I. A meeting of the **Technical Advisory Committee (TAC)** for the Elm Creek Watershed Management Commission was convened at 10:00 a.m., Wednesday, September 13, 2017, in the Mayor’s Conference Room, Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN.

In attendance were: Todd Tuominen, Champlin; Kevin Mattson, Corcoran; Mark Lahtinen, Maple Grove; Kaci Fisher, Hakanson-Anderson, Medina; Andrew Simmons, Rogers; James Kujawa and Jason Swenson, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Diane Spector and Jeff Strom, Wencck Associates; and Judie Anderson, JASS.

Not represented: Dayton and Plymouth.

Also present: Sharon Meister, Corcoran; Doug Baines, Dayton; Elizabeth Weir, Medina; Catherine Cesnik, Plymouth; and Steve Christopher, Board of Water and Soil Resources (BWSR).

II. The focus of this meeting is the **Rush Creek Headwaters Subwatershed Assessment project**. The members reviewed water quality and map book data, discussed problems and issues, reviewed and discussed tools and models strategies, and discussed public participation and input process.

A. **Background.**

The Elm Creek Watershedwide TMDL, approved in 2016, cited Rush Creek as impaired for low dissolved oxygen (DO), *E. coli*, and fish and invertebrate IBI (Index of Biotic integrity). There are two lakes within the Rush Creek subwatershed, Henry and Jubert. The former was found to be impaired for nutrients; the latter, while not assessed, is likely impaired for nutrients as well. The most probable causes for the Stressor ID are altered hydrology, excess sediment, excess phosphorus (invertebrates), and low DO (fish).

B. **Study Area.**

The study area includes a portion of Rush Creek, which the TMDL refers to as Rush Creek but the Third Generation Plan refers to as North Fork Rush Creek. Various maps depicted the location of the study area, including lakes, streams, and ditches; land cover; and land use.

C. **Historic Water Quality Data** (at monitoring site RC2.1)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Status</th>
<th>Critical Flow Condition</th>
<th>Critical Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissolved Oxygen (DO)</td>
<td>Impaired 60% exceedance</td>
<td>All conditions</td>
<td>June-Sept</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>Impaired 92% exceedance</td>
<td>All conditions</td>
<td>All (June-Sept)</td>
</tr>
<tr>
<td>Ortho-phosphorus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen</td>
<td>Not impaired – generally low</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><em>E. Coli</em></td>
<td>Impaired 39% exceedance</td>
<td>All conditions</td>
<td>June-Oct</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>Not impaired 11% exceedance</td>
<td>High (runoff) Low (algae)</td>
<td>May-Oct</td>
</tr>
</tbody>
</table>
D. 2017 Longitudinal Surveys

<table>
<thead>
<tr>
<th>From RC7.2 to RC4.2</th>
<th>From RC4.2 to RC2.1</th>
<th>At TRIBo.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO increases</td>
<td>DO decreases</td>
<td>DO moderate</td>
</tr>
<tr>
<td>TSS and TP increased (storms)</td>
<td>TSS decreases</td>
<td>TSS (storms) is high</td>
</tr>
<tr>
<td><em>E. coli</em> was similar</td>
<td>Particulate P decreases</td>
<td>TP is high</td>
</tr>
<tr>
<td></td>
<td>Dissolved P increases</td>
<td><em>E. coli</em> is high</td>
</tr>
<tr>
<td>RC7.2 is located on Rush Creek at Lake Independence Regional Trail (CR19)</td>
<td>RC2.1–Rush Creek at Trail Haven Rd. (long-term TRPD mon. site)</td>
<td>TRIB0.6–unnamed tributary to Rush Creek at 97th Ave. N. (CR30)</td>
</tr>
<tr>
<td>RC4.2–Rush Creek at Oakdale Drive</td>
<td>RC2.0–Rush Creek at 10th Ave. N.</td>
<td></td>
</tr>
</tbody>
</table>

E. Additional information. Included in Wenck’s presentation were the following:

1. Map showing the large wetland located between RC4.2 and RC2.1.
2. RUSLE. The Revised Universal Soil Loss Equation which provides annualized soil loss from rill and inter-rill erosion. Estimates amount of soil loss and sediment delivery off the land.
3. Map showing probable tile drained areas.
4. Map showing a preliminary analysis of the upper study area field and subsurface sources, in-line wetlands settling particulates and consuming DO, and movement from particulate to dissolved issues.

F. Tools and Strategies described included:

1. ACPF – Agricultural Conservation Planning Framework. Model inputs are lidar, soils, land use. Practices could include grassed waterways, contour buffer strips, nutrient removal wetlands, water and sediment control basins, tile drain water level control structures, and stream buffers.
2. PTMAApp – prioritize, target, measure. Model inputs are lidar, soils, land use, precipitation. Practices that could be considered include storage, filtration, biofiltration, infiltration, protection and source reduction.
3. Available data will be gleaned from the 2007 Elm Creek Channel Study and the 1999-2000 Dindorf-Meisbauer walking assessment. More information will be gathered by field inspection and possibly the use of a drone.

G. What we don’t know.

1. Stream condition details.
3. Livestock management.
4. In-field management.
5. Drainage management.
6. Septic system locations.
7. Names of key landowners. Create fact sheet to send to landowners to begin conversations. What other agencies should we invite to help promote our issues?

H. Next steps.

1. Apply tools.
2. Gather local information.
3. Resident participation, public input.

Four TAC/Commission meetings, two small group meetings, and one public meeting are anticipated. Create mapbooks for TAC members.
The meeting of the Elm Creek Watershed Management Commission Technical Advisory Committee was adjourned at 11:32 a.m.

---

**III. A regular meeting** of the Elm Creek Watershed Management Commission was called to order at 11:41 a.m., Wednesday, September 13, 2017, in the Mayor’s Conference Room, Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN, by Chairman Doug Baines.

Present were: Bill Walraven, Champlin; Sharon Meister, Corcoran; Doug Baines, Dayton; Joe Trainor, Maple Grove; Elizabeth Weir, Medina; Fred Moore, Plymouth; Kevin Jullie, Rogers; James Kujawa and Jason Swenson, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Jeff Weiss, Barr Engineering; and Judie Anderson, JASS.

Also present: Todd Tuominen, Champlin; Kevin Mattson, Corcoran; Mark Lahtinen, Maple Grove; Catherine Cesnik, Plymouth; and Andrew Simmons, Rogers.

A. Motion by Walraven, second by Moore to approve the **revised agenda.** Motion carried unanimously.

B. Motion by Weir, second by Walraven to approve the **minutes** of the August 9, 2017 regular meeting. Motion carried unanimously.

C. Motion by Walraven, second by Jullie to approve the September **Treasurer’s Report and Claims** totaling $16,691.83, including a check in the amount of $1,000.00 to the Freshwater Society for educational sponsorships. Motion carried unanimously.

**IV. Open Forum.**

Catherine Cesnik, the new Alternate Commissioner from the City of Plymouth, introduced herself to the members.

*The regular meeting was suspended at 11:45 a.m.*

**V. Public Hearing.**

On April 12, 2017, the Elm Creek Watershed Management Commission, upon recommendation of the Technical Advisory Committee, approved a motion to move forward with a Minor Plan Amendment (MPA) to its Third Generation Watershed Management Plan to revise the Capital Improvement Program (CIP). The MPA would revise Table 4.5 of the Commission’s Third Generation Plan CIP in order to add two projects, remove one project, and shift funding on four existing projects to future years. These new projects and project updates were submitted by the member cities. Following a public meeting conducted by the Commission on May 10, 2017, the Commission adopted Resolution 2017-01 Adopting a Minor Plan Amendment.

Doug Baines, representative from Dayton and Commission chair, was present at a meeting of a Committee of the Hennepin County Board on June 20, 2017, to answer questions regarding the amendment. The County Board approved the Minor Plan Amendment and adopted a 2017 maximum levy of $437,500 for the Elm Creek Commission on June 27, 2017.

The projects for which the levy will be certified are:

- Project 2017-01 Fox Creek Streambank Stabilization Project Phase 3 $112,500
- Project 2017-03 Mill Pond Fishery and Habitat Restoration $250,000
- Project 2017-04 Rain Garden at Independence Avenue $75,000

The Commission called for a public hearing to be held on September 13, 2017 to consider the three
projects. Member cities and the County have been notified and notice has been duly published. The purpose of the public hearing is to present the proposed projects and proposed financing and to take comment from the member cities and the public.

[The public hearing was opened at 11:47 a.m.]

No comments were received from the reviewing agencies. No comments were received from the member cities.

[The public hearing was closed at 11:49 a.m.]

A brief discussion was conducted by the Commissioners.

Motion by Weir, second by Walraven to adopt Resolution 2017-02 Ordering the 2017 Improvement Projects ... and Designating Commission Cost-Share Funding.* Mot ion carried unanimously.

Motion by Moore, second by Weir to approve the Cooperative Agreements with the cities of Champlin and Rogers contingent upon review by their respective attorneys. Motion carried unanimously.

[The regular meeting resumed at 11:51 a.m.]

VI. Action Items.

A. Project Review 2017-004 Cartway Trail Wetland Replacement Plan, Champlin.* A complete application was received on June 8, 2017 and noticed per Wetland Conservation Act (WCA) requirements. The original application has been revised to conform to the WCA Technical Evaluation Panel (TEP) recommendations to further minimize impacts and provide a minimum of 1:1 replacement ratio within the Elm Creek Watershed. Impacts have been reduced from 2,172 SF to 375 SF and 2:1 mitigation will be rectified by the purchase of bank credits in Minnetrista. Updated plans also reduced floodplain impacts to 20 CY which will be replaced by a rain garden/bio-filter basin being constructed below the floodplain elevation on the north side of the creek. Motion by Moore, second by Walraven to approve the TEP’s recommendation pending BWSR’s approval of the purchase of the bank credits or receipt of a comparable escrow. Motion carried unanimously. Tuominen noted that the City will pursue the purchase agreement and will not proceed with the work until confirmation is received.

B. Project Review 2017-016 Territorial Woods, Maple Grove.* This is a 21-acre site located at 13763 and 14033 Territorial Road. The north property line is Territorial Road and the south line is CR 81. The Elm Creek Park Reserve is across Territorial Road from this project. The developer is proposing to construct a 98-unit apartment building and 69 townhome units. Staff review is for compliance to the Commission’s rules D, E and I. The deadline for a decision on this project was extended to September 14, 2017 by the applicant. Staff has reviewed revised plans and recommends approval contingent upon receipt of an O & M agreement meeting the Commission’s rules. Motion by Weir, second by Walraven to approve Staff findings in their report dated August 25, 2017. Motion carried unanimously.

C. Project Review 2017-019 Medina Senior Community, Medina.* The applicant proposes to construct a senior living facility and medical facility on a 10.8-acre parcel located between Mohawk Drive and Willow Drive, with access from Chippewa Road. The project proposes to disturb 6.0 acres and adds 3.4 acres of new impervious surfaces. Staff is reviewing the site for compliance with rules D, E, G, and I. Updated plans were submitted August 28 in response to previous site reviews and comments from the wetland TEP meeting that resulted in reduced wetland impacts. In their findings dated September 6, 2017.
Staff recommends the Commission approve the site subject to six conditions.

   Motion by Weir, second by Walraven to approve Staff’s recommendations.  Motion carried unanimously.

D.  Project Review 2017-034 Plymouth Memory Care, Plymouth.* This project is a new senior living facility located on a 4.7 acre parcel located northwest of CR 101 and Medina Road.  The project will replace one single-family home located on the site.  Stormwater, grading and erosion control plans were submitted for review.  Motion by Moore, second by Weir to approve Staff’s findings dated August 30, 2017, conditioned upon identifying the party responsible for the O&M Plan.  Motion carried unanimously.

VII.  New Business.

VIII.  Grant Opportunities and Updates.

A.  Internal Phosphorus Loading Control in Fish Lake project.  The contract agreement to award the bid to HAB Aquatic Solutions has been signed by the Elm Creek Commission and Three Rivers Park District.  HAB will be receiving a letter awarding the bid with the contract agreement this week.  After they return the contract agreement with signature, they will receive a notice to proceed with the project.

   1.  HAB Aquatic Solutions has already prepared transects for the alum application on the lake and the Alum Treatment is still planned to begin on September 18.  It is estimated that the treatment will continue throughout the week and be completed on September 22.  The treatment application will be weather dependent.

   2.  The public access will be closed the entire week for the alum treatment.  There are no restrictions with water contact recreational activities (boating, swimming, tubing, water skiing, and fishing).  However, it is recommended that boating activity near the treatment barge occur at a minimum.

   3.  Three Rivers Park District is doing a study in collaboration with the University of Wisconsin to determine the binding capacity of phosphorus due to the alum application.  The objectives of the project are to:

      a.  Determine the Al:P binding ratio of newly-formed Al(OH)3 that has been exposed to peak hypolimnetic P using sediment traps deployed shortly before Al application,

      b.  Examine the extent of hypolimnetic P removal as a result of the Al application, and

      c.  Monitor vertical variations in total Al, mobile P, and Al-bound P in the sediment column and rates of P release from sediment several months after treatment.

   The results from this research study will provide beneficial information that may change the way we do alum treatments in the future for other lakes.  In addition, the study will estimate the alum binding capacity of phosphorus attributed to the alum treatment, and will assist with determination of alum dosage required for the second alum treatment on Fish Lake scheduled in 2019.

B.  Rush Creek Headwaters Subwatershed Assessment project.  See TAC minutes, beginning on page 1.

C.  Kujawa announced that the Hennepin County Good Steward Grant application period is open from September 19 to November 3, 2017.  Good steward grants are primarily for smaller projects that improve water quality, enhance natural areas and promote environmental stewardship in the community.  A typical grant amount is $5,000 to $15,000, with a maximum amount of $25,000.  Landowners, including individuals, non-governmental organizations, local government agencies, non-profit organizations and businesses in Hennepin County, are eligible to apply.  A 25% match is required.
IX. Education.

A. **Watershed PREP.** The educators are teaching and scheduling classes. So far, ten schools have been scheduled. The educators will be sending letters to the cities soliciting their support of the program in the schools within their boundaries.

B. **Native Plant Sales/Pledge to Plant.** The pledge to plant campaign has received 541 pledges to date. Area pledged to plant in natives is 37.7 acres. WMWA members discussed adding to the metrics native buffer areas planted as wetland buffers as part of development projects.

C. The next **WMWA meeting** is scheduled for 8:30 a.m., Tuesday, October 10, 2017, at Plymouth City Hall. Commissioners are encouraged to attend.

X. Communications.

XI. Other Business.

A. The following **projects** are discussed in the September Staff Report.* ("W" denotes wetland project.)

2. 2014-015 Rogers Drive Extension, Rogers.
3. 2015-004 Kinghorn Outlet A, Rogers.
5. 2015-020 Strehler Estates, Corcoran.
6. 2015-030 Kiddigarten Child Care Center, Maple Grove.
7. 2016-002 The Markets at Rush Creek, Maple Grove.
8. 2016-004 Park Place Storage Site Plans, Corcoran.
9. 2016-005W Ravinia Wetland Bank, Corcoran.
10. 2016-014 Balsam Apartments, Dayton.
12. 2016-019 Just for Kix, Medina.
14. 2016-022 AutoZone, Maple Grove.
15. 2016-026 Faithbrook Church, Dayton.
16. 2016-038 AutoMotorPlex, Medina.
17. 2016-039 Fields at Meadow Ridge, Plymouth.
19. 2016-047 Hy-Vee Maple Grove #1, Maple Grove.
20. 2016-052 The Woods at Rush Creek, Maple Grove.*
22. 2017-004W Cartway Trail, Champlin.*
23. 2017-008 TH169 Reconstruction, Champlin.
24. 2017-013W 20417 Larkin Road, Corcoran.
25. 2017-014 Laurel Creek, Rogers.
27. 2017-017 Mary Queen of Peace Catholic Church, Rogers
28. 2017-019 Medina Senior Living Community, Medina.*
30. 2017-021 Hindu Society of MN Staff Housing, Maple Grove.
31. 2018-022 CSAH81 and CSAH101 and 13 Intersection Improvements, Rogers.
32. 2017-023 Midwest Steel Supply, Rogers.
33. 2017-024 Lil Explorers Daycare, Rogers.*
34. 2017-025 Grading by Ground Storage, Rogers.
35. 2017-027W Mill Pond Restoration, Champlin.
36. 2017-028W Fehn Meadows Wetland Bank, Corcoran.*
37. 2017-029 Brayburn Trails, Dayton.*
38. 2017-030 Brindle Path, Medina.
39. 2017-031 Bass Lake Crossing, Corcoran.
40. 2017-032W Rachel Development Wetland Delineation, Corcoran.*
41. 2017-033W Jeff Schalo Wetland Exemption, Corcoran.
42. 2017-034 Plymouth Memory Care, Plymouth.*
43. 2017-035 Weston Woods of Medina PUD.
44. 2017-036 Enclave at Elm Creek, Plymouth.
45. 2017-037 L-80 Lift Station MCES, Corcoran.
46. 2017-038 Bass Lake Estates, Corcoran.

B. Adjournment. There being no further business, motion by Weir, second by Walraven to adjourn. Motion carried unanimously. The meeting was adjourned at 12:59 p.m.

Respectfully submitted,

Judie A. Anderson, Recording Secretary
JAA:tim