, 2023

**Subject:** Highway 252 / I-94 Future EIS Scope and Budget

Recommended Commission Action

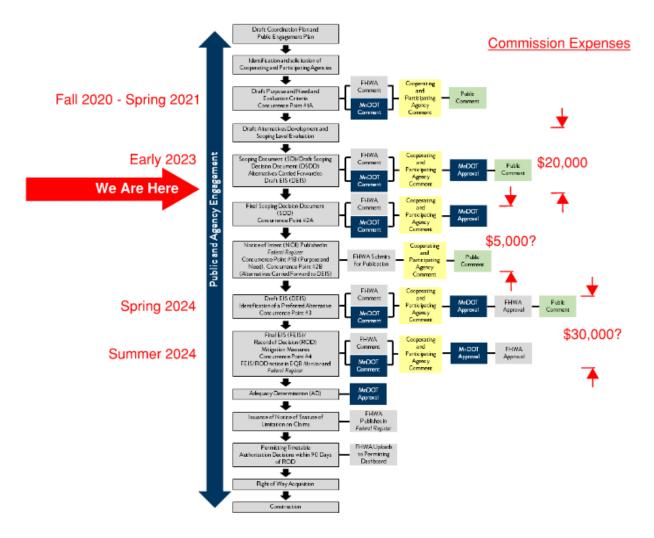
For discussion and information

As directed by the Shingle Creek and West Mississippi Watershed Management Commissions (SC/WM Commissions or Commissions), staff has led and coordinated review the Minnesota Department of Transportation (MnDOT) Environmental Impact Statement (EIS) process for the proposed Highway 252 / I-94 project. This long and linear project requires a more extensive project review than most conducted by the Commission. Therefore, the Commissions directed staff to be very involved in the EIS review process, especially given the magnitude and the potential environmental impacts of the project.

Staff has since led five Commission Subgroup meetings to discuss the Highway 252 / I-94 project purpose and need, the Commissions' role and authority, project updates and concerns, and selection criteria used to evaluate the project build alternatives. We have reviewed the EIS Scoping Document (SD) and Draft Scoping Decision Document (DSDD); attended virtual public meetings hosted by MnDOT; researched and recommended an approach to evaluate impacts on groundwater resources; and drafted two rounds of comments on behalf of the SC/WM Commissions.

The graphic below shows the EIS review process. Staff's detailed involvement began in January 2023 with the informal agency review of the Scoping Document and is now reaching a potential "pause" as MnDOT and the Federal Highway Administration (FHWA) finalize the DSDD and determine the alternatives that will be carried through to the Draft EIS over the summer 2023. Work during this pause period is expected to be limited to attending and providing project updates from the Cooperating and Participating Agency Meeting #9, during which MnDOT will provide an update of the Final Scoping Decision Document.





We request the Commissioners direct staff on the continued level of staff involvement on the Highway 252 / I-94 project. We understand that the Commissions do not have unlimited resources and recognize the review cost to date is nearly \$20,000, with several more environmental reviews over the next year or two as the project moves through the NEPA/MEPA process. Based on efforts to date, we anticipate that these additional reviews could reach or exceed an additional \$35,000 at the current level of involvement. The approved 2023 project review budget was \$25,000 and did not anticipate multiple, detailed, EIS reviews such as the Highway 252 / I-94 project, and is not sufficient to cover both this and typical Commission project reviews.

If the Commissioners wish to proceed with the current level of involvement, the Commission will have to allocate funds from the unrestricted reserve account to cover the assumed overage of \$35,000. While the 2022 audit is not yet complete, at the end of 2021, this account had a balance of \$110,000.



Conversely, the Commissioners could consider a request to the affected member cities to increase their level of environmental review, consistent with the Commissions' comments.



# SHINGLE CREEK / WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION MONTHLY COMMUNICATION LOG May 2023

Date	From	То	SC	WM	Description
					Requesting information on Meadow Lake alum treatment for dissertation
		Katie Kemmitt,	Х		research. Katie will be collecting sediment samples for her research before and
4/2/23	Katie Polik, UMN PhD student	Diane Spector		-	after the alum treatment.
4 /2 /22		60.44.40	Х		Request for information regarding any sediment contaminate done on previous
4/3/23	Leah Gifford, BLIA	SC WMC	<del> </del>	1	dredging projects on the Bass Lake west lagoon. (none available)
4/5/22	Stu Froelich, Schmidt Lake	SCMMC	Х		Request for Schmidt Lake to be added to the Citizen Assisted Lake Monitoring
4/5/23	Resident	SC WMC			Program for 2023. The lake has been added.
1/6/22	BWSR Central Committee	Katie Kemmitt,	х	х	Presented Fourth Generation Plan for review and recommendation o the full BWSR Board
4/6/23	Mike Sorenson, City of	Diane Spector			BWSK Board
4/15/23	Robbinsdale	Katie Kemmitt	Х		Request for carp barrier cleaning. Stantec sent staff to clean the barrier.
4/13/23	RODDITISUATE	Ratie Reminitt			Minneapolis is seeking public input into its stormwater priorities and programs
4/17/23	Shahram Missaghi	SC WMC	Х		prior to holding a public hearing on May 14
4/11/23	Shanrani Wiissagiii	SC WMC, Katie			prior to notating a public rearing on May 14
		Kemmitt, Diane	Х	X	
4/18/23	MPCA	Spector			Presentation sharing Draft Mississippi River Twin Cities monitoring report
., ==, ==	Steve Trotsky, Summit Tech				Inquiry regarding city/watershed project review thresholds for a site in Brooklyn
4/19/23	Engineers	Todd Shoemaker	X		Park
4/19/23	SC WMC	MPCA	Х		Quarterly invoice for the Crystal Lake Mgmt Plan 319 Grant project
	Heather Nelson, City of			.,	, , , , , , , , , , , , , , , , , , , ,
4/20/23	Champlin	Todd Shoemaker		Х	Discussed potential partner grant opportunity
	Mike Sorenson, City of		V		
4/21/23	Robbinsdale	Katie Kemmitt	Х		Request for cap barrier cleaning. Stantec sent staff to clean the barrier.
4/25/23	Jordan Wein, WSB Consultants	Katie Kemmitt	X		Update on Crystal Lake carp spawning activity. No activity had been observed.
4/26/23	BWSR	SCWM WMC	Х	Х	Notification that the BWSR Board has approved the Fourth Generation Plan
4/28/23	Mark Ray, City of Crystal	Todd Shoemaker	Х		Discussed potential City cost share grant opportunity
	James Soltis, City of Brooklyn		Х		House fire led to motor oil discharge to Dupont Ave. Fire department deployed
5/3/23	Center	Todd Shoemaker	^		booms to stop oil from entering storm drains. State duty officer was notified.



To: Shingle Creek/West Mississippi WMO Commissioners

From: Diane Spector

Katie Kemmitt

Todd Shoemaker, PE, CFM

**Date:** May 3, 2023

**Subject:** May 2023 Staff Report

Recommended
Commission Action

For discussion and information.

### **General Updates**

### Highways 252/94 EIS Review

MnDOT released the Draft Scoping and Decision Document (DSDD) for public comment on March 21, 2023. The SC/WM 252/94 EIS Review Subgroup held a virtual meetings on April 4 and 25, 2023 to discuss the DSDD and draft Commission comments. Invitees included David Vlasin, David Mulla, Ray Schoch, Greg Spoden, Alex Prasch, Mitch Robinson, James Soltis, Liz Stout, Ahmed Omer, Liz Heyman, and Stantec staff.

At the April 4th meeting, the subgroup directed Stantec to evaluate potential criteria for MnDOT to use when evaluating vulnerability of the underlying aquifer. Stantec conducted literature research and provided draft comments for the subgroup to review on May 2, 2023. Staff will present the final draft comments to the Commission at the May Board meeting for approval. The approved comments will be finalized and submitted to MnDOT by the close of the public comment period on May 19, 2023.

Future Studies. Following discussion on two topics at the April TAC meeting, staff and city staff will be meting over the next few months to explore the potential for some future special studies and projects, both of which are in West Mississippi. Staff will be working with Brooklyn Park and Hennepin County staff to develop options for proceeding with the Mississippi Riverbank Stabilization project, whether through some alternate funding or perhaps breaking it own into a series of smaller projects. The second study area is in Champlin, which is interested in evaluating options for the remnant oi Oxbow Creek from 109<sup>th</sup> Avenue to the Mississippi River, which decades ago was a small, mostly perennial stream but due to development and area-wide drainage modifications is now an intermittent stream.

### **Project Updates**

#### Meadow Lake Drawdown

The City of New Hope approved the alum treatment quote on Meadow Lake and treatment is scheduled for May 15-17. Stantec issued a Request for Quotes for herbicide treatment of CLP in Meadow Lake to three local applicators. Quotes are due Monday, May 8<sup>th</sup> at 4:00 PM. The contractor will be selected



based on cost and qualifications and quotes will be provided with the Treasurer's Report for information. The herbicide treatment is expected to be completed before the alum treatment.

### Legal Boundary Update

The boundary update already received concurrence from the three neighboring watersheds. We are now asking for approval of the boundary change from all member cities. The following Cities provided a copy of the approved concurrence resolution:

- City of Champlin
- City of Maple Grove
- City of Brooklyn Park
- City of Osseo
- City of Plymouth
- City of New Hope
- City of Crystal
- City of Robbinsdale

Approvals are in process for Minneapolis and Brooklyn Center. After we receive concurrence from all municipalities, we will notify BWSR and then file the new boundary with Hennepin County. Hennepin County requires notification of boundary changes for special taxing districts by July 1st.

### Eagle Lake Subwatershed Assessment

The Eagle Lake Subwatershed Assessment will identify and prioritize potential stormwater management practices in the direct subwatershed to Eagle Lake and evaluate in-lake sediments and aquatic vegetation in Eagle and Pike Lakes. Staff collected Eagle and Pike Lakes sediment cores on April 24. The cores were sent to UW Stout laboratory for analysis of phosphorus release rates under anoxic and oxic conditions and for analysis of phosphorus fractions. The sediment analysis will allow us to evaluate phosphorus release conditions in the two lakes and determine an internal phosphorus loading treatment dosing.

Staff held a meeting on April 26 with Maple Grove and Plymouth staff to review potential projects in the subwatershed. Staff will further evaluate the remaining nine projects for feasibility, estimate project cost, and evaluate phosphorus reduction potential to prioritize projects for TAC and Commission review.

### Gaulke Pond Subwatershed Assessment

The Gaulke Pond Subwatershed Assessment will identify and prioritize potential stormwater volume reduction practices in the Gaulke Pond Watershed. Staff held a field visit with Crystal and New Hope staff on April 21st to review potential BMP locations and identify any site constraints. Stantec is refining the opportunity sites and developing generalized volume reduction and cost estimates to aid in prioritizing the opportunities within the subwatershed. Staff will be present at the May TAC meeting to present the findings, answer questions, and discuss next steps.

### Shingle Creek Brookdale Park Remeander

The Shingle Creek Brookdale Park Remeander study includes field assessment, topographic survey, soil sediment data collection, and development of concept alternatives, a basis of design memo, and



preliminary plans of the selected alternative. Stantec staff held a field visit with staff from Brooklyn Park and Minnesota Department of Natural Resources on April 12th to review current creek and infrastructure conditions and identify constraints. Field topographic survey was completed on April 27th. Stantec staff met to review survey, preliminary existing modeling data and discuss potential conceptual alternatives on May 2nd. Sediment sampling collection is scheduled for May 4th with lab testing and analysis results anticipated by end of May. Preliminary concepts will be further evaluated upon sediment lab testing results with a draft memo and concepts anticipated for presentation at the June 8th SCWMC meeting.

### Shingle Creek Trail Bank Stabilization and Fish Access Improvements

The Shingle Creek Regional Trail Bank Stabilization and Fish Access Improvements study includes field assessment, topographic survey, and development of concept alternatives, a basis of design memo, and preliminary plans of the selected alternative. Stantec staff held a field visit with staff from Brooklyn Park and Three Rivers Park District on April 12th to review current creek, trail, and infrastructure conditions and identify constraints. Field topographic survey was completed on April 27th. Stantec staff met to review survey, preliminary existing modeling data and discuss potential conceptual alternatives on May 2nd. Preliminary concepts will be further evaluated with a draft memo and concepts anticipated for presentation at the June 8th SCWMC meeting.

### Study Presentation Schedule

Staff will present the Shingle Creek and subwatershed studies at upcoming meetings. We will use a "staggered" approach and use the meetings to explain our process, analysis, results and recommendations.

Study	TAC Presentation	Commission Presentation	
Gaulke Subwatershed Assessment	May	June	
Shingle Creek Remeander	luk	August	
Shingle Creek Regional Trail	July		
Eagle Lake Subwatershed Assessment	August	September	