

3235 Fernbrook Lane N • Plymouth, MN 55447
Tel: 763.553.1144 • Fax: 763.553.9326
Email: judie@jass.biz • Website: www.shinglecreek.org

August 5, 2021

Commissioners
Members of the TAC
Shingle Creek and West Mississippi
Watershed Management Commissions
Hennepin County, Minnesota

The agendas and meeting packets for both the TAC and regular meetings are available to all interested parties on the Commission's web site at <http://www.shinglecreek.org/tac-meetings.html> and <http://www.shinglecreek.org/minutes--meeting-packets.html>

Dear Commissioners and Members:

Regular meetings of the Shingle Creek and West Mississippi Watershed Management Commissions will be held **Thursday, August 12, 2021, at 12:45 p.m.**, in the Community Room (downstairs) at Crystal City Hall, 4141 Douglas Drive North, Crystal, MN **This will be an in-person meeting.**

The Joint SCWM Technical Advisory Committee will meet at 11:30 a.m., prior to the regular meetings.

We will be ordering box lunches. Please make your meal selection below and return this letter to me by 3:00, Thursday, August 5, 2021.

Please email me at judie@jass.biz to confirm whether you or your Alternate will be attending the regular and TAC meetings. Thank you.

Regards,

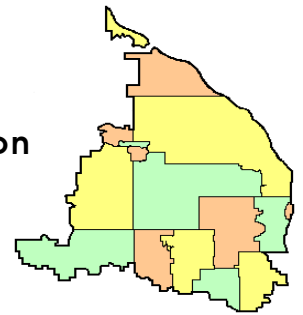
Judie A. Anderson
Administrator

cc: Alternate Commissioners Member Cites Troy Gilchrist TAC Members
Wenck-Stantec BWSR MPCA Met Council

Z:\Shingle Creek\Meetings\Meetings 2021\08 Notice_Regular and TAC Meetings .docx

We will be ordering sandwich bistro box lunches from Lunds & Byerly's. The lunches include a cookie and a bottle of water. Please choose

Type of sandwich (check one)	Sandwich filling (check one)	Side Salad (check one)
<input type="checkbox"/> Croissant	<input type="checkbox"/> Tuna Salad/Leaf Lettuce	<input type="checkbox"/> Cole Slaw
<input type="checkbox"/> Focaccia	<input type="checkbox"/> Turkey, Swiss/Leaf Lettuce	<input type="checkbox"/> Fresh Cut Fruit
<input type="checkbox"/> Whole Grain Bread	<input type="checkbox"/> Ham, Swiss/Leaf Lettuce	<input type="checkbox"/> Italian Pasta
	<input type="checkbox"/> Roast Beef, Cheddar/Leaf Lettuce	<input type="checkbox"/> Potato Salad
	<input type="checkbox"/> Veggies, Cheddar/Leaf Lettuce	☺ you should have 3 check marks ☺



3235 Fernbrook Lane N • Plymouth, MN 55447
 Tel: 763.553.1144 • Fax: 763.553.9326
 Email: judie@jass.biz • Website: www.shinglecreek.org

A combined regular meeting of the Shingle Creek and West Mississippi Watershed Management Commissions will be convened on Thursday, August 12, 2021, at 12:45 p.m. in the Community Room at Crystal City Hall, 4141 Douglas Drive, Crystal, MN. Agenda items are available at <http://www.shinglecreek.org/minutes--meeting-packets.html>. *Black typeface denotes SCWM items, blue denotes SC items, green denotes WM items.*

A G E N D A

August 12, 2021

1. Call to Order.
 - SCWM a. Roll Call.
 - √ SCWM b. Approve Agenda.*
 - √ SCWM c. Approve Minutes of Last Meeting.*
2. Reports.
 - SC a. Shingle Creek.
 - √ SC 1) Treasurer's Report and Claims** - voice vote.
 - WM b. West Mississippi.
 - √ WM 1) Treasurer's Report and Claims** - voice vote.
3. Open forum.
4. Project Reviews.
 - √ WM a. WM2021-011 Zachary Distribution Center, Maple Grove.*
 - √ SC b. SC2021=007 Aeon Crest II, Brooklyn Center.*
- SCWM 5. Technical Advisory Committee Report - verbal.
6. Watershed Management Plan.
 - SCWM a. 2021 Capital Improvement Program.*
 - √ SCWM 1) Call for Public Hearing.*
 - √ WM b. Adopt Partnership Cost Share Policy.*
7. Water Quality.
 - √ SC a. Schmidt Creek Feasibility Report.*
 - 1) Detail.*
8. Grant Opportunities.
 - √ SC a. Authorize Grant Application Submittal.*
 - 1) Application.*

(over)

- SCWM 9. Education and Public Outreach.
 - a. WMWA – update.**
- √ SCWM b. Adopt Updated WMWA Education and Outreach Plan.*
- SCWM c. Next WMWA meeting – 8:30 a.m., Tuesday, September 14, 2021, at Plymouth City Hall.
- SCWM 10. Communications.
 - SCWM a. Return to In-Person Meetings.*
 - SCWM b. Communications Log.*
 - SC c. [Plymouth Seeks Input on MS4 General Permit.*](#)
- 11. Other Business.
- 12. Adjournment.

Z:\Shingle Creek\Meetings\Meetings 2021\08 Agenda Regular meeting.docx

* In meeting packet or emailed ** Supplemental email / Available at meeting

Previously transmitted * Available on website

√ Item requires action



3235 Fernbrook Lane N • Plymouth, MN 55447
 Tel: 763.553.1144 • Fax: 763.553.9326
 Email: judie@jass.biz • Website: www.shinglecreek.org

REGULAR MEETING MINUTES

July 8, 2021

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

*indicates items included in the meeting packet.)

I. A joint virtual meeting of the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission was called to order by Shingle Creek Chairman Andy Polzin at 12:47 p.m. on Thursday, July 8, 2021.

Present for Shingle Creek were: David Vlasin, Brooklyn Center; Alex Prasch, Brooklyn Park; Burton Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Bob Grant, New Hope; Harold Johnson, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Ed Matthiesen and Diane Spector, Wenck/Stantec; Troy Gilchrist, Kennedy & Graven; and Judie Anderson and Amy Juntunen, JASS.

Not represented: Minneapolis.

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

Also present were: Andrew Hogg, Brooklyn Center; Derek Asche, Maple Grove; Megan Hedstrom, New Hope; Ben Scharenbroich and Amy Riegel, Plymouth; Marta Roser, Robbinsdale; and Steve Christopher, Board of Water and Soil Resources (BWSR).

II. Agendas and Minutes.

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

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

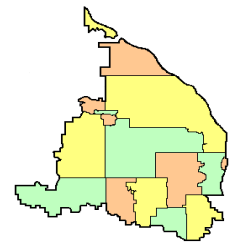
Motion by Jaeger, second by Orred to approve the **minutes of the June 10, 2021, regular meeting.*** *Motion carried unanimously.*

Motion by Johnson, second by Butcher to approve the **minutes of the June 10, 2021, regular meeting.*** *Motion carried unanimously.*

III. Finances and Reports.

A. Motion by Orred, second by Grant to approve the Shingle Creek **July Treasurer's Report* and claims** totaling \$42,473.40. Voting aye: Vlasin, Prasch, Orred, Jaeger, Grant, Johnson, Polzin, and Sicora; voting nay – none; absent – Minneapolis.

B. Motion by Johnson, second by Butcher to approve the **West Mississippi July Treasurer's Report* and claims** totaling \$9,960.60. Voting aye: Vlasin, Prasch, Butcher, Jaeger, and Johnson; voting nay – none.



IV. Open Forum.

Prasch advised the Commissions that she has been appointed as the Commissioner for Brooklyn Park to Shingle Creek, effective June 28, 2021. She will also continue to serve as the Commissioner to West Mississippi.

V. Project Review.

Project Review WM 2021-010 Xylon Avenue Extension, Brooklyn Park.* Construction of Xylon Avenue extension between the Xylon Avenue cul-de-sac and 101st Avenue, including curb, gutter, pedestrian underpass, storm sewer, trail and sidewalks on 7.12 acres. Following development, the site will be 28.2 percent impervious with 2.0 acres of impervious surface, an increase of 2.0 acres. A complete project review application was received on June 28, 2021.

To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing a similar level of treatment - 85% TSS removal and 60% TP removal. Infiltrating 1.3-inches of runoff, for example, is considered sufficient to provide a similar level of treatment. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

Runoff from the site is proposed to be routed to two stormwater ponds as well as an infiltration basin. The applicant meets Commission water quality treatment requirements. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. The applicant meets Commission rate control requirements.

Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 2.01 acres, requiring infiltration of 0.8 in/hr acre-feet within 48 hours. The applicant proposes one stormwater pond and two infiltration basins that have the capacity to infiltrate the required volume within 48 hours. The applicant meets Commission volume control requirements.

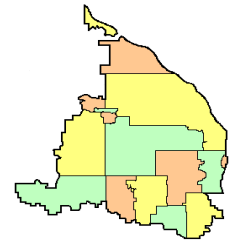
The erosion control plan includes a rock construction entrance, perimeter silt fence/biolog, silt fence surrounding detention ponds/infiltration basins, inlet protection, rip rap at inlets, and native seed specified on the pond slopes and hydromulch. The erosion control plan meets Commission requirements.

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 applicant meets Commission floodplain requirements.

The site is located in a Drinking Water Management Area but is outside of the Emergency Response Area. Therefore, infiltration is permitted but infiltrated water must first filter through 1 foot of soil, the top four inches of which are amended topsoil, and the bottom 8 inches of which are tilled. The applicant proposes an infiltration rate of less than .8 inches/hour. The applicant meets Commission drinking water protection requirements.

A public hearing on the project will not be held as the entire project area is on land owned by the City of Brooklyn Park and there are no residents within 300 feet. According to City Engineer Jesse Struve the bid documents will be posted to the City webpage for public viewing.

A draft Operations & Maintenance (O&M) agreement is not needed as the City will own and operate the stormwater features.



Motion by Butcher, second by Prasch to advise the City of Brooklyn Park that project review WM2021-010 is approved with one condition: Demonstrate by double ring infiltrometer or witness test that the site can meet the design infiltration rate of 0.8 inches/hour. *Motion carried unanimously.*

VI. Watershed Management Plan.

A. Technical Advisory Committee Report.

The July 8 TAC meeting was cancelled. The next TAC meeting is scheduled for 11:30 a.m., prior to the Commissions' August 12, 2021, regular meeting.

B. Fourth Generation Watershed Management Plan.*

1. The Commissions' Third Generation Plan was approved by the Board of Water and Soil Resources (BWSR) March 2013 and adopted in April 2013. Since the Plan covers the period 2013-2022, the Commissions should plan on achieving a BWSR-approved plan by the end of 2022 so it can be in place to cover the period 2023-2032. To allow six months for the review and approval process, a draft Fourth Generation Plan should be completed by mid-2022.

State Statutes and Minnesota Rules 8410 govern what must be included in the watershed management plan. Much of the background information was developed over the course of the first three plans does not need to be repeated except to reflect any changed conditions. Most of the focus will be on updating goals and policies and the Implementation Plan. As long as the Commissioners meet the regulatory minimums for what must be in the Plan, the remaining content is up to them.

Last month the Commissioners reviewed a list of questions developed by Staff regarding content/focus of the Plan in order for Staff to achieve a better understanding of the level of effort that will be needed to address the responses and complete the Plan update.

2. Included in the meeting packet is Wenck/Stantec's July 2, 2021 letter* listing a scope of services, outlining the plan review process, showing the estimated time schedule to complete the plan, and identifying the members of the Wenck/Stantec team who will do the work. It also estimates the cost to complete the Plan to be \$74,706.

Motion by Jaeger, second by Orred to approve the Scope of Services on behalf of the Shingle Creek Commission. *Motion carried unanimously.*

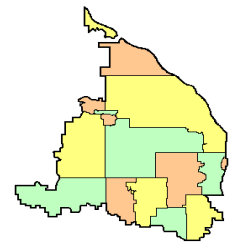
Motion by Butcher, second by Jaeger to approve the Scope of Services on behalf of the West Mississippi Commission. *Motion carried unanimously.*

3. Also included in the meeting packet is a draft letter* advising the various planning partners of the Commissions' intent to begin the process of updating the Plan and requesting their input as it pertains to local water management goals and priorities. This information will be used to guide the Commissions' planning process and align their efforts with those of their local partners.

Motion by Orred, second by Jaeger to authorize Staff to transmit this letter. *Motion carried unanimously.*

Motion by Prasch, second by Johnson to authorize Staff to transmit this letter. *Motion carried unanimously.*

4. Motion by Grant, second by Prasch to set the date of the kickoff meeting as September 9, 2021, concurrent with the Commission's regular meeting. *Motion carried unanimously.*



Motion by Jaeger, second by Johnson to set the date of the **kickoff meeting** as September 9, 2021, concurrent with the Commission's regular meeting. *Motion carried unanimously.*

VII. Water Quality.

A. New Hope Cost Share Reimbursement.*

In 2019 the Commission approved a cost share request from the City of New Hope for \$50,000 to help fund an underground stormwater retention and treatment tank on the west side of Civic Center Park, which was undergoing a complete renovation at the time. This would take advantage of the grading and other work being completed in the park to add stormwater treatment for a 7.4-acre adjacent area comprised of Zealand Avenue and surrounding residential areas that drained to the project site untreated. It was estimated the project would remove 4.7 pounds of TP and 1,106 pounds of TSS annually and remove 8.309 acre-ft of runoff in an average year.

The work has been completed and the City has submitted the required documentation. They are requesting \$49,066.50, or 50% of the total project cost. Staff recommends approval of this request for reimbursement with \$25,000 from the Watershed Based Implementation Funding grant dedicated to cost share projects and \$24,066.50 from the Cost Share Account.

Motion by Grant, second by Johnson to approve this request. *Motion carried unanimously.*

B. Gaulke Pond and Crystal Lake Pump Operating Plan.*

Motion by Prasch, second by Sicora to accept the report, which was presented at the June meeting. *Motion carried unanimously.*

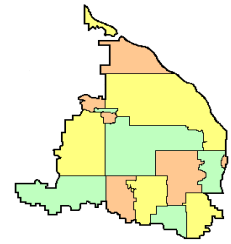
VIII. Grant Opportunities.

Clean Water Fund Grant Applications. The Board of Water and Soil Resources (BWSR) has opened the annual Clean Water Fund (CWF) application period, which runs from June 30 to August 17, 2021 (<http://www.bwsr.state.mn.us/apply>). The CWF is comprised of several pots of money that are available to fund state priorities. The largest pot is the Projects and Practices grant program, this year funded at \$12 million. Grant funding will be released to successful applicants in about April 2022 and funds must be expended by December 31, 2024. The grants require a 25% non-state match.

According to Staff's July 2, 2021, memo,* eligible projects must be identified in an approved watershed plan or a TMDL or WRAPS. The following three high-level state priorities have been established for Clean Water Fund nonpoint implementation:

1. Restore those waters that are closest to meeting state water quality standards
2. Protect those high-quality unimpaired waters at greatest risk of becoming impaired
3. Restore and protect water resources for public use and public health, including drinking water.

At this time the only project on either CIP that would be a good candidate for a CWF grant is the upcoming Palmer Lake Estates Bass Creek Restoration. The City of Plymouth is currently working on a feasibility study to refine the design concepts and cost estimate which should be complete by the time the CWF applications are due. Under the Commission's CIP cost share policy, the stabilization, water quality, and habitat enhancement portions of this project are eligible for 100% Commission funding, so obtaining a grant would reduce the cost to the Commission.



If the Commission so desires, Staff will work with the City of Plymouth to put together a grant application and bring it back at the August meeting for review and approval. The Commission does budget funds in the operating budget for grant preparation, which is estimated to be \$2,000.

Motion by Grant, second by Orred to authorize Staff to prepare the application and bring it back to the Commission at its August 12 meeting. *Motion carried unanimously.*

IX. Education and Public Outreach.

A. At recent meetings of the **West Metro Water Alliance (WMWA)** members have been concentrating on education and outreach items in the new NPDES General Permit, focusing on chloride and pet waste. Subcommittees are completing this assessment to determine additional needs and required resources (e.g., design assistance, fabrication, printing) as well as a plan for disseminating the materials. It is anticipated this work can be completed using the WMWA Special Projects budget, which had a balance of \$10,700 at the end of 2020. The agreement between the four WMOs in WMWA (Bassett Creek, Elm Creek, Shingle Creek and West Mississippi) requires that Special Projects be approved by the four WMOs before expenditures can be made. The goal is to have all the work completed by the end of 2021.

Motion by Vlasin, second by Grant to approve an expenditure of \$1,000 as the Shingle Creek Commission's share of the costs of a WMWA Special Project to create/update/develop educational materials related to chloride and pet waste. *Motion carried unanimously.*

Motion by Jaeger, second by Butcher to approve an expenditure of \$1,000 as the West Mississippi Commission's share of the costs of a WMWA Special Project to create/update/develop educational materials related to chloride and pet waste. *Motion carried unanimously.*

B. WMWA is seeking to hire an educator and to begin preparing for in-person Watershed PREP classes in the fall.

C. The **next WMWA meeting**, is scheduled for 8:30 a.m., Tuesday, August 10, 2021, at Plymouth City Hall. This will be an in-person meeting.

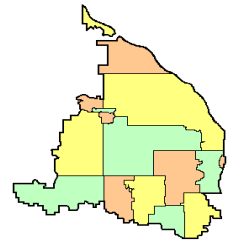
X. Communications.

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

B. **Staff Report.*** Updates were provided on the ribbon-cutting for the (1) new children's playground at Crescent Cove in Brooklyn Center;* (2) July 31 grand re-opening of River Park in Brooklyn Park;* (3) minimalized alum application on Crystal Lake; (4) continuing monitoring of Bass and Pomerleau Lakes; (5) restarting of work on the draw down permit for Meadow Lake; and (6) the beginning of design work on the Connections II and Bass Creek restoration projects.

C. Hennepin County is in the process of updating its **Natural Resources Strategic Plan,*** which will define their natural resources goals and strategies for the next ten years. They are seeking input from the community by taking a survey by August 1, 2021, to help shape priorities and how citizens would like to be engaged in the update of the plan. <https://www.surveymonkey.com/r/L2QRWFS>.

D. **Shingle Creek on TV.*** The Crystal Lake carp removal was featured on KARE 11 and in a *Sun Post* news article.* 2,361 carp were removed on the first attempt, around 200 on the second attempt. Ideally, Staff would like to remove a total of 6-8,000 carp.



E. On July 1, 2021, Matthiesen received an email* announcing that two of the five post-doctoral **MnDrives research grant applications** that were funded are projects that started with Shingle Creek Commission work. They are the biochar research projects for septic system improvements with Dr. Sara Heger and PFAS (polyfluoroalkyl substances) capture with Dr. Jiwei Zhang.

XI. Other Business.

A. In response to inquiries at the June meeting, included in the meeting packet were the various **insurance coverages*** for each Commission.

B. Also included in the packet were the results of the **in-person meeting survey.*** The following responded to four questions: six Commissioners (C), seven TAC members (T), and one staff person (S) – a total of 14 people.

1. Are you personally comfortable with returning to in-person meetings? *Responding yes: 5C (3 if vaccinated); 7T (1 if social distancing, no communal food); 0S.*

2. Do you think it is practical or prudent to start conducting meetings in person? *Responding yes: 3C; 5T; 0S.*

3. Is it important to you that efforts be made to promote social distancing in the meeting room (to the extent possible)? *Responding yes: 3C; 4T; 1S.*

4. Should the WMOs hire a company to help acquire and set up equipment in the meeting to allow hybrid meetings where members or the public can participate in meetings electronically? *Responding yes: 2C; 1T; 0S.*

Staff will continue to reach out to facilities which will best meet our needs and the members' desire for social distancing. The August meeting will be in person.

XII. Adjournment. There being no further business before the Commissions, the joint meeting was adjourned at 2:36 p.m.

Respectfully submitted,

Judie A. Anderson,
 Recording Secretary
 JAA:tim

WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION**PROJECT REVIEW WM2021-011: Zachary Distribution Center**

Owner: Endeavor Development, LLC
Company: Endeavor Development, LLC
Address: 5116 Skyline Drive, Edina, MN, 55436

Engineer: Erik Miller
Company: Sambatek
Address: 12800 Whitewater Drive, Suite 300
 Minnetonka, MN, 55343
Phone: 763-476-6010
Email: EMiller@sambatek.com

Purpose: Construction of a distribution center on 11.46 acres

Location: 9450 Zachary Lane, Maple Grove, MN, 55369 (Figure 1)

- Exhibits:**
1. Project review application and project review fee of \$2,500, dated 7/13/21, received 7/14/21.
 2. Site plan, preliminary plat, grading (Figure 2), utility, erosion control, and landscaping plans dated 7/13/21, received 7/14/21 and updates received 7/27/21.
 3. Hydrologic calculations by Sambatek, dated 7/13/21, received 7/14/21 and updates received 7/27/21.

- Findings:**
1. The proposed project is the construction of a 172,224 square foot building. The site is 11.46 acres. Following development, the site will be 67 percent impervious with 7.77 acres of impervious surface, an increase of 7.68 acres from 0.09 existing acres of impervious surface.
 2. The complete project application was received on 7/14/21. To comply with the 60-day review requirement, the Commission must approve or deny this project no later than the 9/9/21 meeting. Sixty calendar-days expires on 9/12/21.
 3. To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing a similar level of treatment - 85% TSS removal and 60% TP removal. Infiltrating 1.3-inches of runoff, for example, is considered sufficient to provide a similar level of treatment. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

The applicant proposes to meet water quality requirements by implementing a filtration basin on the eastern side of the site. The majority of runoff from the site will be routed to this onsite basin before discharging into an offsite regional basin. Two sump catch basin manholes are proposed prior to discharging to filtration basin. The filter media is proposed to be MPCA bioretention media mix D, with 2-5% organic matter. The basin contains a non-woven geotextile over a gravel

blanket and an underdrain outlet pipe. Applicant meets Commission water quality treatment requirements.

4. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. The majority of runoff from the site will be routed to this onsite basin before discharging into an offsite regional basin. Any stormwater not directed this way will flow west into an existing ditch on the western boundary of the project site. The existing regional basin was also sized for a previous project containing more impervious area and runoff. The applicant meets Commission rate control requirements (Table 1).

Table 1. Runoff from site (cfs).

	Drainage Area	2-year Event	10-year event	100-year event
Existing	SE to regional basin	<i>24.13</i>	<i>42.37</i>	<i>82.70</i>
Proposed	Discharge from filtration basin	0.49	9.43	63.70
	West to ROW ditch	0.00	0.00	0.32
	SE to regional basin	0.00	0.01	0.73
	Total	<i>0.49</i>	<i>9.44</i>	<i>64.75</i>

5. Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 7.77 acres, requiring infiltration of 0.70 acre-feet within 48 hours. The applicant meets Commission volume control requirements.
6. The erosion control plan includes rock construction entrances, perimeter silt fence, inlet protection, rip rap at inlets, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.
7. The National Wetlands Inventory does not identify any wetlands on site. The applicant meets Commission wetland requirements.
8. There are no Public Waters on this site. The applicant meets Commission Public Waters requirements.
9. There is no FEMA-regulated floodplain on this site. The applicant meets Commission floodplain requirements.
10. The site is located in a Drinking Water Management Area but is outside of the Emergency Response Area. Groundwater must be at least three feet below the filtration basin bottom to ensure proper filtration of water. The applicant meets Commission drinking water protection requirements.
11. A public hearing on the project is not required, but the applicant has notified all parties within 300 feet of construction, meeting Commission public notice requirements.
12. A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Maple Grove was provided.
13. A Project Review Fee of \$2,500 has been received.

WM 2021-011:

Recommendation: Recommend approval subject to the following condition(s):

1. Provide a complete O&M agreement between the applicant and the City of Maple Grove for all stormwater facilities on the project site. (A draft agreement has been provided.)

Wenck Associates, Inc.
Engineers for the Commission

Ed Matthiesen, P.E.

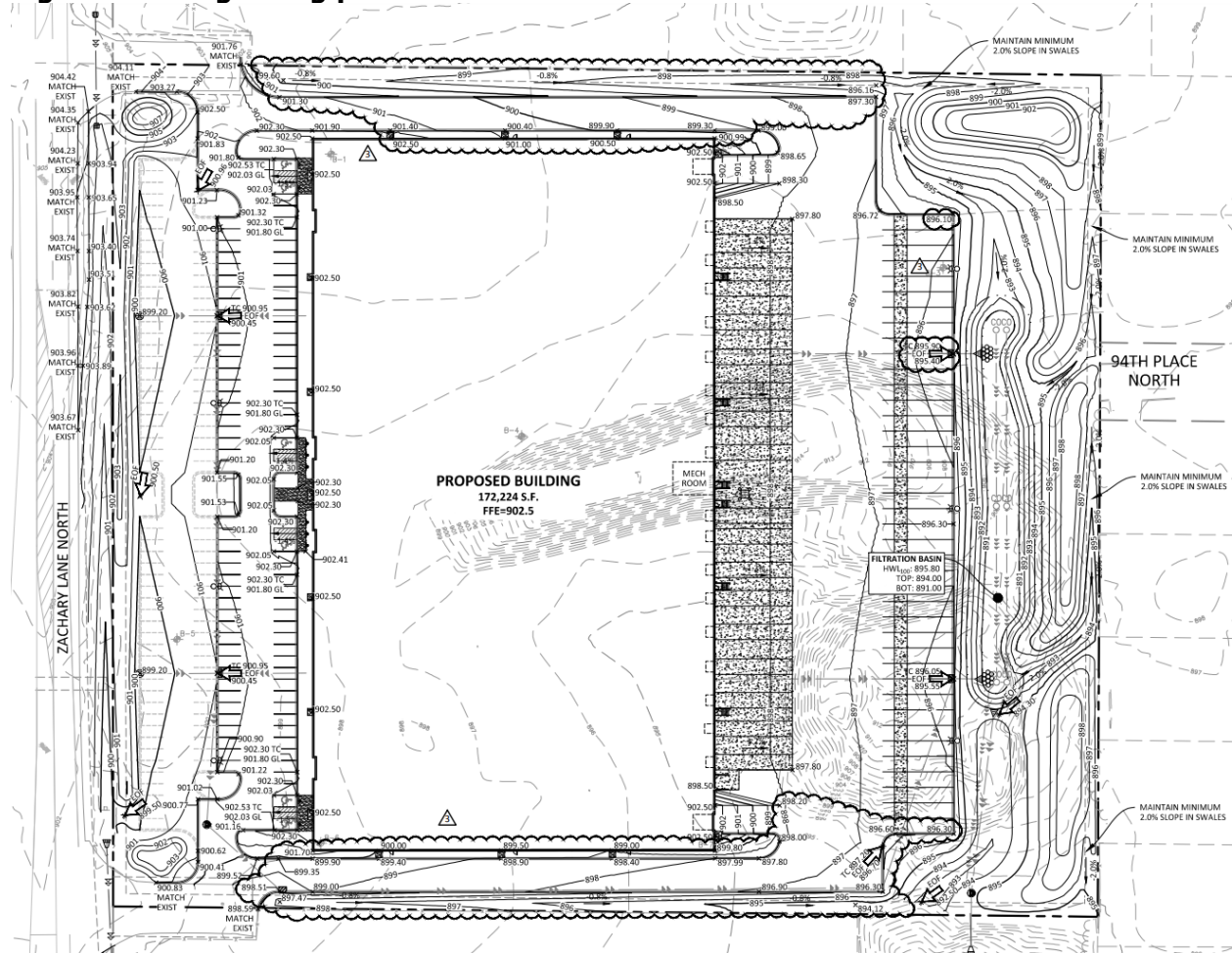
Date

WM 2021-011:

Figure 1. Site location.



Figure 2. Site grading plan.



SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION**PROJECT REVIEW SC2021-007: Aeon Crest II**

Owner: Leslie Roering
Company: Aeon
Address: 901 North 3rd Street, Suite 150
 Minneapolis MN 55401

Engineer: Rhonda Pierce
Company: Pierce Pini + Associates, Inc.
Address: 9298 Central Avenue NE
 Blaine, MN 55434

Phone: 763.537.1311
Fax:
Email: rhonda@piercepini.com

Purpose: Construction of new apartment building on 3.25 acres.

Location: 6221 Shingle Creek Parkway, Brooklyn Center, MN 55430 (Figure 1).

- Exhibits:**
1. Project review application and project review fee of \$2600, dated 5/21/2021, received 5/21/2021.
 2. Site plan, preliminary plat, grading (Figure 2), utility, erosion control, and landscaping plans dated 7/27, received 7/27.
 3. Hydrologic calculations by Rhonda S. Pierce, dated 7/25, received 7/27.

- Findings:**
1. The proposed project is the construction of a new apartment building on an existing lot. The site is 3.25 acres. Following development, the site will be 69.2 percent impervious with 2.25 acres of impervious surface, an increase of 0.86 acres.
 2. The complete project application was received on 7/27/2021. To comply with the 60-day review requirement, the Commission must approve or deny this project no later than the 8/12/2021 meeting. Sixty calendar-days expires on 9/25/2021.
 3. To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing a similar level of treatment - 85% TSS removal and 60% TP removal. Infiltrating 1.3-inches of runoff, for example, is considered sufficient to provide a similar level of treatment. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

Runoff from the site is proposed to be routed to an underground stormwater storage system. The applicant meets Commission water quality treatment requirements.

4. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site gets directed to an underground storage system. The applicant meets Commission rate control requirements (Table 1).

Table 1. Runoff from site (cfs).

Drainage Area	2-year event		10-year event		100-year event	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
	8.92	2.53	15.37	4.20	30.13	11.62

5. Commission rules require the site to filtrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 0.86 acres, requiring filtration of 7531 cubic feet within 48 hours. The applicant proposes to route the water to a underground storage system that has the capacity to filtrate the required volume within 48 hours. The applicant meets Commission volume control requirements.
6. The erosion control plan includes a rock construction entrance, regularly planned street sweepings, perimeter silt fence/biolog, inlet protection, native seed and erosion control mat. The erosion control plan meets Commission requirements.
7. The National Wetlands Inventory identifies one probable wetland in the northwest portion of the site. Shingle Creek watershed district is 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. According to the grading plan there is no proposed work that will effect the wetland.
8. There are no Public Waters on this site. The applicant meets Commission Public Waters requirements.
9. There is FEMA 100-year floodplain on the eastern portion of this site. However, the low floor elevations of the building (849 feet) is at least two feet higher than the FEMA 100-year flood elevation of 842 feet and HUC 8 floodplain of 845. The applicant meets Commission floodplain requirements.
10. The site is located in a Drinking Water Management Area, but is outside of the Emergency Response Area. Therefore, infiltration is permitted, but infiltrated water must first filter through 1 foot of soil, the top four inches of which are amended topsoil, and the bottom 8 inches of which are tilled. The applicant proposes to not infiltrate, but rather to treat water using an underground storage system.
11. A public hearing on the project has been conducted on 6/28/2021 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 Brooklyn Center has not yet been provided.

SC2021-000:

13. A Project Review Fee of \$2600 has been received.

Recommendation: Recommend approval subject to the following conditions:

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

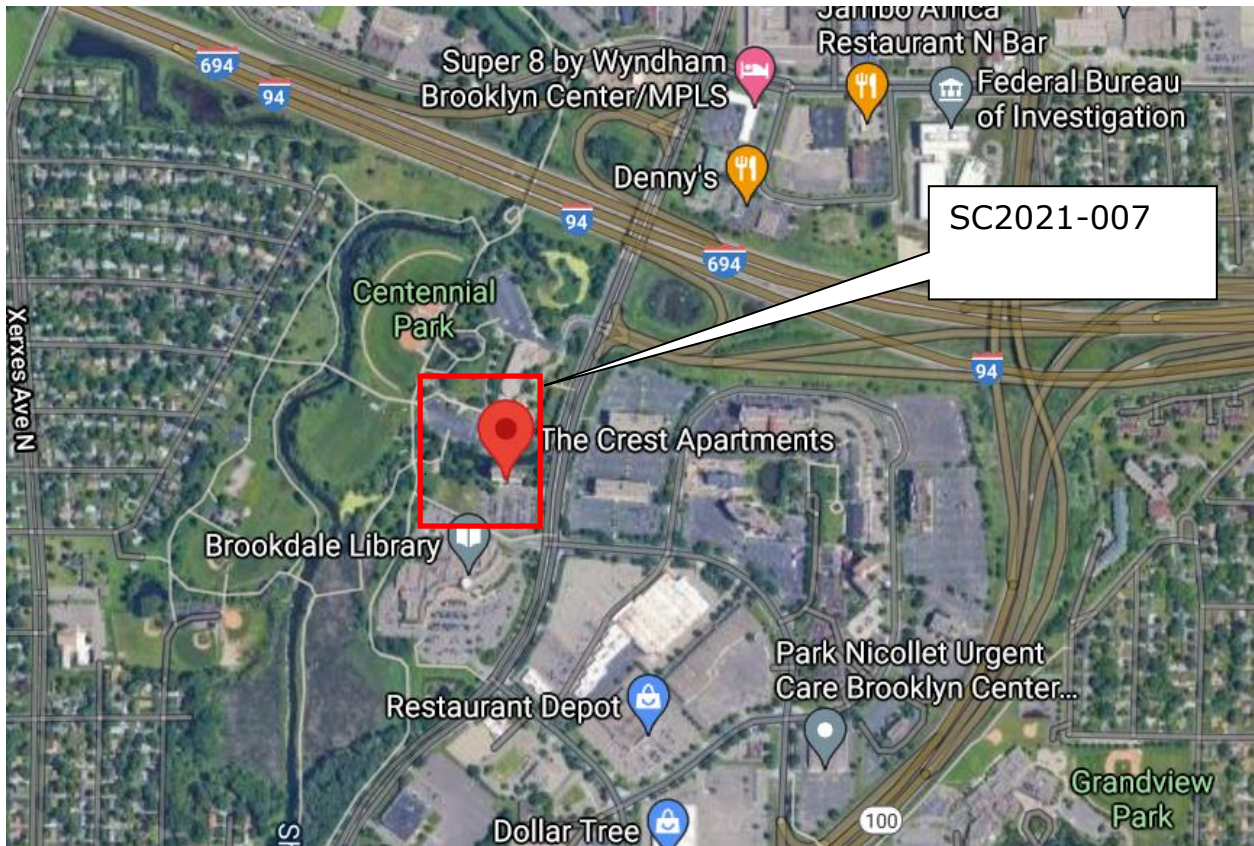
Wenck Associates, Inc.
Engineers for the Commission

Ed Matthiesen, P.E.

Date

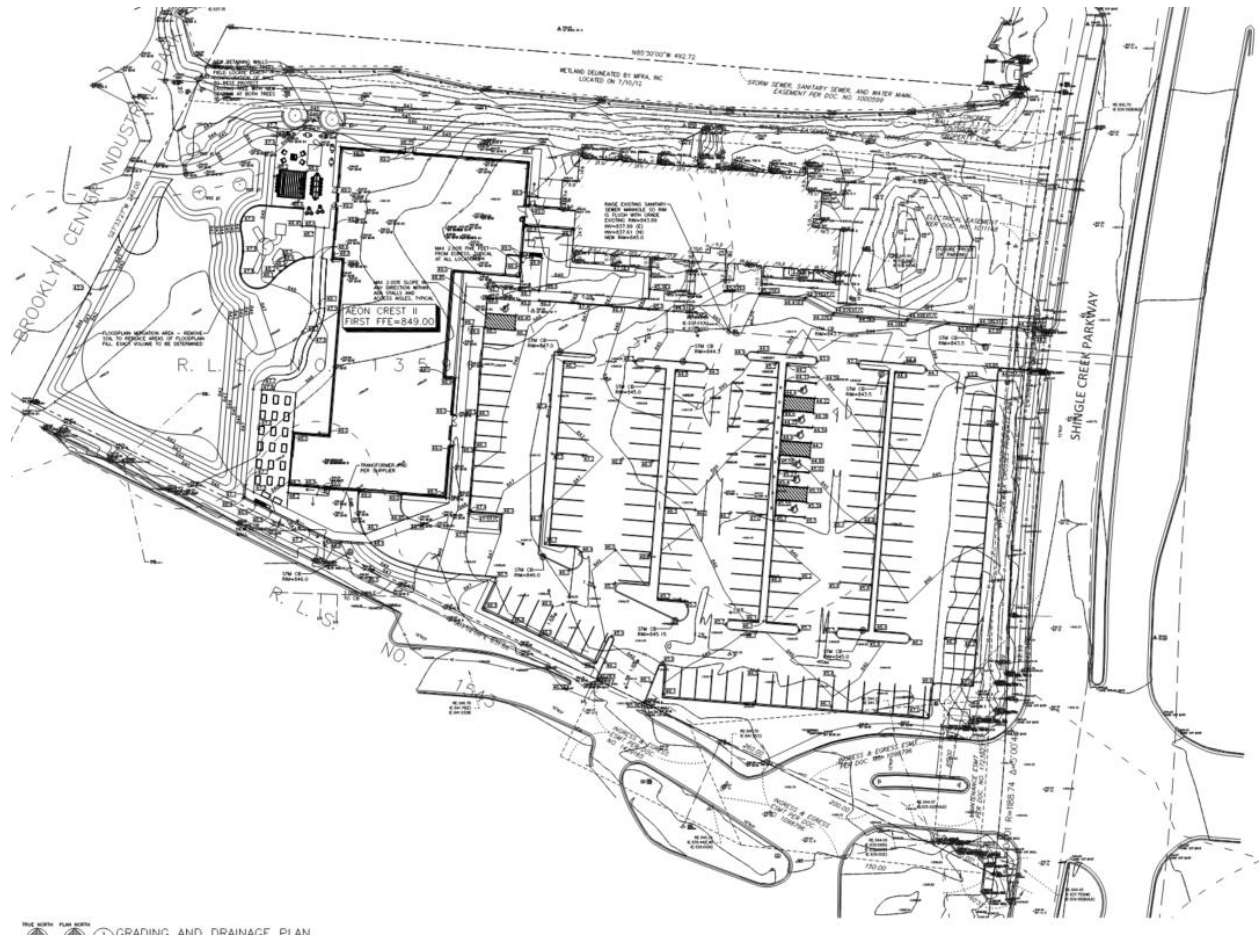
SC2021-000:

Figure 1. Site location.



SC2021-000:

Figure 2. Site grading plan.



To: Shingle Creek/West Mississippi WMO Commissioners

From: Ed Matthiesen, P.E.
Diane Spector

Date: August 5, 2021

Subject: 2021 Capital Improvement Program and Feasibility Studies

**Recommended
Commission Action**

Receive feasibility studies for proposed 2021 capital projects and determine projects to proceed. Each Commission should call for a Public Hearing on September 9, 2021 to consider proposed projects and proposed levies.

The Commissioners had previously established maximum proposed levies for the 2021 Capital Improvement Program (CIP). The next step in the process is to receive and discuss feasibility studies for the proposed projects and call for a public hearing on those that you desire to move forward. Tables 1 and 2 attached show the projects under consideration and their funding followed by short project summaries.

Feasibility Studies. There are two capital projects on the CIP for 2021. The Phase 2 SRP Channel Extension is a continuation of Phase 1, which will be constructed this fall funded by a Hennepin County grant and Closed Project Account funds. The Commission had previously received a received a feasibility study for that project. The second project is the Palmer Lake Estates Stream Restoration Project. At its August 12, 2021 meeting your Technical Advisory Committee (TAC) will review a feasibility study proposing specific improvements to a channel known informally as Schmidt Creek. This channel was formerly part of Upper Bass Creek, but now primarily conveys flow from Schmidt Lake to Bass Lake, so we have come to calling the project the Schmidt Creek Restoration Project. After reviewing that the TAC will make a recommendation to the Shingle Creek Commission as to whether to proceed.

Recommendation: 1) The Shingle Creek Commission should by motion receive the Schmidt Lake Restoration Feasibility Report. 2) Each Commission should by motion elect to proceed to Public Hearing for the CIP as proposed.

Public Hearing. The final step in the CIP process is to hold a public hearing on the proposed projects. This should occur at the Commissions' regular September 9, 2021 meeting. At that time the Commissions will formally order the projects, certify levies to Hennepin County, and authorize the execution of cooperative agreements with the lead cities to contract the ordered projects.

Recommendation. Each Commission should by motion call for a Public Hearing on proposed 2021 capital projects at the regular September 9, 2021 meeting.

Table 1. Shingle Creek 2021 CIP Projects (2022 levy).

Project	Total Estimated	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
Palmer Lake Estates Stream Restoration	600,000	0	0	600,000
Phase 2 SRP Channel Extension	125,000	0	0	125,000
Subtotal	\$975,000	\$100,000	\$0	\$875,000
5% additional for legal/admin costs				43,750
Subtotal				918,750
TOTAL LEVY (101% for uncollectable)				\$927,940

Table 1b. Levy by project.

Project	Total Levy
Cost share (city projects)	\$106,050
Partnership cost share (private projects)	\$53,025
Palmer Lake Estates Stream Restoration	636,300
Phase 2 SRP Channel Extension	132,565
Total	\$927,940

Table 2. West Mississippi 2021 CIP Projects (2022 levy).

Project	Total Estimated	City/Private	Grant	Commission Share
Cost share (city projects)	\$100,000	\$50,000	0	\$50,000
Partnership Cost Share	100,000	0	0	100,000
Subtotal	\$150,000	\$50,000	\$ 0	\$150,000
5% additional for legal/admin costs				7,500
Subtotal				157,500
TOTAL LEVY (101% for uncollectable)				\$159,075

Table 2b. Levy by project.

Project	Total Levy
Cost share (city projects)	\$53,025
Partnership Cost Share	106,050
Total	\$159,075

Shingle Creek Projects

Cost Share Fund (City Projects). This annual project provides cost sharing to retrofit smaller BMPs on city property on a voluntary basis. The TAC developed policies and procedures to administer these funds and makes recommendations to the Commissions on which projects should be funded. The annual levy is \$100,000, to be matched at least one-to-one by a member city or cities. Applications are open until funds are depleted. Potential cost-share projects for 2022 will be solicited in November-December 2021, but the program is open until all funds have been used.

Partnership Cost Share Fund (Private Projects). This annual project provides cost sharing to retrofit smaller BMPs on private property on a voluntary basis. The TAC developed policies and procedures to administer these funds and makes recommendations to the Commissions on which projects should be funded. The annual levy is \$50,000, and funding does not require a match. Potential cost-share projects are open year-round until the funds are depleted.

Palmer Lake Estates Stream Restoration. This project will restore 1250 feet of streambank to improve water quality entering Bass Lake, remove 28 pounds of phosphorus annually, and correct erosion issues currently threatening public infrastructure and private structures. Also called the Schmidt Creek Restoration Project.

Phase 2 SRP Channel Extension. This is the second phase of a project under construction in 2021. An additional 400 feet of the channel downstream of the 639W wetland overflow weir will be lined with iron-enhanced sand to provide treatment for soluble reactive phosphorous (SRP) that discharges from the wetland under some conditions.

West Mississippi Projects

Commission Fund for Retrofit Cost Share (City Projects). This annual project provides cost sharing to retrofit smaller BMPs on city property on a voluntary basis. The TAC developed policies and procedures to administer these funds and makes recommendations to the Commissions on which projects should be funded. The annual levy is \$50,000, to be matched at least one-to-one by a member city or cities. Applications are open until funds are depleted. Potential cost-share projects for 2022 will be solicited in November-December 2021, but the program is open until all funds have been used.

Partnership Cost Share Fund (Private Projects). New in 2021, this annual project provides cost sharing to retrofit smaller BMPs on private property on a voluntary basis. The TAC developed policies and procedures to administer these funds and makes recommendations to the Commissions on which projects should be funded. The annual levy is \$50,000, and funding does not require a match. Potential cost-share projects are open year-round until the funds are depleted.

To: West Mississippi WMO Commissioners
From: Ed Matthiesen, P.E.
Diane Spector
Date: August 5, 2021
Subject: Adopt Partnership Cost Share Policy

**Recommended
Commission
Action**

Review and discuss. By motion adopt the policy.

Earlier this year the Commission amended the Third Generation Plan to add a project to the CIP- the Partnership Cost Share project. Similar to its counterpart in Shingle Creek, this is intended to be funded by an annual levy and be used to help fund voluntary Best Management Practices (BMPs) on private property.

The proposed Partnership Cost Share Policy is identical to Shingle Creek's except that it specifically states that Mississippi River streambank restoration projects that meet certain criteria are eligible. To participate, the streambank must have been evaluated using a specific condition assessment method, be experiencing moderate or worse erosion severity, and the improvement must result in a quantifiable sediment load reduction.

This eligibility relates to the South Metro Mississippi Turbidity TMDL. The TMDL requires a 50% sediment Load Allocation reduction from the contributing watershed. The LA is defined as "field, ravine, bluff, and stream bank erosion" and is analogous to internal loading from a lakebed or from a streambank. Riverbank stabilization that reduces annual sediment loading from ongoing erosion helps to make progress toward that goal.

The Technical Advisory Committee (TAC) will be reviewing this proposed policy at its August 12 meeting and will make a recommendation to the Commission for your consideration.

To: Shingle Creek/West Mississippi WMO TAC/Commissioners

From: Ed Matthiesen, P.E.
Josh Accola, P.E.

Date: August 6, 2021

Subject: Schmidt and Ives Creek Feasibility Study

**Recommended
Action**

For discussion and review.

The City of Plymouth has engaged Wenck/Stantec to prepare a Feasibility Study for the restoration of two channels upstream of Bass Lake: Schmidt Creek (which carries flow from Schmidt Lake via storm sewer outfall) and Ives Creek (local drainage adjacent to Ives Lane). Schmidt Creek is experiencing erosion and mass wasting, some of which is threatening structures. Ives Creek was added to the study because it is immediately adjacent and now would be a cost-effective time to address any stability issues.

We are preparing a conceptual design to stabilize the streambanks and are evaluating potential additional BMPs that could be incorporated. We will also update the Engineer's Estimate for this work. More details will be presented at the August 12, 2021 meeting.

Attached to this memo are a site overview plan and some photos of Schmidt Creek showing typical conditions and illustrating some of the more severe erosion. Ives Creek appears mostly stable. Our preliminary estimate is that stabilizing the streambanks would prevent about 45 tons of sediment or soil loss annually, which translates into 9-18 pounds of phosphorus annually. For reference, based on current conditions the required watershed load reduction is about 215 pounds of phosphorus.

Z:\Shingle Creek\CIPs\2021-2022\M-preliminary schmidt creek feasibility.docx



The solid red line is Schmidt Creek and the dashed is Ives Creek. Bass Lake is to the north.



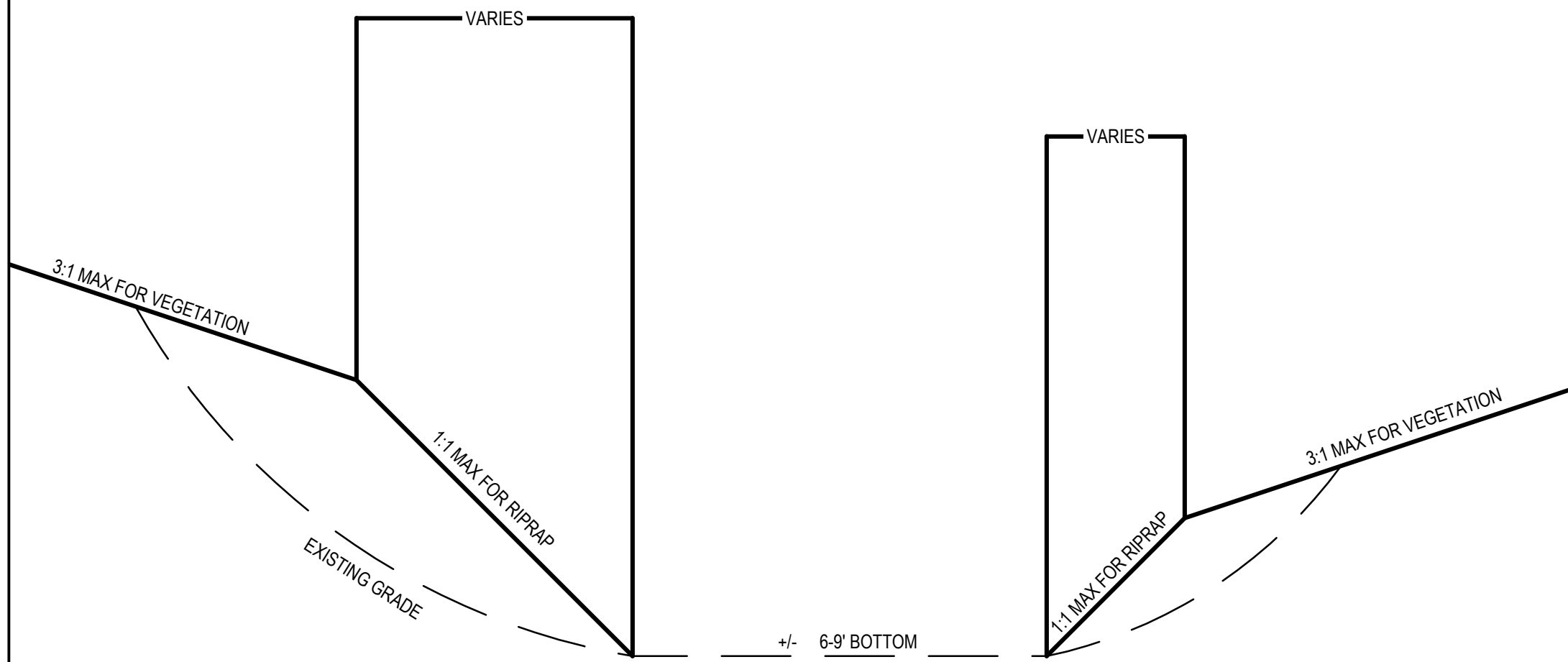
(Above) Cut bank downstream of the Larch Lane culvert.
(Below) Typical view downstream of Larch Lane.





Small footbridge and typical conditions mid-reach.

TYPICAL CHANNEL SECTION (NOT TO SCALE)



WENCK
now part of
Stantec
7500 OLSON MEMORIAL HWY
SUITE 300
GOLDEN VALLEY, MN 55427
PHONE: 763-252-6800
FAX: 952-831-1268
WWW.WENCK.COM

SUB CONSULTANT:

CLIENT:
CITY OF
PLYMOUTH

SCHMIDT AND IVES
CREEK STABILIZATION
CITY OF
PLYMOUTH

PROJECT TITLE:

ISSUE NO.	ISSUE #

DESCRIPTION:

DATE	DESCRIPTION
XXXXXX	

CERTIFICATION:

NOT FOR CONSTRUCTION

PROJECT NO.: 227704233

DWN BY: JJOA	CHKD BY: EAM	APPD BY: XXX
ISSUE DATE: 08/XX/2021		
ISSUE NO.: CONCEPT PLAN		

SHEET TITLE:

CONCEPT PLAN

SHEET NO.:

C-101



To: Shingle Creek WMO Commissioners

From: Ed Matthiesen, P.E.
Diane Spector

Date: August 6, 2021

Subject: DRAFT Schmidt Creek Grant Application

**Recommended
Commission
Action**

Review and discuss. Authorize submittal of final application

The Commission had previously authorized preparation of a Board of Water and Soil Resources (BWSR) Clean Water Fund grant application for the proposed Schmidt Creek Stream Restoration project (formerly known as the Palmer Lake Estates Stream Restoration). Attached is a rough draft of the application. The final is due August 17.

The City of Plymouth has engaged Wenck/Stantec to prepare a Feasibility Study for this project, which will be presented to you as a separate agenda item at your August 12 meeting. This work is still under way but has progressed far enough that we have a better understanding of the most effective stream restoration practices. The City also requested that we look for opportunities to include other types of BMPs. Because of site constraints, opportunities are limited, but we are continuing to explore.

The estimated cost of this project was originally \$450,000 but was increased to \$600,000 in the event more BMPs could be accommodated. Our preliminary estimate, assuming just the stream work, will likely be in the \$300,000 range. We will be working with the City to refine this estimate. Last month you set the maximum levy for this project at \$600,000. If the final cost estimate is still significantly lower you can choose to reduce the levy at the time of the public hearing in September.

DRAFT

Schmidt Creek Restoration Project

CWF Policies and Practices Questions
 (character limit = 2000 except where noted)
 8/6/21

Project Abstract: Succinctly describe what you are trying to achieve and how you intend to achieve those results, including the type and quantity of projects and/or practices included in the application budget and anticipated outcomes.

The purpose of the Schmidt Creek Restoration Project is to improve water quality in Bass Lake in the City of Plymouth. Bass Lake is an Impaired Water for excess nutrients and has been undergoing significant efforts to reduce both watershed and internal loading. Schmidt Creek is a tributary channel to Bass Lake that conveys flow from Schmidt Lake and from the local drainage area that is currently experiencing significant erosion and mass wasting. Some of that erosion is threatening public infrastructure and private structures. This soil loss results in an estimated 52 tons of sediment conveyed directly to the lake. About 1,250 linear feet between Larch Lane and a culvert under the CP Rail embankment will be improved by regrading banks, installing boulder toe and vegetated riprap, enhancing buffer with native vegetation, and replacing old failing retaining walls. These proposed improvements will reduce that annual soil loss by an estimated 45 tons, resulting in a total phosphorus load reduction of 18 pounds per year. The outcome will be stabilized streambanks protecting public and private structures, improved water quality, and enhanced habitat for aquatic and upland wildlife.

Proposed Measurable Outcomes: In 250 characters or less, state the proposed measurable outcomes of the project.

Reduce annual streambank soil loss from 52 tons/year to 7.2 tons/year and TP load from 20.8 to 2.9 lbs/year, a reduction of 17.9 pounds TP.

Does your organization have any active CWF competitive grants? If so, specify FY and percentage spent. Also, explain your organization's capacity (including available FTEs or contracted resources) to effectively implement additional Clean Water Fund grant dollars.

Yes. The Commission is winding down the Bass and Pomerleau Alum Treatment Project. 97% has been expended, with the balance to be expended on final water quality and sediment release monitoring in 2021. That project will be complete by the time this proposed project would start.

Water Resource: Identify the water resource the application is targeting for water quality protection or restoration.

The targeted waterbody is Bass Lake 27-0098-00. The channel to be restored is part of the historical Bass Creek channel draining the western Shingle Creek watershed to Bass Lake. However, much of that creekflow has been diverted into an upstream storm sewer that takes a different route to Bass Lake. Because the stream continues to receive flow from upstream Schmidt Lake as well as local drainage this channel is now referred to as Schmidt Creek. This channel has not been assigned an AUID.

Prioritization (Relationship to Plan): Question 1. (17 points): (A) Describe why the water resource was identified in the plan as a priority resource. For the proposed project, identify the specific water management plan reference by plan organization (if different from the applicant), plan title, section, and page number.

Bass Lake is an Impaired Water for excess nutrients. The Shingle Creek WMO's Third Generation Watershed Management Plan established five priorities, two of which are: "Priority 1 Work aggressively toward achieving TMDL lake and stream goals;" and "Priority 4 Retrofit BMPs in developed areas in the most cost-effective way." Water Quality Goal B.2 is: "Implement phosphorus and sediment load reduction actions sufficient to achieve de-listing from the Impaired Waters list for Bass, Eagle, Crystal, and Middle Twin Lakes." (p. ES-iii, p 4-4, p. 4-6). This project was added to the Commission's CIP in 2017.

The project is located in the City of Plymouth's Bass Lake South subwatershed. The City several years ago engaged a consultant to evaluate the subwatersheds draining to Bass Lake to identify potential BMPs to reduce watershed load to this Impaired Water. This proposed project was high-ranking in that subwatershed assessment. The Plymouth Surface Water Management Plan includes this project, titled "Palmer Creek Estates Stream Restoration." (pp 217-220).

Bass Lake is currently undergoing active watershed and internal load and aquatic vegetation management to improve water quality. Alum treatments and invasive aquatic vegetation management have greatly improved water quality and clarity, and water quality has been better than the state standard for the last three years. New BMPs in the watershed and conversion of from untreated agricultural land in the drainage area to residential development with water quality treatment and volume management have made significant progress toward reducing watershed TP load. The City and Commission continue to look for opportunities to further achieve watershed load reductions to maintain the current improved water quality and the longevity of the alum treatment effectiveness.

Prioritization (Relationship to Plan): Question 1, continued: (B) In addition to the plan citation, provide a brief narrative description that explains whether this application fully or partially accomplishes the referenced activity.

This application will fully accomplish the stabilization of this channel. The estimated 18 pound TP load reduction annually represents about 8% of the remaining watershed load reduction to Bass Lake.

Prioritization (Relationship to Plan): Question 1, continued: (C) Provide weblinks to all referenced plans.

SCWMMMO Third Gen Plan: <http://www.shinglecreek.org/management-plan.html>
Plymouth Local Plan: <https://www.plymouthmn.gov/departments/public-works/surface-water-resources/surface-water-management-plan>

Prioritization (Relationship to Plan): Question 2. (3 points): (A) Describe how the resource of concern aligns with at least one of the statewide priorities referenced in the Nonpoint Priority Funding Plan (also referenced in the "Projects and Practices" section of the RFP).

(A) The Commission and City partnered on alum treatments on Bass Lake in 2019 and 2020. In the three years since the initial alum treatment, water quality has significantly improved and in 2019 and 2020 and the first half of 2021 it is now better than the state standard, although it has not yet been delisted. To protect that water quality and prevent backsliding and to extend the longevity of the treatment the City will continue to implement watershed load reductions such as the proposed Schmidt Creek Restoration project. This aligns with the Nonpoint Priority Funding Plan priorities:

1. Restore those waters that are closest to meeting state water quality standards
3. Restore and protect water resources for public use

(B) Describe the public benefits resulting from this proposal from both a local and state perspective.

The public benefit is stabilized streambanks, a native vegetation buffer, enhanced habitat, improvements in reaeration to reduce periods of low dissolved oxygen, reduced sedimentation and nutrients to improve water quality, and an improved fish and macroinvertebrate community. The native buffer will include pollinator-benefitting species, including rusty-patched bumblebee, an endangered species.

Targeting: Question 3. (15 points): Describe the methods used to identify, inventory, and target the root cause (most critical pollution source(s) or threat(s)). Describe any related additional targeting efforts that will be completed prior to installing the projects or practices identified in this proposal.

In 2013, the City completed a subwatershed assessment of the area draining to Bass Lake and identified potential best management practices for improving water quality including the potential for expanding water quality ponds, completing pond maintenance projects, and alum treatments. [Get more info from Ben about the 2013 subwatershed assessment]

Targeting: Question 4. (10 points): How does this proposal fit with complementary work that you and your partners are implementing to achieve the goal(s) for the priority water resource(s) of concern? Describe the comprehensive management approach to this water resource(s) with examples such as: other financial assistance or incentive programs, easements, regulatory enforcement, or community engagement activities that are directly or indirectly related to this proposal.

The stakeholders in the watershed have focused on reducing pollutant loading to Bass Lake and other water resources through installation of Best Management Practices (BMPs) as part of street, highway, and park projects; strengthened standards for development and redevelopment projects that require enhanced stormwater management; strict enforcement of erosion control standards; and enhanced street sweeping. The Commission has identified “directly connected untreated areas” throughout the watershed where stormwater is discharged into lakes and streams with no interim treatment from ponds, wetlands, or BMPs. These are areas of focus for enhanced sweeping and for siting new BMPs.

The City of Plymouth also provides enhanced environmental education and outreach opportunities to its residents through its City newsletter; sponsored workshops through Metro Blooms and other partners on rain gardens and resilient lawns and smart water use; and events such as the Plymouth Yard and Garden Expo and school environmental fairs. These focus on small practices suitable for residential properties. The Commission is also a member of the West Metro Water Alliance (WMWA), a consortium of four WMOs that focus on coordinated education and messaging across Hennepin County. That group focuses on in-school education for elementary students and on preparing and disseminating resources for watershed-friendly ways to manage non-single family residential properties.

Measurable Outcomes and Project Impact: Question 5. (10 points): (A) What is the primary pollutant(s) this application specifically addresses?

Total phosphorus (TP) and total suspended solids (TSS).

(B) Has a pollutant reduction goal been set (via TMDL or other study) in relation to the pollutant(s) or the water resource that is the subject of this application? If so, please state that goal (as both an annual pollution reduction AND overall percentage reduction, not as an in-stream or in-lake concentration number).

Yes. A nutrient TMDL was completed and approved for Bass Lake in 2009. At that time modeling estimated the annual load reduction from watershed sources to be 453 pounds TP/year and the internal load reduction needed as minimal. In 2017 the Commission completed a TMDL progress review and updated watershed and lake response modeling using more recent and more robust water quality data. It

also reflects new BMPs and significant land use change in the watershed in which untreated agricultural was developed into residential lands under the latest water quality treatment and volume management standards. This updated modeling estimates that the current watershed load reduction required would be 215 pounds TP/year, or 16% reduction, and the internal load reduction is 446 pounds/year, or 93% reduction. Two alum treatments on Bass Lake have achieved almost the entire internal load goal.

(C) If no pollutant reduction goal has been set, describe the water quality trends or risks associated with the water resource or other management goals that have been established.

n/a

(D) For protection projects, indicate measurable outputs such as acres of protected land, number of potential contaminant sources removed or managed, etc.

n/a

Measurable Outcomes and Project Impact: Question 6. (10 points): (A) What portion of the water quality goal will be achieved through this application? Where applicable, identify the annual reduction in pollutant(s) that will be achieved or avoided for the water resource if this project is completed.

The estimated load reduction to be achieved by this proposed project is 18 pounds TP per year, or 8% of the remaining watershed load reduction goal.

(B) Describe the effects this application will have on the root cause of the issue it will address (most critical pollution source(s) or threat(s)).

This channel which conveys flow from upstream Schmidt Lake and local drainage discharges directly into Bass Lake. It is actively eroding and discharging sediment and sediment-bound phosphorus directly into the lake. Stabilizing the streambanks and stream bed and enhancing buffers will minimize the amount of annual soil loss.

Measurable Outcomes and Project Impact: Question 7. (5 points): If the project will have secondary benefits, specifically describe, (quantify if possible), those benefits. Examples: hydrologic benefits, climate resiliency, enhancement of aquatic and terrestrial wildlife species, groundwater protection, enhancement of pollinator populations, or protection of rare and/or native species.

The project will include enhancements to the stream buffer, which currently is comprised of bare ground, undergrowth, and tree canopy. Thinning the trees to remove leaners and undercut trees and opening the canopy will allow a wider variety of slope stabilizing understory and pollinator-friendly forbs and grasses to thrive, which will create a more varied terrestrial habitat.

Measurable Outcomes and Project Impact: Question 8. (15 points): (A) Describe why the proposed project(s) in this application are considered to be the most cost effective and feasible means to attain water quality improvement or protection benefits to achieve or maintain water quality goals. Has any analysis been conducted to help substantiate this determination? Discuss why alternative practices were not selected. Factors to consider include, but are not limited to: BMP effectiveness, timing, site feasibility, practicality, and public acceptance.

[This needs to be expanded]

The degree of streambank degradation, channel migration threatening public infrastructure and private structures, sediment deposition and aggradation, and the lack of streambank vegetative protection led to the reach being designated as a high priority for restoration. Because the channel abuts a large publicly-owned open area, a feasibility study evaluated whether additional BMPs such as an offline pond might

DRAFT

be able to provide additional water quality treatment of streamflow. However, due to site constraints, it would not be possible to access that area with the type of equipment necessary both to construct a BMP and undertake periodic maintenance. The north side of the project area abuts the raised embankment of a CP Rail line, and the other boundaries are single family residential properties.

(B) If your application is proposing to use incentives above and beyond payments for practice costs, please describe rates, duration of payments and the rationale for the incentives' cost effectiveness. Note: For in-lake projects such as alum treatments or carp management, please refer to the feasibility study or series of studies that accompanies the grant application to assess alternatives and relative cost effectiveness. Please attach feasibility study to your application in eLINK.

n/a

Question 9. (8 points): What steps have been taken or are expected to ensure that project implementation can begin soon after the grant award? Describe general environmental review and permitting needs required by the project (list if needed). Also, describe any discussions with landowners, status of agreements/contracts, contingency plans, and other elements essential to project implementation.

Survey work has been completed, and plans have been developed to the 30% level. Final design work can proceed as soon the grant is awarded. The project will require a DNR Work in Public Waters permit and a FEMA No Rise Certificate assessment, both of which the Commission has successfully obtained on other stream restoration projects. Work will be completed either on City owned property or where the City has a drainage easement. The City will hold an Open House for the property owners prior to final design.

Question 10. (2 points): What activities, if any proposed, will accompany your project(s) that will communicate the need, benefits, and long-term impacts to your local community? This should go above and beyond the standard newsletters, signs and press releases.

The City will hold an Open House for the property owners prior to final design. This project will be publicized on the Commission and City's websites, and we will also work with CCX Media to provide ongoing, local cable-access TV coverage over the life of the project.

Stream Restoration Projects Only: The Legacy Fund Restoration Evaluation Report recommends early coordination and comprehensive planning for stream projects. Describe the expertise of your team (i.e. geomorphology, hydrology, plant and animal ecology, construction site management, and engineering) and early coordination efforts you have been part of to ensure project success.

The project design team is led by Ed Matthiesen, PE, a civil engineer who has designed and provided construction oversight for over 70 stream restoration projects in Minnesota, Iowa, Montana, and North and South Dakota, including warm water and trout streams and streams in state and county parks; stabilization of gullies, ravines, ditches; and spot repairs. Ed has participated in stream assessment and restoration workshops from Dave Rosgen in Colorado. Also on the team are landscape architects that specialize in bio restoration and water quality scientists and engineers who have worked with Ed on other stream restoration projects.

Stream Restoration Projects Only: Describe how your organization will provide financial assurance that operations and maintenance funds are available if needed.

D R A F T

The Commission maintains a Closed Project Account that houses excess funds from capital projects completed for less than the levied Commission share. As of the 2020 audit, that balance was about \$105,000. The use of those funds is restricted for other capital projects, including current projects experiencing cost overruns, significant maintenance projects, or new projects. These funds are available to help cover the cost of major failures or maintenance. The cost of minor maintenance (e.g., removal of fallen trees, removal of accumulated trash) will be the responsibility of the cities.

The Constitutional Amendment requires that Amendment funding must not substitute traditional state funding. Briefly describe how this project will provide water quality benefits to the State of Minnesota without substituting existing funding.

The grant funds will allow the Commission to use more bioengineering techniques and to include habitat features to create better habitat, including planting for pollinators..

West Metro Education and Outreach Plan
West Metro Water Alliance
July 2021

The West Metro Water Alliance is a collaboration of four Watershed Management Organizations (WMOs) in Hennepin County, Minnesota jointly providing common education and outreach programming to residents, property owners, and businesses in western Hennepin County about the water resources in the watersheds and positive actions that can be taken to protect and improve them. Other WMOs, cities, and agencies and organizations in the county also participate on an ad hoc basis.

History

In 2006 the Shingle Creek and West Mississippi Watershed Management Commission's Education and Public Outreach Committee (EPOC) invited the Education Committee of the Bassett Creek Watershed Management Commission to partner in developing joint education and outreach activities. The Elm Creek Watershed Management Commission soon joined, and the Three Rivers Park District, the Freshwater Society, and Hennepin County Department of Environmental Services sat in on meetings as well.

In 2010 this partnership formalized and took the name West Metro Water Alliance (WMWA). This partnership grew from a recognition that the individual organizations have many common education and public outreach goals and messages that could be more efficiently and effectively addressed and delivered collaboratively and on a wider scale. The partnership first developed a West Metro Education and Outreach Plan (Plan) in 2010 as a way to define those common goals and set forth a plan for implementing those common activities. In 2015 the partnership revised the Plan to reflect updated education and outreach priorities and to recognize the revised education and outreach requirements of the State of Minnesota General Stormwater Permit reissued in 2013. This Plan was revised in 2021 to reflect the most recent needs and priorities of the partners and the revised requirements of the General Stormwater Permit reissued in 2020.

It is understood that each WMO and community may have additional localized goals for their education programming. For example, implementation of a Total Maximum Daily Load (TMDL) plan may require targeted messages to specific audiences. Activities targeted to the urbanized areas of the county are likely to have a different emphasis than activities targeted to developing or agricultural areas. The Plan also serves as a guide for each of the partners to refine their own individual education and outreach plans and activities.

The West Metro Education and Outreach Plan is intended to serve as a framework to accommodate activities common to most or all WMOs and communities in the county as well as unique local activities.

Purpose, Goals, Target Audiences, and Objectives

This section identifies the vision, mission, and goals set forth collectively by the WMWA. It also identifies the target audiences, and the objectives for learning for each of these target audiences.

Vision:

The West Metro Water Alliance (WMWA) is a collaborative group working to create education and outreach opportunities to protect and improve water resources.

Mission:

The mission of the WMWA is to protect and improve water resources through education and outreach by:

- Jointly identifying and implementing education and outreach strategies to promote consistency of messages.
- Pooling resources to undertake activities in the most cost-effective manner.
- Promoting interagency cooperation and collaboration.

Goal:

The actions in this West Metro Education and Outreach Plan are intended to help the WMOs and member cities to meet their education and outreach needs as set forth in their Watershed and Surface Water Management Plans, Total Maximum Daily Load (TMDL) studies, and the Minnesota Pollution Control Agency's General Stormwater Permit.

Equity Statement:

WMWA acknowledges the past intrinsic gaps in water and natural resources outreach and education to underserved and minority communities and will work to incorporate principles of environmental justice where possible into our outreach efforts.

Target Audiences:

Target audiences are individuals or groups to whom education is being directed. The Plan has identified the following target audiences and general educational goals for each. Often more than one target audience will benefit from an educational activity.

1. Single family homeowners and renters
 - a. Have general understanding of watersheds and water resources
 - b. Understand the connection between behavior and water quality
 - ~~b-c.~~ Understand the connection between climate, water quality, and water quantity
 - ~~c-d.~~ Adopt sensible practices that protect water resources
 - ~~d-e.~~ Support protection and restoration efforts
2. Commercial, industrial, institutional, and multifamily property owners and managers
 - a. Maintain their properties and best management practices (BMPs) in water-friendly ways
3. Government: elected and appointed officials, staff, board and commission members
 - a. Have general understanding of watersheds and water resources
 - ~~a-c.~~ Understanding the connection between climate, water quality, and water quantity
 - b. Establish and maintain up-to-date ordinances, rules, and practices
 - c. Understand public opinions and needs regarding water resources
4. Educators and students
 - a. Have general understanding of watersheds and water resources
 - b. Understand the connection between behavior and water quality

Joint Education and Outreach Activities

Activity 1. Facilitate Online Information Availability and Sharing

Description:

Provide a convenient, “one-stop” online location for water quality/quantity information and resources. The WMWA website will provide informational, educational, and training materials; links to individual watershed management organization websites; links to other organizations such as Blue Thumb and Watershed Partners; and the latest news and information about water resources in Hennepin County.

Target Audience:

Government employees and officials, watershed commissions/boards and staff, City Councils and staff, general public, educators, students

Education Goals:

1. Deliver a consistent message
2. Create an efficient and cost-effective means for distribution of messages and resources

Proposed Activities:

1. Develop and curate content and links to off-site content.
2. Periodically query key members of the target audiences to solicit ideas for content.
3. Periodically inform the target audience of the website and content.

Measurable Goals:

1. Record number of “hits” on the website; the number of times content is used/published. Develop strategy for measurement.
2. Increase in knowledge and adoption of practices as measured in periodic surveys

Responsible Party(ies):

1. Partners – supply content for website
2. Coordinator – develop or identify existing content as requested, solicit content from partners, periodically query target audiences for content ideas and requests
3. Contracted staff – update website as needed

Timeframe:

Ongoing activity at www.westmetrowateralliance.org

Activity 2. Provide Coordinated Communication and Information Sharing

Description:

Provide targeted messaging and outreach regarding key environmental issues. Coordinate and, where appropriate, jointly prepare communications and information pieces such as articles, brochures, newsletters, graphics, photographs, handbooks, etc. Disseminate information developed by WMWA, cities, Hennepin County, and others using the web site, social media, and other media. Work with local and regional media to undertake coordinated information campaigns on general water resources issues.

Target Audience:

All target audiences

Education Goals:

1. Prioritize water issues and develop and implement educational materials focused on those issues.
2. Increase awareness of general water quality/quantity issues.
- ~~2-3.~~ [Increase awareness of the connection between climate, water quality, and water quantity](#)
- ~~3-4.~~ Provide stakeholders with the information and tools necessary to make a difference.

Proposed Activities:

1. In consultation with partners, annually identify high priority issue(s) of focus.
2. Develop a communications plan for each priority issue that identifies specific implementation actions for each relevant target audience, including measurable goals and responsible parties.
3. Develop materials, signs, displays, etc., conveying desired messages and make available to targeted audiences.
4. Assign a person to serve as “coordinator” for each communication plan, responsible for tracking and reporting activities.
5. Annually evaluate the extent to which the communications plans were implemented, and the measurable goals attained.
6. Periodically work with cities and Hennepin County to evaluate current knowledge regarding topics of relevance.
7. Maintain an up to date general media and communications plan.

Measurable Goals:

Number of pieces distributed, number of hits on website referred from outreach materials and social media, number of requests for copies of materials

Responsible Party(ies):

Coordinator- track communications plan implementation

All partners including financial support, editorial skills, graphic design skills, printing

Timeframe:

Annual, ongoing activity

Activity 3. Watershed PREP (Protection, Restoration, Education and Preservation)

Description:

Support and promote Watershed PREP (Protection, Restoration, Education and Preservation) activities providing classroom watershed education to K-12 students and education and outreach at school and community events.

Target Audience:

Educators and students, and all other targeted audiences

Education Goals:

1. Increase student and educator understanding of watersheds, water quality, the hydrologic cycle, [the impacts of climate change on water](#), and stormwater issues in their neighborhoods.
2. Increase general public understanding of watersheds, water quality, and stormwater issues in their cities and neighborhoods.

Proposed Activities:

1. Continue to work with school districts and individual schools and teachers to provide structured fourth-grade classroom lessons on watershed-relevant topics.
2. Promote PREP to other WMOs and organizations and share lesson plans and materials to broaden its reach.
3. Expand Watershed PREP activities to other activities such as family nights and outreach activities.
4. Provide education booth staffing and other assistance to member cities, lake associations, and other groups to deliver information on priority issues.
5. Document outcomes of ongoing programs.

Measurable Goals:

1. Number of students served
2. Favorable comments from teachers
3. Community members receiving targeted information at events

Responsible Party(ies):

Contracted educators – solicit school district approval and classroom teacher interest, coordinate and deliver lessons

Staff-assist with grant writing, and matching funding identification

Timeframe:

Ongoing activity continued as funding is available

Activity 4. Pursue and Obtain Funding for Joint Education and Outreach Activities**Description:**

Investigate options and pursue funding from foundations, grant agencies, and other sources to supplement WMO and city funding for education and outreach activities.

Target Audience:

WMOs and cities

Education Goals:

1. Obtain funding to undertake and expand activities
2. Raise awareness of the WMWA with funding agencies and sources

Proposed Activities:

1. Identify fiscal agent(s)
2. Identify funding options and funding goals
3. Identify matching funding sources and amounts
4. Develop packet of information for funding sources describing WMWA and its partners, the organization's goals and activities, and education and outreach strategies
5. Write and submit grant proposals
6. Document outcomes of previous programs.

Measurable Goals:

1. Number of applications successfully made
2. Grant and matching funds raised

Responsible Party(ies):

Staff-appropriate individuals, other partners for research, grant writing, and matching funding identification

Timeframe:

Ongoing activity continued as funding opportunities are available

Presiding Officer Statement to Return to In-Person Meetings

As the Presiding Officer for the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission (collectively, the “Commissions”), I find as follows:

- a. As a result of the federal, state, and local declarations of emergency due to the COVID-19 pandemic I, as the presiding officer, issued a statement under Minnesota Statutes, section 13D.021 directing that the meetings of the Commissions and the Technical Advisory Committee shall be conducted by telephone or other electronic means in a manner satisfying the requirements of Minnesota Statutes, section 13D.021.
- b. The statement was based on findings that it was not practical or prudent, and that was not feasible to require any members or staff to be present in the meeting room during the meetings and the public was prohibited from being in the meeting room.
- c. The Governor has repealed the state’s peacetime emergency declaration sooner than was anticipated and with little advanced notice to local governments.
- d. Despite the repeal of the emergency declaration, the state has not declared an end to the health pandemic.
- e. The number of new cases and deaths have dropped significantly, but the Delta Variant poses an increasing risk to those who are not fully vaccinated.
- f. The spread of the new variant will need to be monitored, but for now the Commissions will soon be in a position where it will once again be practical and prudent to allow members and staff to return to in-person meetings and arrangements are being made to secure a meeting room.

Based on the above findings, I hereby determine and state as follows:

1. Effective as of 11:59 p.m. on July 31, 2021, meetings of the Commissions and the Technical Advisory Committee shall return to in-person meetings conducted in accordance with the Minnesota Open Meeting Law.
2. The previous statement directing meetings to be conducted by electronic means is rescinded effective as of 11:59 p.m. on July 31, 2021.

Dated this 31st day of July 2021.



Andy Polzin, Chair



**SHINGLE CREEK / WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION
MONTHLY COMMUNICATION LOG
July 2021**

Date	From	To	SC	WM	Description
7-6-2021	April Londo @ MnDNR	Ed Matthiesen., Nick Omodt	X		Curly-leaf pondweed permit application withdrawal for Upper Twin Lake by private property owner
7-14-2021	Aaron Feldberg@Sambatek	Ed M.		X	Preliminary review comments on Zachary Distribution Center in Maple Grove
7-15-2021	Kerri Pearce Ruch @ Hennepin County	Ed M.	X		Bottineau Community Works Steering Committee announcement
7-15-2021	Kelly Bessar @ Stonebrooke Engineering	Ed M.		X	Three Rivers Park Reserve District trail work in Brooklyn Park next to the Mississippi River
7-15-2021	Hildania Kristensen @ Plymouth	Ed M.	X		Resident concern with neighbor's drainage and accurate legal watershed assignment
7-26-2021	Laurie Jensen, resident	Commission website	X		Concern about low flow and litter at the Brunswick bridge in Brooklyn Park. Ed M. responded.
7-28-2021	Norm Olafson, Business Administrator, St. Vincent de Paul Catholic Church	Ed M.		X	Question re: WM2021-03 Avery Park adjacent parcel
7-30-2021	Katie Wolf @ Civil Site Group	Ed M.	X		Revised O & M for Walser Hyundai SC2021-03

Plymouth seeks public input regarding storm sewer systems permit

The City of Plymouth is seeking public input regarding the reissuance of the Small Municipal Separate Storm Sewer Systems (MS4) General Permit.

The Minnesota Pollution Control Agency, which issues the MS4 Permit, requires a public notice comment period to allow the public to review the city's Stormwater Pollution Prevention Program and other documents included in the MS4 Permit.

The MS4 Permit requires the city to develop, implement and enforce a SWPPP designed to reduce the discharge of pollutants from their storm sewer system and protect water quality.

The application submitted to the MPCA represents the city's SWPPP, including best management practices for six minimum control measures, as required by the MPCA.

Comments regarding the MS4 Permit are due by 4:30 p.m. Friday, Aug. 20. Comments may be submitted to:

Rajminder Heck
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155
Phone: 651-757-2296
Email: raj.heck@state.mn.us

View the MS4 Permit Application and More Information

View the [Minnesota Pollution Control Agency Public Notice Document](#).

View the [Minnesota Pollution Control Agency Public Notice Webpage](#).

View the application for the [City of Plymouth Municipal Separate Storm Sewer System General Permit](#).

A paper copy of the MS4 Permit application and associated documents is available for the public to view during normal business hours, 8 a.m. to 4:30 p.m. Monday-Friday, at Plymouth City Hall, 3400 Plymouth Blvd.