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**MINUTES
 Regular Meeting
 November 9, 2017**

(Action by the SCWMC appears in blue, by the WMWMC in green and shared information in black.
 *indicates items included in the meeting packet.)

I. A joint meeting of the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission was called to order by Shingle Creek Chairman Andy Polzin at 12:46 p.m. on Thursday, November 9, 2017, at the Clubhouse at Edinburgh, USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present for Shingle Creek were: David Mulla, Brooklyn Center; John Roach, Brooklyn Park; Burton Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Gary Anderson, Minneapolis; Bill Wills, New Hope; Harold E. Johnson, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Troy Gilchrist, Kennedy & Graven; Ed Matthiesen and Tom Langer, Wenck Associates, Inc.; and Judie Anderson, JASS.

Present for West Mississippi were: David Mulla, Brooklyn Center; John Roach, Brooklyn Park; Gerry Butcher, Champlin; Karen Jaeger, Maple Grove; Harold E. Johnson, Osseo; Troy Gilchrist, Kennedy & Graven; Ed Matthiesen, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present were: David Vlasin and Andrew Hogg, Brooklyn Center; Steve Chesney and Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Rick Lestina, Maple Grove; Shawn Markham, New Hope; Leah Gifford and Ben Scharenbroich, Plymouth; Richard McCoy and Marta Roser, Robbinsdale; and Chris Long, Stantec, for Project SC2017-08.

II. **Agendas and Minutes.**

Motion by G. Anderson, second by Jaeger to approve the **Shingle Creek agenda**. * Motion carried unanimously.

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

Motion by Wills, second by Orred to approve the **minutes of the October regular meeting**. * Motion carried unanimously.

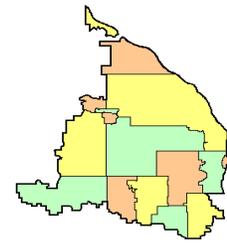
Motion by Butcher, second by Roach to approve the **minutes of the October regular meeting**. * Motion carried unanimously.

III. **Finances and Reports.**

A. Motion by Wills, second by G. Anderson to approve the **Shingle Creek Treasurer's Report**. * Motion carried unanimously.

Motion by Johnson, second by Jaeger to approve the **Shingle Creek November claims**. * Claims totaling \$40,023.52 were approved by roll call vote: ayes – Vlasin, Roach, Orred, Jaeger, G. Anderson, Wills, Johnson, Polzin and Sicora; nays – none.

B. Motion by Jaeger, second by Roach to approve the **West Mississippi Treasurer's Report**. * Motion carried unanimously.



Motion by Butcher, second by Johnson to approve the **West Mississippi November claims**. * Claims totaling \$12,184.70 were approved by roll call vote: ayes – Vlasin, Roach, Butcher, Jaeger, and Johnson; nays – none.

IV. Open Forum.

Roach reported that he observed a **Watershed PREP class** at Oxbow Creek Elementary School. The Educator was Sharon Meister. He suggested that WMWA should consider developing a student take-away to re-enforce the classroom experience.

Langer was queried on the observance of **blue-green algae on Twin Lake**.

V. Project Review.

SC2017-08 New Hope City Hall. * Demolition and construction of New Hope's City Hall, Police Station, City Pool, and associated parking lot, as well as the reconfiguration of park amenities in the project area. The total project area, located at 4401 Xylon Avenue North, is about 19.8 acres in size. A complete project review application was received on October 26, 2017. Following development, the site will be 46% impervious with 9.1 acres of impervious surface, an increase of 1.7 acres.

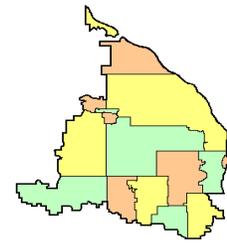
The project is scheduled to take place in phases over the next several years. The first phase will include construction of the new City Hall/Police Department building and minor alterations to the parking lot north of the new City Hall and to the secure parking area and driveway south of the new City Hall. Although roof runoff from the new City Hall/Police Department building will drain north, this permit application only includes a model for drainage to the south (about 3 acres, south of the new City Hall/Police building). Commitments for drainage to the north are discussed below and the model for drainage to the north will be submitted in a future project review.

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 - 80-85% TSS removal and 50-60% TP removal. Commission rules also state that the water quality rule may be met if runoff from a 1.3" event is infiltrated or filtrated. Runoff from about a third of the south drainage area (called South Drainage Area to Xylon) is proposed to be routed to an underground storage tank that filters stormwater before releasing it to the Xylon Avenue storm sewer. Runoff from a 1.3" event in this drainage area will be filtered in the underground storage tank, meeting Commission water quality treatment requirements. The remaining two-thirds of the south drainage area (called South Drainage area to Fire Station) will not treat runoff from a 1.3" event, but very few alterations to this area are proposed, making treatment difficult. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the southern portion of the site is either routed into an underground storage tank that filters stormwater before releasing it to Xylon Avenue storm sewer, or is routed offsite to the south. During the 2-year and 100-year storm events, site runoff is limited to predevelopment rates, meeting Commission rate control requirements. However, during the 10-year event, proposed runoff is greater than existing runoff by about 2 cfs. Because much of the southern drainage area of the site is not being disturbed, the applicant is not able to regulate this increase in runoff. The applicant has sized the proposed storm sewer for this additional runoff and the City of New Hope has stated that the downstream sewer line has the capacity for the additional runoff. The applicant meets the Commission's rate control requirements.

Commission rules require the site to infiltrate 1.0" or filtrate 1.3" of runoff from new impervious area within 48 hours. As discussed above, the applicant meets this requirement for the South Drainage Area to Xylon, but not for the South Drainage Area to Fire Station, due to the lack of changes proposed for the fire station area. The applicant meets Commission volume control requirements.

The NWI identifies a probable wetland on the northern portion of the site. However, Bernie Webber, who serves as the WCA LGU contact for the City of New Hope, stated on October 31, 2017 that this is not a wetland. He said that the area has drainage issues and is purposely flooded in winter for use as a general skating rink, but it is not a wetland.



There are no Public Waters or floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high water elevation of the underground storage tank, and street surface flooding will drain away from the new building, meeting Commission requirements.

An erosion control plan was submitted with the project review, and includes rock construction entrance(s), inlet protection, silt fence and bioroll. The erosion control plan meets Commission requirements.

Several public hearings on the project have been conducted as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

Drainage to the North: The majority of the disturbance will take place in this area. Final designs of this area and the associated HydroCAD model will be submitted to the Commission for review when they are complete. The City's commitments for the northern drainage area design, stated in this application, are as follows:

- Total impervious will be 9.1 acres (an increase from 7.4 acres). A total of 6.1 acres will be treated.
- A HydroCAD model will be developed to ensure proposed runoff rates will not exceed existing runoff rates.
- An underground storage tank will be used to filter, at minimum, the 1.3" event.
- When the underground storage tank capacity is exceeded, water will flow overland to a greenspace that will act as a detention basin.
- The City may include water reuse BMPs.
- The City will evaluate the feasibility of routing runoff from the neighborhood adjacent west (along Zealand Avenue) to the underground storage tank.
- Runoff will be routed to the stormwater pond on 45th Avenue.

Motion by Wills, second by Sicora to advise the City of New Hope that approval of Project Review SC2017-08 is granted with no conditions. *Motion carried unanimously.*

VI. Watershed Management Plan.

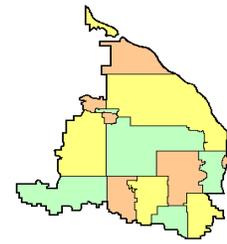
VII. Water Quality.

A. Langer provided an update of the **Twin Lake Carp Management Project**. At this time the following tasks have been completed – estimating the common carp density, tracking their immigration/migration, and locating their spawning and overwintering sites. Estimated carp population in the three Twin Lakes is approximately 15,000. Langer showed aerials of the movement of the carp since January 2017. They showed various amounts of movement throughout the chain, including the wetland, stormwater pond, and Ryan Lake. Flooding events allowed ease of movement in and out of the system. Staff was also able to identify probable wintering locations and possible locations of spawning and recruitment. It was also determined that some fish left the system and some radio tags may have been removed.

The current status of the lakes shows high algal turbidity, limited habitat for fish and waterfowl, degraded vegetation community and sparse submerged vegetation in Upper Twin.

This winter staff will identify the aquatic vegetation response and management options, reduce the carp biomass in the system, and identify ways to prevent/limit recruitment. It is a goal to remove ~8,500 carp or ~11,000 lbs. of carp based on initial population modeling. Barriers will be considered at the France Avenue bridge and at the Bass Lake Road culvert. Winter aeration will occur to prevent winterkill of sunfish and promote their colonization. External recruitment areas remain to be identified.

The next steps include meeting with MnDNR, getting permits/authorizing contracts for the barriers, removing the carp, constructing the barriers/structures, and undertaking vegetation management plan options. An informational meeting for Twin Lake residents will be held on December 13, 2017, at Crystal Community Center.



B. Roser provided an email* with information regarding carp tracking using environmental DNA to estimate population size.

VIII. Education and Outreach.

A. In her November 3, 2017 memo,* Diane Spector, Wenck Associates, provided an update on various education and outreach occurring this month. Included with the memo were the website Google Analytics for October and the Facebook insights for the month for the Shingle Creek and WMWA Facebook pages.

B. The **next WMWA meeting** is scheduled for 8:30 a.m., Tuesday, December 5, 2017, at Plymouth City Hall. Commissioners are encouraged to attend.

C. A flyer promoting “**The Lake Effect: Protecting Water Through Innovative Collaboration,**” a Moos Family Speaker Series event, was included in the meeting packet.

D. Also included in the packet was a flyer for the November 20 “**Winter Maintenance Training for Reduced Environment Impacts: Roads,**” to be held at the City of Plymouth Public Works Facility.

It was noted that large **salt deposits** occur at the 66th and Highway 252 truck turn-around. Matthiesen will contact MnDOT to discuss ways to avoid this occurrence.

IX. Grant Opportunities.

A. Included in the meeting packet were letters of support* from both Commissions for:

1. A proposal submitted to the National Science Foundation by Drs Sanjay Mohanty and Shaily Mahendra entitled “Resilient and sustainable stormwater treatment: Fungal media contaminant removal and in situ filter media regeneration.”

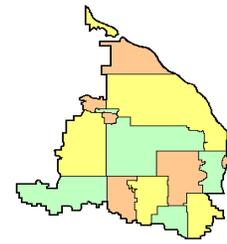
2. A proposal submitted to the National Science Foundation by Drs. Jenny Jay, Sanjay Mohanty, and Shaily Mahendra entitled “Can stormwater biofilters reduce the proliferation of antibiotic resistance genes in urban environments?”

If these proposals are selected for funding by the NSF, the Commissions would collaborate and/or provide filter media samples and water samples as detailed in the Project Descriptions.

B. Matthiesen recounted discussion from the October 26, 2017 Technical Advisory Committee (TAC) meeting where the members met with representatives from the MnDNR. The Federal Emergency Management Agency (FEMA) has awarded the MnDNR a **grant to update the Special Flood Hazard Areas (SFHAs) in the Twin Cities HUC8 watershed.** The scope of the grant depends on individual river reaches, but in most cases includes

- 1.** Updated hydrology, either through modeling or use of statistical methods
- 2.** Updated river hydraulics and/or volume analyses
- 3.** Creating the floodway and floodplain shapefiles and x-section shapefiles
- 4.** Creating depth grids
- 5.** Development of Work Maps
- 6.** A project narrative describing the above activities

Pass-through grants can be provided so that watershed organizations can complete some or all of these tasks. FEMA would like to leverage existing data wherever possible so Twin Cities WMOs within the HUC8 watershed are being approached to see if they have any data that can support this effort. Since leveraged data will reduce overall project cost, WMOs that can provide data will be offered remaining funds allotted for that watershed to be used for such activities as flood risk reduction or communication activities. Total funds for each HUC10 watershed have been established between FEMA and the DNR. The cost estimates are based on MnDNR staff developing new hydrologic and hydraulic models using HEC-HMS and HEC-RAS, delineating all floodplains and x-section shapefiles, and developing the depth grids.



Wenck staff will put together a scope of work and cost estimate for consideration by the Commissions at their December meeting.

X. Communications.

A. October Communications Log.*

B. Gifford recounted the presentation she gave to the **Bass Lake Improvement Association** on October 2, 2017, about the proposed alum treatment project. Most folks were generally in favor of the project. The biggest concern was a long-term vegetation management plan.

XI. Adjournment.

There being no further business before the Commissions, the meetings were adjourned at 2:14 p.m.

Respectfully submitted,



Judie A. Anderson
Recording Secretary

JAA:tim+

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