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

MINUTES

March 11, 2021

A virtual meeting of the Technical Advisory Committee (TAC) of the Shingle Creek and West Mississippi Watershed Management Commissions was called to order by Chairman Richard McCoy at 11:34 a.m., Thursday, March 11, 2021.

Present were: Andrew Hogg, Brooklyn Center; Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Derek Asche, Maple Grove; Megan Hedstrom, New Hope; Ben Scharenbroich and Amy Riegel, Plymouth; Richard McCoy, Robbinsdale; Ed Matthiesen, Diane Spector, and Erick Megow, Wenck/Stantec; and Judie Anderson and Amy Juntunen, JASS.

Not represented: Minneapolis and Osseo.

Also present: Burt Orred, Crystal, and Kris Guentzel, Hennepin County Environment and Energy.

- I. Motion by Ray, second by Hogg to approve the agenda.* Motion carried unanimously.
- **II.** Motion by Ray, second by Riegel to **approve the minutes*** of the February 11, 2021 meeting. *Motion carried unanimously.*

III. 2021 Capital Improvement Program (CIP).*

In preparation for the 2021 CIP process, one new project has been submitted for addition to the CIP in West Mississippi. In addition, one current project on the Shingle Creek CIP deserves further discussion as to whether it should be considered for 25% funding or 100% funding.

A. West Mississippi.

The City of Brooklyn Park has been working with Hennepin County to complete an inventory of bank conditions along the Mississippi River. Several private properties are experiencing moderate to severe erosion and bank loss. The TAC previously had some discussion with the City as to whether Cost Share funds could be used to help match grant funds. West Mississippi does not at this time have a Partnership Cost Share program such as Shingle Creek does. At that time, the TAC discussed how the city cost share could potentially be used, but did not resolve that question. The City submitted a Clean Water Fund grant application* to help fund about 715 linear feet of restoration along seven properties, but fell just short of being funded. In the feedback from the Board of Water and Soil Resources to the city, BWSR asked that the Commission provide more specifics and more clearly support the project.

The South Metro Mississippi Turbidity TMDL requires a 50% Load Allocation reduction to the Mississippi River. The LA is defined as "field, ravine, bluff, and stream bank erosion," so a case can reasonably be made that it would be consistent with other cost share projects to share in the cost of riverbank stabilization where we can estimate a specific annual load reduction. Stabilization on public property would be eligible under the levy or the city cost share program. West Mississippi would have to establish a Partnership Cost Share Program for privately-owned properties.

[Tuominen arrived 11:45 a.m.]

SCWM TAC Meeting Minutes March 11, 2021 Page 2



The City anticipates a revised project cost of \$900,000 for phase one which includes 7 or 8 sites west of Banfill Island. Shared county/city/commission cost would be \$40,000-\$50,000 each. Robinson noted that access and mobilization costs will be high on this project.

In the guidelines for project eligibility, Staff could specifically call out riverbank stabilization to reduce TSS (Total Suspended Solids) LA to the Mississippi River as an eligible project. If this is something the TAC is willing to recommend to the Commission, Staff would work with BWSR to come up with wording meeting its requirement for specificity. Adding a Partnership Cost Share to the West Mississippi CIP would require a minor plan amendment.

Following discussion, motion by Tuominen, second by Asche to recommend to the West Mississippi Commission the addition of a private property cost share program and, upon its application for cost-share funding, add this project to the West Mississippi CIP. *Motion carried unanimously*.

[Scharenbroich arrived 11:54 a.m.]

B. Shingle Creek.

The City of Plymouth previously submitted the **Palmer Lake Estates Bass Creek Restoration project** to the CIP, and it was added in 2017 for implementation in 2021/2022 for 25% cost share. Since that time, the Commission has revised its policy for CIP projects to allow for 100% funding of projects that would consider to be "load allocation" or "internal load" projects such as in-lake treatments or stream restorations to repair erosion, improve water quality, and enhance habitat. It is not clear that this project falls under the 100% cost participation policy and revising the cost share to 100% would require a minor plan amendment.

On one hand, this reach of Bass Creek, just upstream of Bass Lake, is clearly experiencing erosion and mass wasting, and is clearly exporting sediment and nutrient loading to the lake. On the other hand, the reach is not an Impaired Water for either water quality or biotic integrity and, since it is an intermittent stream, it would be difficult to create habitat that could sustain and enhance aquatic life, although it is clear some habitat improvement could be made. Scharenbroich noted that undertaking and maintaining BMPs will be challenging. Updated estimates set the project cost at \$600,000.

Following discussion, motion by Ray, second by Asche to recommend to the Shingle Creek Commission moving this project forward and proceeding with a Minor Plan Amendment. *Motion carried unanimously*.

IV. NPDES General Permit Application.

City staff within the SCWMC (and other area watersheds) are currently working to determine the changes to the MS4 rules and the implications they have to individual cities and the Commissions. A group of city staff members are working together to determine the best approach to meeting the rules in the most cost-effective way possible. This includes, but is not limited to, working with the West Metro Water Alliance (WMWA) on educational efforts. Scharenbroich and Hogg have been representing the Shingle Creek and West Mississippi Commissions, respectively. *Please refer to the minutes of the SCWM March* 11, 2021 regular meeting, Section IX.D. Education and Public Outreach, for more details.

V. HUC 8 Model Status.

Megow presented an overview of the Shingle Creek model. Hydraulic and hydrologic modeling was completed in EPA-SWMM, allowing for easier updating and more detailed modeling. They were calibrated using two storm events:

SCWM TAC Meeting Minutes March 11, 2021 Page 3



Storm 1: This June 14-18, 2014 event consisted of a 4.33" rainfall event, approximately a 5-year (4.51") event.

Storm 2: This September 17-21, 2018 event consisted of a 6.03" rainfall event, between a 10-year (5.23") and 25-year (6.37") Atlas 14 storm event. Storm 2 was used for the hydraulic calibration as it represented the record USGS (Queen Avenue) discharge

Included in the presentation were the hydraulic results for Shingle Creek, 13 lakes (the Twin Lakes counted as one lake), three ponds and one wetland.

Staff will submit the preliminary floodplain areas and profiles to the Minnesota Department of Natural Resources (MnDNR) for processing and review on March 15-16. The DNR will publish the Preliminary Floodplain Maps for the Federal Emergency Management Agency (FEMA) Review Meeting, April 1. City staffs will work with the Commission and DNR to review and discuss where large rises occur before the Floodplain Areas and Profiles are published and mapped by FEMA.

VI. Wild Wings Western Wetland.

Riegel presented this flood mitigation and drainage improvement project. The project consisted of recreation of a wetland channel and installation of an emergency overflow structure to protect against flooding on a 0.89 acre site located at 5220 Yorktown Lane. The project excavated a depth of about 4 feet of sediment along 2,068 linear feet of the 18-foot-wide channel; 3,100 cubic yards of material were excavated. Permits/approvals were obtained from the US Army Corps of Engineers (USACE), the DNR, the Shingle Creek Commission, and the Wetland Conservation Act (WCA). The project took seven days to complete, including five days of excavation.

VII. Partitioned TMDL Wasteload Allocations.*

The new NPDES permit reapplication requires each MS4 to report their individual wasteload allocations even if approved TMDLs were written using categorical wasteload allocations. Staff's December 17, 2013 memo provides estimated individual wasteload allocations for the approved TMDLs in the Shingle Creek watershed by MS4 along with the dates of TMDL and Implementation Plan approvals. The Shingle Creek Chloride, Twin and Ryan Lakes, Crystal Lake, Pomerleau-Bass-Schmidt Lakes, Meadow Lake, Cedar Island-Pike-Eagle Lakes, Lake Magda, Shingle and Bass Creeks Biotic Integrity and Dissolved Oxygen, and Bass Creek Chloride TMDL partitionings are described in detail in the memo. Spector reported that she has located the SHAPE files associated with this task.

VIII. Other Business.

- **A.** Matthiesen provided an update on four projects:
- **1.** Grant funding has been received, awaiting execution for the Shingle Creek channel stabilization project upstream of Brooklyn Boulevard. Expect design to begin after water recedes from spring snowmelt and contracts are signed.
- **2.** Grant execution is also under way for Bass Creek in Plymouth and design will proceed at the same schedule as the Shingle Creek channel project.
- **3.** The grant execution has been completed for the media installation for the Wetland 639W overflow. An internal design kick-off is scheduled for the last week in March.
- **4.** The Meadow Lake project will occur this fall. Funding was received from the Clean Water Fund. Dewatering will occur in 2022.

SCWM TAC Meeting Minutes March 11, 2021 Page 4



- **B.** Robbinsdale Project. McCoy shared the most recent photo of the Water Treatment Plant construction site.
- **C. Next meeting** 11:30 a.m., Thursday, April 8, 2021, prior to the regular meeting. This will be a virtual meeting.

There being no further business, the meeting was adjourned at 12:46 p.m. Respectfully submitted,

Judie A. Anderson Recording Secretary

Lucie Ashauson

JAA:tim

Z:\Shingle Creek\TAC\2021 TAC\03-11-2021 TAC minutes.docx