

elm creek Watershed Management Commission

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March 7, 2018

Representatives
Elm Creek Watershed Management
Commission Hennepin County, MN

*The meeting packets may be found on the
Commission's website:*
[http://elmcreekwatershed.org/minutes--
meeting-packets.html](http://elmcreekwatershed.org/minutes--meeting-packets.html)

Dear Representatives:

A **regular meeting** of the Elm Creek Watershed Management Commission will be held on **Wednesday, March 14, 2018, at 11:30 a.m.** in the Mayor's Conference Room at Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN.

Please email Tiffany at tiffany@jass.biz to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.

Regards,



Judie A. Anderson
Administrator
JAA:tim
Encls: Meeting Packet

cc: Alternates
Joel Jamnik
TRPD

HCEE
Diane Spector
Clerks

BWSR
Met Council
Official Newspaper

MPCA
DNR

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AGENDA March 14, 2018

1. Call Regular Meeting to Order.
 - a. Approve Agenda.*
2. Consent Agenda.
 - a. Minutes last Meeting.*
 - b. Treasurer's Report and Claims.*
3. Open Forum.
4. Action Items.
 - a. Project Reviews – *see Staff Report*.*
5. New Business.
6. Water Quality.
 - a. TRPD extensive stream monitoring (\$7,600), and one DO longitudinal survey (\$1,000).
 - b. Three Rivers Park District 5-Year Cooperative Agreement.*
 - c. Floodplain Modeling Proposal.*
7. Grant Opportunities and Updates.
 - a. Fish Lake Internal Phosphorus Loading Control.
 - b. Rush Creek Headwaters Subwatershed Assessment.*
 - c. Watershed-Based Funding Pilot Update.*
 - d. 319 Grant Application–Nutrient Reduction through Better Lawn Maintenance*–Fortin Consulting.
8. Education.
 - a. Education and Outreach Update.*
 - b. Metro Blooms Workshops.*
9. Watershed Management Plan.
 - a. Maple Grove Local Surface Water Management Plan.*
10. Communications.
 - a. 2017 Work Plan in Review - final.*
 - b. 2018 Work Plan - final.*
11. Project Reviews – *also see Staff Report*.*
12. Other Business.
 - a. Election of officers. Nominees are

1) Doug Baines, Dayton, Chair	2) Liz Weir, Medina, Vice Chair
3) Bill Walraven, Champlin, Secretary	4) Fred Moore, Plymouth, Treasurer.
 - b. Annual Appointments.
 - 1) Official newspaper – *Osseo-Maple Grove Press*.
 - 2) Official depositories - *US Bank and the 4M Fund*.
 - 3) Deputy Treasurer - *Judie Anderson*.
 - 4) Auditor - *Johnson & Company, Ltd*.
13. Adjourn.

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A = Action item E = Enclosure provided I = Informational update available at meeting RPFI - removed pending further information R = Will be removed
 removed RP= Information will be provided in revised meeting packet..... D = Project is denied AR awaiting recordation *in meeting packet
 **available at meeting

CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

Project Reviews. (See Staff Report. *)						
a.					2013-046	Woods of Medina, Medina.
b.					2014-015	Rogers Drive Extension, Rogers.
c.					2015-004	Kinghorn Outlet A, Rogers.
d.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
e.					2016-002	The Markets at Rush Creek, Maple Grove.
f.					2016-004	Park Storage Place, Corcoran.
g.					2016-005W	Ravinia Wetland Bank Plan, Corcoran.
h.				AR	2016-026	Faithbrook Church, Dayton.
i.					2016-040	Kinghorn 4th Addition, Rogers.
j.					2016-047	Hy-Vee Maple Grove #1 (Hy-Vee Maple Grove North).
k.				AR	2016-052	The Woods at Rush Creek, Maple Grove.
l.				AR	2017-014	Laurel Creek, Rogers.
m.				AR	2017-016	Territorial Woods, Maple Grove.
n.				AR	2017-017	Mary Queen of Peace Catholic Church, Rogers.
o.				AR	2017-019	Medina Senior Living Community, Medina.
p.				AR	2017-021	Hindu Society of MN Staff Housing, Maple Grove.
q.				AR	2017-029	Brayburn Trails, Dayton.
r.					2017-030	Brindle Path, Medina.
s.					2017-031	Bass Lake Crossing, Corcoran.
t.				AR	2017-034	Plymouth Memory Care, Plymouth.
u.					2017-035	Weston Woods PUD, Medina.
v.					2017-036	Enclave at Elm Creek, Plymouth.
w.				AR	2017-037	Corcoran L-80 Lift Station MCES Project 808520, Corcoran.
x.					2017-038	Bass Lake Estates, Corcoran.
y.					2017-039	Rush Creek Apartments, Maple Grove.
z.					2017-044	Reserve at Medina 2nd Addition, Medina.
aa.					2017-045	Fish Lake Estates, Maple Grove.
ab.					2017-046W	Wessell Property Wetland Delineation, Corcoran.
ac.					2017-048W	Ebert Parcel Wetland Delineation, Corcoran.
ad.					2017-049W	Rolling Hills Wetland Delineation, Corcoran.
af.					2017-050W	Ernie Mayer Wetland/floodplain violation, Corcoran.
ag.				AR	2017-051	Mallard South 2nd Addition, Rogers.
ah.					2017-053	Sunrise Solar, Corcoran.
ai.				AR	2018-001	Rush Creek Commons, Maple Grove.
aj.					2018-002	Mill Pond Pedestrian Trail and Bridge, Champlin.
ak.	A	E			2018-003	Rathburn Driveway, Rogers.
al.					2018-004	Rush Creek Restoration, Maple Grove.
am.		E			2018-005	Sundance Greens, Dayton.
an.		E	R		2018-006	6270 Hunter Road, Corcoran.
ao.		E			2018-007	Copper Creek of Nottingham, Maple Grove.
ap.					2018-008	Hayden Hills Golf Course, Dayton.
aq.					2018-009	Plymouth NW Greenway Trail Phase IV, Plymouth.
ar.						
as.						

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Item 02a

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Technical Advisory Committee and Regular Meeting Minutes February 14, 2018

I. A meeting of the **Technical Advisory Committee (TAC)** for the Elm Creek Watershed Management Commission was convened at 9:31 a.m., Wednesday, February 14, 2018 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; Rick Lestina and Mark Lahtinen, Maple Grove; Kaci Fisher, Hakanson-Anderson, Medina; Ben Scharenbroich, Plymouth; Andrew Simmons, Rogers; James Kujawa, Jason Swenson, and Kirsten Barta, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Jeff Weiss, Barr Engineering; and Judie Anderson, JASS.

Not represented: Dayton.

Also present: Sharon Meister, Corcoran; Doug Baines, Dayton; Catherine Cesnik, Plymouth; and Jeff Strom, Wenck Associates.

II. Motion by Scharenbroich, second by Kujawa to **approve the agenda**. *Motion carried unanimously.*

Motion by Scharenbroich, second by Lestina to **approve the minutes** of the December 13, 2017 TAC meeting. *Motion carried unanimously.*

[Mattson arrived 9:43 a.m.]

III. Rush Creek Subwatershed Assessment.

Strom presented an update on the assessment project. Included in the meeting packet were the following:

A. A map* of the assessment study area showing **resident attendance** at the Open House held on December 7, 2017 at Corcoran City Hall. Concerns expressed at the meeting related to streambank erosion, buffers, culverts, heavy tree downfalls/debris in the creek, drainage, and flooding, the latter two being of most concern. Private ditches had more issues, mostly related to upstream problems such as sediment from fields, drain tiling, and hydrology alteration. Will need to determine if cities/the County have policies regarding any of these issues.

B. A map* of refined BMPs in the **South Tributary Management Unit**. Map shows location of refined BMPs identified using the agricultural conservation planning framework (ACPF).

C. Spreadsheet* showing **structural BMP cost-benefit analysis** for South Tributary Management Unit. BMPS illustrated include grassed waterways, saturated buffers, wetland restorations, and alternate tile intakes (ATIs). Query: runoff risk sediment delivery risk – is this a high-medium-low runoff risk area?

[Barta arrived 10:56 a.m.]

Non-structural BMPs include such things as feedlot/pasture/manure management, fertilizer application, education and outreach, urban BMPs, and cropping practices such as no-till, conservation tillage, and cover crops.

A draft final report will be ready for review in April.

IV. Commission Cost Share Policy.

At their December 13, 2017 meeting, the Commissioners discussed the “cap” on the maximum annual levy for

Capital Improvement Projects (CIPs). It was noted that, according to the Commission's current Cost Share Policy which was adopted in 2012, the cap is \$250,000/project, \$500,000/year. The current CIP,* which was amended in 2017, shows estimated costs for projects anticipated to be levied in 2018/payable 2019 are \$1,395,250. While some 2018 projects may be reassigned to future years, others will most probably be added and the costs of some existing projects may increase. Commissioners and TAC members were encouraged to discuss this possible action with their city personnel/councilors.

Plymouth indicated they were okay with a raise in the annual cap to \$750,000. Maple Grove said they would like to maintain the cap at \$500,000. Rogers indicated they would probably not be in favor of an increase. Medina misunderstood the intent and will go back to their Council for direction. Motion by Scharenbroich, second by Simmons to table action on this topic to the next TAC meeting so that all member cities can be polled. *Motion carried unanimously.*

V. Capital Improvement Program.

A. The members reviewed the CIP spreadsheet (*Table 4.5_2017 with 2018 submittals_Rev2*).*

1. Stone's Throw Wetland (line 31) has been moved from 2018 to 2019.
2. Hickory Drive Stormwater Improvement, Medina, (line 37) has been added in 2019.
3. Southeast Corcoran Wetland Restoration, Corcoran, (line 38) has been added in 2019.
4. Downtown Regional Stormwater Improvement, Corcoran, (line 39) has been added in 2019.

Motion by Kujawa, second by Scharenbroich to recommend to the Commission approval of the revisions listed above. *Motion carried unanimously.*

[Tuominen arrived 11:10 a.m.]

Tuominen requested that four additional projects be added to the CIP:

5. Elm Creek Stream Restoration Phase III, Champlin, (new line 40) to be added in 2018.
6. Downs Road Trail Raingarden, Champlin, (new line 41) to be added in 2018/2019.
7. Elm Creek Stream Restoration Phase IV, Champlin, (new line 42) to be added in 2019
8. Lowell Pond Raingarden, Champlin, (new line 43) to be added in 2019.

Motion by Kujawa, second by Scharenbroich to recommend to the Commission approval to add the four Champlin projects to the CIP. *Motion carried unanimously.*

B. Projects were reviewed for timeliness and some construction dates adjusted. Generic projects were extended out to the 2020-2024 timeframe. As a result \$500,000 in projects will be considered for levy funding in 2018/payable 2019. Motion by Kujawa, second by Lestina to recommend to the Commission the following five projects for levy funding pending receipt and approval of feasibility studies and adoption of a Minor Plan Amendment updating the CIP:

1. Rush Creek Main Stem Stream Restoration (line 16), Maple Grove, \$75,000
2. Elm Creek Stream Restoration Reach D (line 18), Plymouth, \$212,500
3. Mill Pond Gardens (line 30), Champlin, \$100,000
4. Elm Creek Stream Restoration Phase III (line 40), Champlin, \$100,000
5. Downs Road Trail Rain Garden (line 41), Champlin, \$12,500

Motion carried unanimously.

VI. Draft Manure Management Model Ordinance/Policy.

Barta reported that she will have a draft of the ordinance/policy available to send to the member cities for review and comment prior to the April 11 TAC meeting.

VII. Aquatic Vegetation Management.

In the years prior to 2010 the Shingle Creek Watershed Management Commission received final approval for 13 lake TMDLs and Implementation Plans. One of the goals the Commission set for itself was to undertake reviews of these implementation plans to evaluate progress toward achieving the state TMDL goals every five years following adoption of

the respective Implementation Plans. Along with follow-up lake monitoring one component of the five-year reviews was meetings with the affected cities and local lake property owners to hear their comments regarding the work done by the Commission and others in and around the lakes.

One discussion that usually came up was, while improvements were made to the lake, oftentimes the results included increased vegetation, whether it be native “good” plants or invasive “bad” plants. Residents were concerned that they were losing the clear open space they were expecting to accommodate access to the lake as well as recreational enjoyment. They also expected the Commission to “fix it.”

The Shingle Creek Commission is now considering a **vegetation management policy*** that would protect water quality and ecologic integrity. Members of the Commissions’ Technical Advisory Committee advised the Commission that perhaps such a policy should be more metro-wide in scope since all of its member cities also are members of neighboring watersheds and it would be beneficial that the policy of each WMO be similar, if not the same. The Commissioners requested that Staff contact other WMOs with which they work to present the draft policy as a very preliminary draft for consideration. The draft policy is included in the meeting packet for the members’ review and comment.

VIII. The meeting of the Technical Advisory Committee was adjourned at 11:30 a.m. The TAC will reconvene on Wednesday, April 11, 2018.

I. A **regular meeting** of the Elm Creek Watershed Management Commission was called to order at 11:42 a.m., Wednesday, February 14, 2018, 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; Victoria Reid, 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.

Not represented: Maple Grove.

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

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

B. Motion by Walraven, second by Jullie to approve the **minutes*** of the January 10, 2018, regular meeting. *Motion carried unanimously.*

C. Motion by Moore, second by Walraven to approve the February **Treasurer’s Report and Claims*** totaling \$52,620.20. *Motion carried unanimously.*

II. Open Forum.

III. Action Items.

A. Project Review 2018-001 Rush Creek Commons, Maple Grove.* This project is located on a 9.13-acre site at the southwest intersection of CSAH 10 and 101. It is part of the Markets at Rush Creek PUD and is proposed for 82 townhomes, creating 4.68 acres of new impervious area. Staff review was for consistency with the Commission’s approvals for the Markets at Rush Creek PUD stormwater management plan (project 2009-004) and for compliance with the Commission’s Third Generation Stormwater Management Plan Appendix O, Rules and Standards. Staff recommends approval of site plans dated January 25, 2018, contingent upon meeting the Commission’s operation and maintenance requirements on the stormwater facilities. Motion by Moore, second by Walraven to approve this project subject to Staff’s recommendation. *Motion carried unanimously.*

B. Motion by Moore, second by Jullie to approve the **2018 Cooperative Agreement with Hennepin county Environmental Services** in an amount not to exceed \$120,000 – \$110,000 for Technical Services and \$10,000 for Volunteer Monitoring Services. *Motion carried unanimously.*

C. Motion by Moore, second by Jullie to approve the **2017 Work Plan in Review** pending comments received by February 23, 2018. *Motion carried unanimously.*

D. Motion by Moore, second by Jullie to approve the draft **2018 Work Plan** pending additional comments received by March 1, 2018. *Motion carried unanimously.* Item 12 referring to the Plymouth Home Expo will be stricken.

E. Motion by Moore, second by Walraven to approve the **2018 Blue Thumb Partner Agreement** with a partner fee of \$500.00. *Motion carried unanimously.*

IV. Technical Advisory Committee (TAC) Update. *(Also refer to pages 1-3 of these minutes.)*

A. Jeff Strom, Wenck Associates, provided an update on the **Rush Creek Subwatershed Assessment**. The TAC reviewed a map of the assessment study area showing resident attendance at the December Open House and a map showing refined BMPs in the South Tributary Management Unit along with a spreadsheet showing the structural BMP cost-benefit analysis for that area. A draft final report will be available for review in April.

B. Not all cities have responded to the question as to whether the **annual capital improvement project cost-share cap** for levied projects should be adjusted higher or remain the same (\$500,000). Members will go back to their cities to request responses by the time of the April TAC meeting.

C. A total of seven new projects were recommended to the Commission for addition to the Capital Improvement Program. They are listed in Section V.A. on page 2 of these minutes. Motion by Walraven, second by Jullie to approve the addition of the seven projects. *Motion carried unanimously.*

The five projects listed in Section V.B. on page 2 of these minutes are recommended for levy funding in 2018/payable 2019 pending receipt and approval of feasibility studies and adoption of a Minor Plan Amendment. [On February 26, 2018 Steve Christopher, BWSR, confirmed that the updates to the CIP could go forward as a Minor Plan Amendment upon concurrence of the County. On February 27, 2018, Karen Galles concurred per MN Rule 8410.0140 Subp 2 C.] The Minor Plan Amendment will require a public meeting, to be held as part of the May 9, 2018 meeting.

D. A draft of the **manure management ordinance/policy** will be transmitted to the member cities for review and comment prior to the April 11 TAC meeting.

E. At their next meeting the TAC will review a draft of a lake **vegetation management policy** forwarded by the Shingle Creek Watershed Management Commission. It is being considered as a possible basis for a metro-wide policy since Hennepin County WMOs have many member cities in common.

V. New Business.

A. **Citizen Assisted Lake Monitoring Program (CAMP) Survey.** Last summer Metropolitan Council conducted a survey of CAMP sponsors and volunteers to gather feedback on the program. Surveys were sent to 30 sponsor organizations and 121 volunteers. Responses were received from 21 organizations and 45 individuals, respectively. The survey results* are included in the meeting packet.

A common comment was that the timeliness of reports and availability of finalized data needs to improve greatly. In order to respond to this comment, changes will be implemented to improve the efficiency of three CAMP processes – kit restocking, delivery and pick-up; pick-up of samples and monitoring forms and delivering them to the lab; and volunteer training. Some of the proposed changes should result in an improved rate of volunteer participation, improved maintenance of the monitoring kits, and will include an updated CAMP price structure. The survey cover letter* outlines 11 items which describe the proposed revised program. These revisions will begin in 2019 along with an increase in the cost of monitoring 14 events from \$550 to \$760 and a \$55 increase to \$225 in the cost of purchasing a monitoring kit.

B. **2018 CAMP Monitoring.** The 2018 budget includes \$720 for CAMP monitoring. The cost to monitor one lake is \$550. Motion by Walraven, second by Moore to monitor Henry and Jubert Lakes and to take money remaining in the 2017 Contingency budget to pay the difference in cost-to-budget (\$380). *Motion carried unanimously.*

C. **2018 TRPD Lake Monitoring.** The 2018 budget includes \$3,300 to monitor the sentinel lakes – Fish,

Diamond, Weaver and Rice Main Basin – plus \$825 for one additional lake, and \$1,100 to perform one vegetation survey. It was a consensus of the Commission that this monitoring be done and that the vegetation survey would be conducted on Diamond Lake.

D. 2018 Stream Monitoring. The 2018 budget includes \$24,900 to continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS). Both grab samples and storm runoff samples are collected and analyzed for various parameters at that site. It was agreed by consensus of the Commission that this monitoring continue.

E. 2018 TRPD Stream Monitoring. The 2018 budget includes \$7,600 for extensive stream monitoring and \$1,000 for one DO longitudinal survey. Water quality monitoring will occur at three sites. This item will be discussed further at the March meeting and the 2018-2023 Cooperative Agreement with TRPD will also be considered for approval at that time. Scharenbroich noted that Plymouth will continue to monitor Elm Creek for flow and nutrients in 2018.

VI. Grant Opportunities and Updates.

A. Internal Phosphorus Loading Control in Fish Lake project. The *2017 Annual Progress Report** was included in the meeting packet. It describes the activities that occurred in 2017 as well as the monitoring that will take place in 2018 in anticipation of the second alum treatment.

B. Rush Creek Headwaters Subwatershed Assessment project.*

1. Expected February-March 2018 Activities:

- (February 2) a. Meet with Core Team to review prioritization scheme and BMP costs and removals
- b. Meet with TAC in February to review prioritized BMPs (February 14)
- c. Apply prioritization scheme to the other five management units, estimate cost and removals
- d. Draft report
- e. Identify potential focus group participants

2. Expected April 2018 Activities:

- a. Meet with Core Team to review draft report and identified BMPs
- b. Meet with TAC in April to review draft report and identified BMPs
- c. Meet with focus group to review draft report and identified BMPs

VII. Education.

The next **WMWA meeting** is scheduled for 8:30 a.m., Tuesday, March 13, 2018, at Plymouth City Hall.

VIII. Communications.

IX. Other Business.

A. Motion by Moore, second by Walraven to nominate the existing officers to serve in 2018. *Motion carried unanimously.* **Election of officers** will take place at the March meeting.

B. Tuominen provided an update on the **Champlin Mill Pond project**. He stated that the City is applying for LCCMR grant funding and requested that the Commission provide a **letter of support**. His request was agreed to by consensus.

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

- 1.** 2013-046 Woods of Medina, Medina.
- 2.** 2014-015 Rogers Drive Extension, Rogers.
- 3.** 2015-004 Kinghorn Outlet A, Rogers.
- 4.** 2015-030 Kiddiegarten Child Care Center, Maple Grove.
- 5.** 2016-002 The Markets at Rush Creek, Maple Grove.
- 6.** 2016-004 Park Place Storage Site Plans, Corcoran.

7. 2016-005W Ravinia Wetland Bank, Corcoran.
8. 2016-026 Faithbrook Church, Dayton.
9. 2016-040 Kinghorn 4th Addition, Rogers.
10. 2016-047 Hy-Vee Maple Grove #1, Maple Grove.
11. 2016-052 The Woods at Rush Creek, Maple Grove.
12. 2017-014 Laurel Creek, Rogers.
13. 2017-016 Territorial Woods, Maple Grove.
14. 2017-017 Mary Queen of Peace Catholic Church, Rogers
15. 2017-019 Medina Senior Living Community, Medina.
16. 2017-021 Hindu Society of MN Staff Housing, Maple Grove.
17. 2017-029 Brayburn Trails, Dayton.
18. 2017-030 Brindle Path, Medina.
19. 2017-031 Bass Lake Crossing, Corcoran.
20. 2017-034 Plymouth Memory Care, Plymouth.
21. 2017-035 Weston Woods of Medina PUD.
22. 2017-036 Enclave at Elm Creek, Plymouth.
23. 2017-037 L-80 Lift Station MCES, Corcoran.
24. 2017-038 Bass Lake Estates, Corcoran.
25. 2017-039 Rush Creek Apartments, Maple Grove.
26. 2017-044 Reserve at Medina 2nd Addition, Medina.
27. 2017-045 Fish Lake Estates, Maple Grove.
28. 2017-046W Wessell Wetland Delineation, Corcoran.
29. 2017-048W Ebert Parcel Wetland Delineation, Corcoran.
30. 2017-049W Rolling Hills Wetland Delineation, Corcoran.
31. 2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran.*
32. 2017-051 Mallard South 2nd Addition, Rogers.
33. 2017-052 John Meister Wetland Exemption, Corcoran.
34. 2017-053 Sunrise Solar Garden, Corcoran.
35. 2018-001 Rush Creek Commons, Maple Grove.*
36. 2018-002 Highway 169 Pedestrian Bridge/Trail, Champlin.
37. 2018-003 Rathburn Property, Rogers.
38. 2018-004 Rush Creek Restoration Project, Maple Grove.
39. 2018-005 Sundance Greens, Dayton.

D. Adjournment. There being no further business, motion by Moore, second by Walraven to adjourn the meeting. *Motion carried unanimously.* The meeting was adjourned at 12:50 p.m.

Respectfully submitted,



Judie A. Anderson, Recording Secretary

JAA:tim

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STAFF REPORT

March 7, 2018

2013-046 Woods of Medina, Medina. This is two parcels totaling 9.5 acres located east of CR 116 and south of Hackamore Road. The site is proposed to be developed into 16 single-family residential lots. On January 13, 2015, the Commission approved this project with two conditions. Although this project has not been constructed, it is still active with the City of Medina and remains approved by the Commission until it becomes inactive with the City.

2014-015 Rogers Drive Extension, Rogers. This project involves improvements along Rogers Drive from Vevea Lane to Brockton Lane. The project is located east of I-94, south of the Cabela development. The total project area is 8.0 acres; proposed impervious surfaces total 5.6 acres. Site plans received July 1, 2014 meet the requirements of the Commission with the exception of the nutrient control. Due to limited options to treat the nutrient loads on the east 1.7 acre portion of Rogers Drive, the Commission approved the site plan contingent upon the City deferring 4.6 lbs. of phosphorus for treatment in future ponding opportunities as the easterly corridor of Rogers Drive develops. 2.3 lbs. will be accounted for in the Kinghorn Spec. Building site plan with 2.3 lbs. still outstanding. This item will remain on the report until the total deferral is accounted for.

2015-004 Kinghorn Outlot A, Rogers. This is a 31 acre site located between the Clam and Fed Ex sites in Rogers on the west side of Brockton Road and I-94. The proposed site will have two warehouse buildings, 275,000 and 26,000 SF in size, with associated parking and loading facilities. The Commission standards require review of stormwater management, grading and erosion controls and buffers. In June 2015 the Commission approved this project with three conditions. Revisions have yet to meet the Commission's approval conditions. This project was extended by the City of Rogers earlier this year. It will remain active on the Staff Report.

2016-002 The Markets at Rush Creek, Maple Grove. This is a proposal to develop 40 acres of a 123-acre planned unit development located in the southwest quadrant of the intersection of CSAH 101 and CSAH 10. County Ditch 16 (Maple Creek) runs along the south property line on this project. The 40-acre project area includes a Hy-Vee grocery store (16.8 acres), a Hy-Vee gas station (2.5 acres) and 11 outlots (18.76 acres). Right-of-way accounts for 2.3 acres. The remaining acreage (83 acres) consists of 5 outlots and right-of-way. The additional outlot areas are not part of the stormwater review for this project but will be reviewed for compliance with the Commission's buffer and floodplain requirements. In May 2016 the Commission granted Staff authority to administratively approve the project and report any updates. This project has been placed on hold by Hy-Vee. As long as it remains active with the City, the Commission's approval with conditions remains in place. A temporary pipe to drain excess water on the west side of CSAH 101 will be installed by the City of Maple Grove through this site. The permanent pipe was installed under CSAH 101 at the time the road was constructed in 2007, but it was bulk headed on both ends of the ROW. This is being completed because a new development in the northwest corner of this intersection is being considered by the City. (See project 2017-039.)

2016-004 Park Place Storage Site Plans, Corcoran. The applicant is developing a 22-acre site in the southwest portion of the city into a multi-unit storage facility with associated access roads, utilities, and stormwater features. This is an addition to the existing storage facility located west of the proposed project. New wetland permit revisions were approved by the Commission at their July 2016 meeting. New site plan information was received and approved by the Commission in October 2016. All approval contingencies have been met with the exception of wetland banking withdrawals for 0.24 acres from bank account #15560. Staff gave the applicant 45 days (until November 17, 2017) to secure the additional 0.24 acre

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credits. The applicant has requested some additional time to secure these credits due to a specific bank site expected to be certified by BWSR in the next 60 days. Staff approved the request. They are working toward an agreement with the Murray Ball Wetland Bank in Greenfield.

2016-005W Ravinia Wetland Replacement Plan, Corcoran. In February 2016, Lennar Corporation submitted a Wetland Banking Concept Plan for Phase II of the Ravinia Development. This plan was withdrawn in favor of an onsite wetland replacement plan. At their December 2016 meeting the Commission approved Staff's findings and recommendations dated January 10, 2017. Final wetland impacts will be 1.22 acres. Wetland credits created on site will be 4.01 acres. Excess credits of 0.11 acres are proposed to be used on Lennar's Laurel Creek development in Rogers (2017-014). All contingency items that were part of Commission's approval have been met. Construction on the site began last spring. Vegetation planting and management took place throughout 2017. Barr Engineering will provide monitoring to ensure the replacement meets the performance standards of the approved plans. Monitoring will begin in 2018.

2016-040 Kinghorn 4th Addition, Rogers. This is a 13.7-acre parcel located in the northwest corner of the intersection of Brockton Lane and Rogers Drive. An industrial warehouse with 8.8 acres of new impervious area is proposed for the site. The plan includes the use of a NURP pond and a biofiltration basin to meet Commission requirements for rates, water quality and abstraction. The adjacent site is likely to be developed in the near future and some of the stormwater features were oversized to accommodate future development. In November 2016 the Commission approved the project conditioned on: 1) approval of only this phase; future phases will need additional review and approval; 2) final modifications to the hydrologic modeling; 3) additional details are provided for a proposed water re-use system; 4) an O&M Plan for the pond and biofiltration basin is completed and recorded on the final plat; 5) modification of the storm sewer system to maximize the area draining to the NURP pond; and 6) receipt and review of wetland-related documentation if wetlands are present. Condition #1 required no action, so has been met. Condition #2 has been met for the current design; however, any future design modifications will require additional review. Conditions #3-6 remain outstanding and are expected to be addressed during final design. Staff has discussed the project with the City and been in contact with the project engineer to receive an update, but no new information has been provided.

2016-047 Hy-Vee North Maple Grove. The applicant is proposing to disturb 13 acres of a 20.4-acre site located at the northeast corner of Maple Grove Parkway and 99th Avenue for the purpose of constructing a grocery store, fuel station, convenience store and parking facilities. Staff sent preliminary review comments and requested revisions on December 14. In their findings dated January 10, 2017, Staff recommended approval of this project subject to 1) receipt, approval, and recordation of an Operations and Maintenance Plan for the pond and the iron-enhanced filtration system, 2) revisions for items relating to buffer requirements and erosion and sediment control as enumerated in the findings, and 3) receipt of a signed and dated final plan set. The Commission approved Staff's recommendations at their January 11, 2017 meeting with the additional requirement that the Commission receive and comment on a WCA impact notice. No new information has been received to date.

2017-030 Brindle Path, Medina. This is a 40-acre site proposed for 68 single family lots. It is located just north of the Polaris Headquarters. Staff provided preliminary comments to the City. This item will remain on the report as a placeholder until an application is received.

2017-031 Bass Lake Crossing, Corcoran. This is two parcels, 48.5 total acres, located north of the intersection of CR 10 and Larkin Road. M/I Homes is proposing to develop the two parcels into 97 single-family residential homes. As proposed, the project will require 0.3303-acre of jurisdictional wetland fill within 5 separate wetland locations. The review will be for compliance with the Commission rules D, G, and I. The Commission approved this project and wetland replacement plan per Staff and TEP recommendations at their November 2017 meeting. All the contingent recommendations have been met. A \$75,000 escrow has been placed with the Commission until all the wetland credits have been purchased per the approved wetland replacement plan.

2017-035 Weston Woods, Medina. This is an 80-acre townhome development located northeast of Chippewa Road and Mohawk Drive. Staff will provide preliminary comments to the City and this item will remain on the report as a placeholder until plans are received.

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2017-036 Enclave at Elm Creek, Plymouth. This is a 73-acre parcel located on CSAH 101 and Prairie Creek Road, about 3/4 miles north of TH 55. The property will be developed into 111 residential lots and a new school site. Stormwater, grading and erosion control plans were submitted for the residential portion of the property. Only stormwater management plans for the future school site were submitted for review. The residential portion of this development looks good. But, a large component of the stormwater management (2.1 lbs/year of phosphorus removals and 46,452 CF of abstraction) for this 73-acre area is dependent on construction of the school site on the south 1/3 portion of the property. The school site grading and stormwater management system was provided as a concept only. Staff is working with the City of Plymouth to provide assurance to the Commission that the limiting stormwater components will be handled by the City if the school site is not constructed to meet Commission standards. An alternative to meet the Commission's requirements has been proposed, but not preferred by the applicant. The applicant and City agreed to an escrow submittal in lieu of meeting the City and Commission's stormwater management requirements at this time. The escrow will be held until the applicant meets said requirements or the school site is developed. This item was approved by the Executive Committee of the Commission in October 2017. It will remain on the report until the stormwater management requirements are met by the school district or the applicant.

2017-038 Bass Lake Estates, Corcoran. This is a proposed residential development consisting of 55 single family lots and one commercial lot on a 40-acre site. The project is located west of the intersection of Bass Lake Road (CR 10) and CR 101. Fifty-five villa-style homes are proposed for the residential portion of the site and a storage facility is proposed for the commercial portion of the site. The Commission will review this site for conformance to rules D, E, F, and I. A revised set of plans was submitted on February 14, 2018. *Staff will present this item with a recommendation at the March meeting.*

2017-039 Rush Creek Apartments, Maple Grove. This project is located in the southwest quadrant of the intersection of Bass Lake Road (CSAH 10) and Troy Lane (CSAH 101). The project area is 8.2 acres in size and includes two phases of construction. Phase I is 236 apartment units on 6.0 acres located on Lot 1, Block 1, Southwest Crossroads 2nd Addition. Phase II is a future 76-unit apartment building located on 2.2 acres in Outlot C of this development. The Commission will review this project for conformance to rules D, E and I. Findings with no recommendations dated November 15, 2017, were provided to the applicant and City. The applicant requested and was granted an extension of the deadline (per MN statute 15.99) to December 31, 2018.

2017-044 Reserve at Medina 2nd Addition, Medina. An erosion control review of the plans for the final buildout of this addition of the Reserve at Medina project originally approved under permit #2013-002. This addition is located southeast of Hackamore Road and Pinto Drive (CR116), immediately east of the First Addition, and will allow for the construction of 46 new single-family homes. The plans are in conformance with the previously approved project, and require small modifications in order for Staff to complete its administrative review. Staff has not received updated plans as of this date and will be checking in with the applicant.

2017-045 Fish Lake Estates, Maple Grove. This is a small subdivision located at the intersection of the Weaver Lake Road entrance ramp to east bound I94 and Fish Lake Road East. The application is considered incomplete because the Commission has not received authorization from the City to proceed with its review. The City has concerns with the lot layout, wetland impacts and stormwater management. No new information has been received as of this report.

2017-046W Wessell Property Wetland Delineation, Corcoran. This is a wetland delineation received for the Commission's review and decision for a 155-acre site located in the northwest quadrant of Hackamore Road and CSAH 116. The WCA application notice has been issued. The application is considered incomplete at this time. Staff met with the delineator on the site and walked the wetland boundaries. Staff requested additional historic aerial photo reviews and the complete report prior to a final decision. Neither have been received.

2017-048W Ebert Parcel Wetland Delineation, Corcoran. This application was submitted without a final delineation report and is considered incomplete. The applicant requested the LGU look at the site prior to freeze up. Once a final report is received Staff will notice the delineation and move forward with the application.

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2017-049 Rolling Hills Road Wetland Delineation, Corcoran. This application was submitted without the final delineation report and is considered incomplete. The applicant requested the LGU look at the site prior to freeze up. Once a final report is received Staff will notice the delineation and move forward with the application.

2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran. It came to the Commission's attention that a potential wetland violation occurred on four parcels in Corcoran. All appear to be operated by Mayer. An initial site inspection appears to confirm the wetland violation. An access road was constructed from Larkin Road into these parcels. The road appears to be constructed in MN Wetland Conservation Act jurisdictional wetlands within the Rush Creek floodplain. A Technical Evaluation Panel (TEP) met onsite on December 11 to advise the Local Government Unit (the Commission) as to the extent of any violation and the development of a restoration order for any violation that has occurred on this site. An informational meeting with the TEP and applicant was held on January 30, 2018. Once conditions permit in the spring, additional site work will be done to determine the extent of the wetland fill and other impacts from the work.

2017-053 Sunrise Solar Garden, Corcoran. The project proposes to construct a 5 Megawatt Solar Facility on an 80-acre site located northwest of the intersection of County Roads 50 and 19. Staff met with the applicant prior to the application to discuss the site on December 20. The project proposes to place solar panels across much of the site, including through several lower quality wetlands and their associated buffers. Otherwise, the site proposes minimal grading to install the panels and associated infrastructure. At their January meeting the Commission approved this project contingent that 1) stormwater easements and buffers are provided over all stormwater features on the site, including a stipulation that no other structures other than the proposed solar panels are allowed for installation in the buffers and wetlands, that 2) an approved O & M agreement is recorded on the land title within 90 days after City approval, and that 3) final signed plans be submitted by the applicant's engineer.

2018-002 Highway 169 Pedestrian Bridge/Trail, Champlin. This project proposes the construction of a multi-modal pedestrian trail adjacent to the TH 169 corridor, along with several other improvements including parking improvements in two locations, changing the location of a boat launch proposed in permit 2017-027W, and modifying an existing trail. The total project area includes nearly 6 acres of disturbance. Impacts to the floodplain are part of the project, with both floodplain fill and mitigation being provided as part of the project. *Staff will present this item with a recommendation at the March meeting.*

2018-003 Rathburn Property, Rogers. This project is an existing 40-acre parcel located at the south terminus of Tilton Trail. The applicant is proposing to install a driveway and future home site along the northerly edge of the property, *creating 0.5 acres of new impervious area. In addition, he is requesting a wetland no-loss certificate for excavating and enhancing two wetland basins on his property. This work will include vegetation removal, excavation, wetland expansion through grading and a water control structure, drain tile removal and a long term vegetation management program. There will be no floodplain impacts. Wetland buffers and grading/erosion controls meet the Commission's standards so Staff administratively approved the application. Staff findings and recommendations dated February 9, 2018 are included in the meeting packet. This item will be removed from the report.*

2018-004 Rush Creek Restoration Project, Maple Grove. The City is proposing to restore 2,400 feet of Rush Creek just north of Territorial Road adjacent to the Enclave on Rush Creek development. This is within the Three River Parks corridor that was obtained when the development was platted. It is being reviewed for compliance to the Commission's grading and floodplain requirements.

2018-005 Sundance Greens, Dayton. This site consists of 7 parcels that total 310 acres. Approximately half is the Sundance Golf course and the other half is agricultural land. The applicant is proposing a long term, phased residential development with 665 residential units while maintaining a portion (9 of the 18 holes) of the golf course. Total new impervious area will be 71 acres. The site will be reviewed for Commission Rules D, F, and I. *Staff's review and findings are attached. Because the plans do not meet the Commission's requirements no recommendations were given. The decision deadline per MN 15.99 is April 3, 2018.*

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2018-006 6270 Hunter Road, Corcoran. *This is an existing lot that a home is being moved to. A driveway for access will cross the road ditch on Hunter Road. The application requested and staff granted, a no-loss wetland certificate for an incidental wetland fill of 711 SF. Staff will also approve a floodplain fill and mitigation plan for 3 cubic yards. This item will be removed from the report.*

2018-007 Copper Creek of Nottingham, Maple Grove. *This is a 4.03 acre in-fill project in the Nottingham development section of Maple Grove. It is located about ¼ mile northeast of the intersection of Nottingham Parkway at Bass Lake Road along 73rd Place/Xene Lane Cul-de-sac. Nine (9) new single family residential lots are proposed. The current site plans dated February 12, 2018 do not meet the Commission's standards for water quality, abstraction and erosion controls. The review and findings were sent to the City and applicant on March 6th. The decision deadline per MN Statute 15.99 is April 21, 2018.*

2018-008 Hayden Hills Golf Course Subdivision, Dayton. *This is an 85 acre golf course that is proposed to be developed into 238 single family residential lots. Site plans were received March 1 and have not been reviewed as of this update. If available, Staff's review and recommendations will be provided to the Commission at their meeting.*

2018-009 NW Greenway Trail, Phase IV, Plymouth. *This section of the Plymouth NW Greenway Trail is a boardwalk and trail that will cross a portion of the Elm Creek floodplain that is adjacent to Peony Lane near Wayzata High School. Staff will review for compliance to the Commission's floodplain and erosion control requirements. Site plans were received March 1 and have not been reviewed as of this update. If available, Staff's review and recommendations will be provided to the Commission at their meeting.*

FINAL RECORDINGS ARE DUE ON THE FOLLOWING PROJECTS:

2015-030 Kiddiegarten Child Care Center, Maple Grove. Approved December 9, 2015. If the City of Maple Grove does not take over the operation and maintenance of the underground system and the sump catch basins, an O&M agreement for the underground trench/pond system must be approved by the Commission and the City and recorded with the title.

2016-026 Faithbrook Church, Dayton. Approved August 10, 2016, with the stipulation that an approved O&M plan be recorded with the property within 90 days following final plat approval. Per his August 31, 2017 email, Jason Quisberg has indicated that construction is significantly complete, although some vegetation establishment remains. The City still has an escrow in place which will be held until the maintenance agreement is finalized and recorded. *The City reported on March 7, 2018, that their last communication with the applicant was on December 1, 2017. They sent another request on March 7.*

2016-052 The Woods at Rush Creek, Maple Grove. At their March 2017 meeting, the Commission approved Staff's findings and recommendations dated February 15, 2017. Outstanding items are the biofiltration pond, O & M plans, and recording.

2017-014 Laurel Creek, Rogers. At their June 14, 2017 meeting the Commission approved Staff findings dated June 13, 2017, in which they recommended approval of this project with four conditions. All contingency items have been provided with the exception of the O&M agreement which is being negotiated by the City as to whether the City or the HOA will be responsible for the operation and maintenance of the stormwater management facility. In his August 31, 2017 email, Andrew Simmons responded that the O&M agreement is still being negotiated.

2017-016 Territorial Woods, Maple Grove. Approved at the September 13, 2017 Commission meeting contingent upon receipt of an O & M agreement meeting the Commission's rules. The agreement was approved by the City and is in the process of being recorded.

2017-017 Mary Queen of Peace Catholic Church, Rogers. At their June 14, 2017 meeting the Commission granted Staff

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approval authority pending satisfactory compliance with Staff's findings dated June 16, 2017. All items from the findings have been completed with the exception of the O&M agreement for the stormwater facilities. In his August 31, 2017 email, Andrew Simmons responded that he has the O&M agreement in hand, just awaiting recordation.

2017-019 Medina Senior Community, Medina. This item was approved at the Commission's September 2017 meeting subject to conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. *On March 2, 2018, city staff reported that the applicant is anticipated to be recording documents and starting construction in the spring.*

2017-021 Hindu Society of MN, Maple Grove. At their June 14, 2017 meeting, the Commission approved this project per Staff's recommendations. All the recommendations have been met with the exception of the O&M plan agreements.

2017-029 Brayburn Trails, Dayton. At their August 2017 meeting the Commission approved Staff's findings dated August 2, 2017 with five conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. *On March 7, 2018, the City reported: Final plat approval has not been granted, easements will be recorded as plats are approved. Ponds will be maintained by the City of Dayton. An agreement, and additional easement, will be required for a water re-use system within one of the ponds (between the City and HOA). This system is not part of the first addition – the timing of said improvements/agreement is unknown. Construction is expected to start in 2018.*

2017-034 Plymouth Memory Care, Plymouth. This project was approved by the Commission at its September 2017 meeting subject to the receipt of an O&M agreement acceptable to the Commission. *On March 2, 2018, city staff reported that this project has not received final approval of plans from the City and they have not heard from the applicant in awhile.*

2017-037 Corcoran L-80 Lift Station, Corcoran. Staff recommended the Commission approve this project contingent upon the project meeting the Commission wetland buffer requirements. This item was approved by the Executive Committee of the Commission in October 2017. Revised plans meet the Commission's buffer requirements with the exception of the final easement recordings. *On March 6, 2018, city staff informed the Commission that they are working with a land surveyor and will complete the recordings before construction is completed.*

2017-051 Mallard South 2nd Addition, Rogers. The Commission approved this project at their January 2018 meeting. The only remaining condition for final approval is the easement and O&M plan recordings on the bio-filtration basin.

2018-001 Rush Creek Commons, Maple Grove. Approved at the February 14, 2018 meeting contingent upon meeting the Commission's operation and maintenance requirements on the stormwater facilities, i.e., all ponds and biofiltration basins must have drainage and utility easements and operation and maintenance agreements over them. These must be recorded on the property title and a copy of the recordings must be provided to the Commission within 90 days after final plat approval.

LOCAL PLANS

Maple Grove Draft Surface Water Management Plan. Staff reviewed the City of Maple Grove's Draft Surface Water Management Plan dated January 2018 (received on January 26, 2018) for conformance with the Commission's 3rd Generation Watershed Management Plan and per MN Statutes 103B and Minnesota Rules 8410. Correspondence to the City is attached in this month's packet.

HENNEPIN COUNTY

A letter is going out to 4,000 rural and large lot residential landowners in Hennepin County to remind them of what SWCD services are available.

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Rathburn Driveway and Wetland Grading **Rogers, Project #2018-003**

Project Overview: This project is an existing 40 acre parcel located at the south terminus of Tilton Trail. Mr. Rathburn is proposing to install a driveway and future home site along the northerly edge of the property, creating \pm 0.5 acres of new impervious area. In addition, he is requesting a wetland no-loss certificate for excavating and enhancing two wetland basins on his property. This work will include vegetation removal, excavation, wetland expansion through grading and a water control structure, drain tile removal and a long term vegetation management program. The Commission rules require review for grading, erosion and sediment controls, floodplain and wetland buffers.

Applicant: Jim Rathburn, 23541 Birch Circle, Rogers, MN 55374. Phone: 612-867-0907.
Email: jrathburn@hsiotech.com.

Agent: Wenck Associates, Wes Boll, 1800 Pioneer Creek Center, P.O. Box 249, Maple Plain, MN 55359. Phone: 763-476-4283. Email: wboll@wenck.com

Exhibits:

- 1) Preliminary Grading Plan-Driveway by Otto Associates, dated September 29, 2017 with most recent revision of December 8, 2017
 - a. Sheet 1 of 3, Preliminary Grading Plan-Driveway
 - b. Sheet 2 & 3 of 3, Stormwater Pollution Prevention Plan and Narrative.
- 2) Rathburn Wetland Restoration Concept Plan by Wenck Associates, dated December 27, 2017.
- 3) MN Joint Permit Application, Rathburn Property Restoration and Habitat Improvement Project, by Wenck Associates, dated December 2017, signed January 5, 2018.

Findings:

- 1) A complete application was received January 25, 2018. The initial 60-day decision period per MN Statute 15.99 expires March 26, 2018.
- 2) The Commission's Rules and Standards (appendix O of the stormwater management plan) requires a review based on Rule E, Erosion and Sediment Control, Rule F, Floodplain Alteration, and Rule I, Buffer Strips.
- 3) New impervious areas are ~0.5 acres. This project does not require a stormwater management plan and does not impact floodplains or wetlands and thus can be administratively approved by staff.

Rule E, Grading, Erosion & Sediment Control. Site plans meet the Commission Rule.

- 4) This project will grade approximately 3.6 acres. Approximately 1.0 acre for the driveway and house pad, with the remaining in the wetland basins and adjoining areas.
 - a. Erosion and sediment controls for the driveway/home grading consist of perimeter silt fence, inlet protection with bio-rolls, a rock construction entrance, rip-rap at pipe outlets and erosion control blankets at critical areas.
 - b. The SWPPP Plan and Narrative provides the necessary construction sequencing, inspection and maintenance of BMP's, pollution prevention and final stabilization measures.
 - c. No erosion and sediment controls are provided on the wetland restoration plan sheet. Because this work is self-contained plus temporary and permanent stabilization are addressed in both the SWPPP and wetland restoration permit, staff believes this will be adequate for control.
- 5) It is hard to discern on the existing topography plans, where the overflow to wetland B/pond 2 actually occurs. Based on topography, wetland B/pond 2 appears to overflow at 935.5±. The LiDAR maps show this same approximate elevation to the west, south and north. The wetland delineation report shows it overflowing to the south into wetland F. If it does overflow to the south during high water conditions, the road construction will block this natural overflow path. We recommend the actual low point be determined by a survey. If the pond 2 overflow elevation is shown to flow south, an overflow pipe with the invert elevation constructed at the overland flow elevation should be added to connect wetlands B and F. In lieu of this, just installing a pipe under the new driveway at or below 935.5 to connect the two wetlands during high flows would be adequate.

Rule F, Floodplain Alteration. No floodplain alteration is proposed on this site.

- 6) The large wetland complex in the SE corner of this site is a designated floodplain by the ECWMC in their 1974 flood study and by FEMA in the November 2016 updates. FEMA has it listed as a Zone A with no base flood elevation (BFE) determined. The ECWMC has it listed as upland flood basin #3 with a BFE of 928.6 (1929 NGVD).
- 7) No work is proposed within the floodplain zone A or below the BFE of 928.9 (1988 NAVD)

Rule I, Buffer Strips. The site plans proved for 25' buffers and monumentation around all wetlands per the Commission rule.

- 8) The City of Rogers is the LGU in charge of administering the 1991 MN Wetland Conservation Act on this parcel.
 - a. A wetland delineation was submitted and approved by the City of Rogers in 2016. These boundaries are shown on the current site plans.
 - b. An application for a wetland no-loss certificate for excavating and enhancing two wetland basins on this property is being considered by the City at this time. This work will include vegetation removal, excavation, wetland expansion through grading and a water control structure, drain tile removal and a long term vegetation management program to enhance and restore the two wetland basins.
- 9) The Commission standard requires an average 25' buffer with a minimum of a 10' buffer around all the wetlands on this site. Site plans provide for the standard.

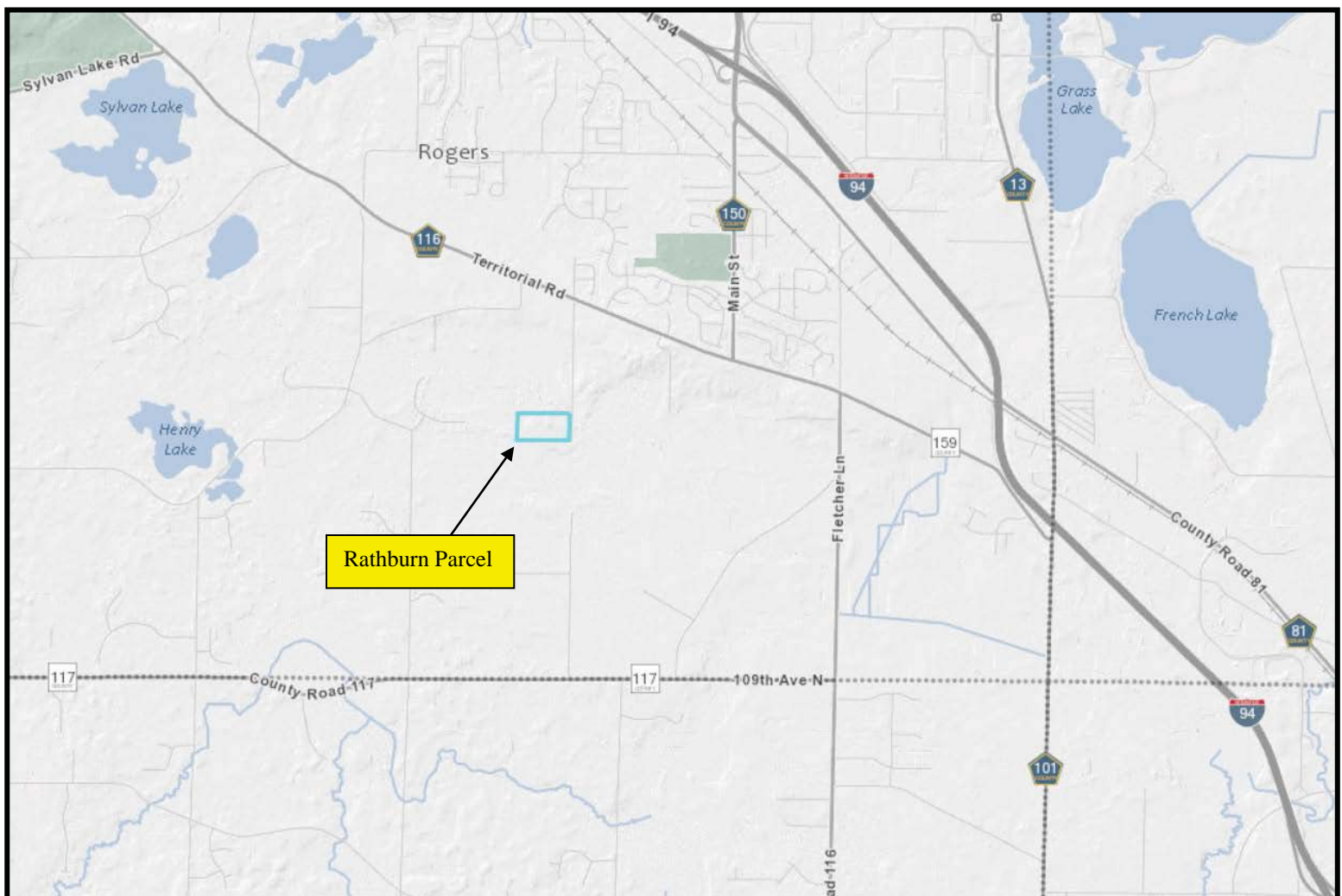
Decision: Approved pending City of Rogers final approvals.

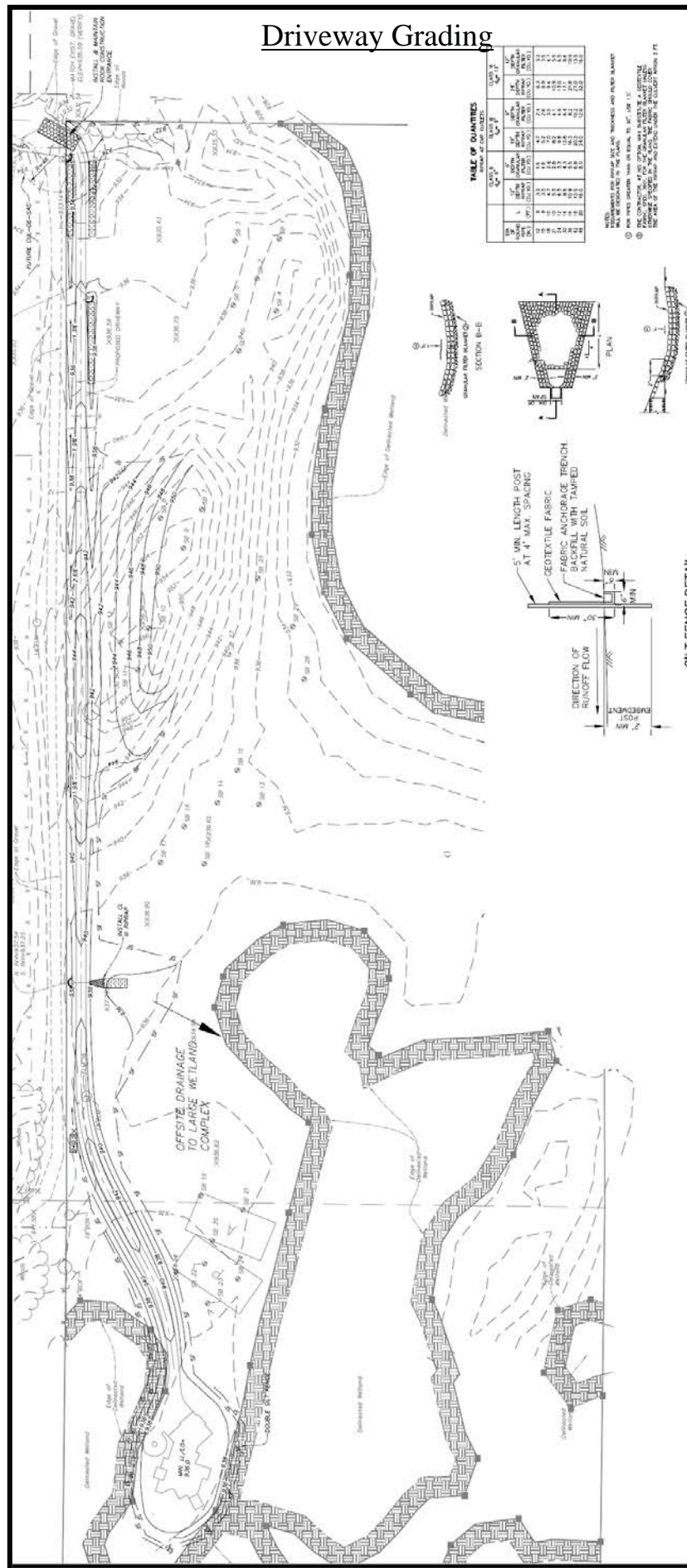
Hennepin County
Department of Environment and Energy
Advisor to the Commission

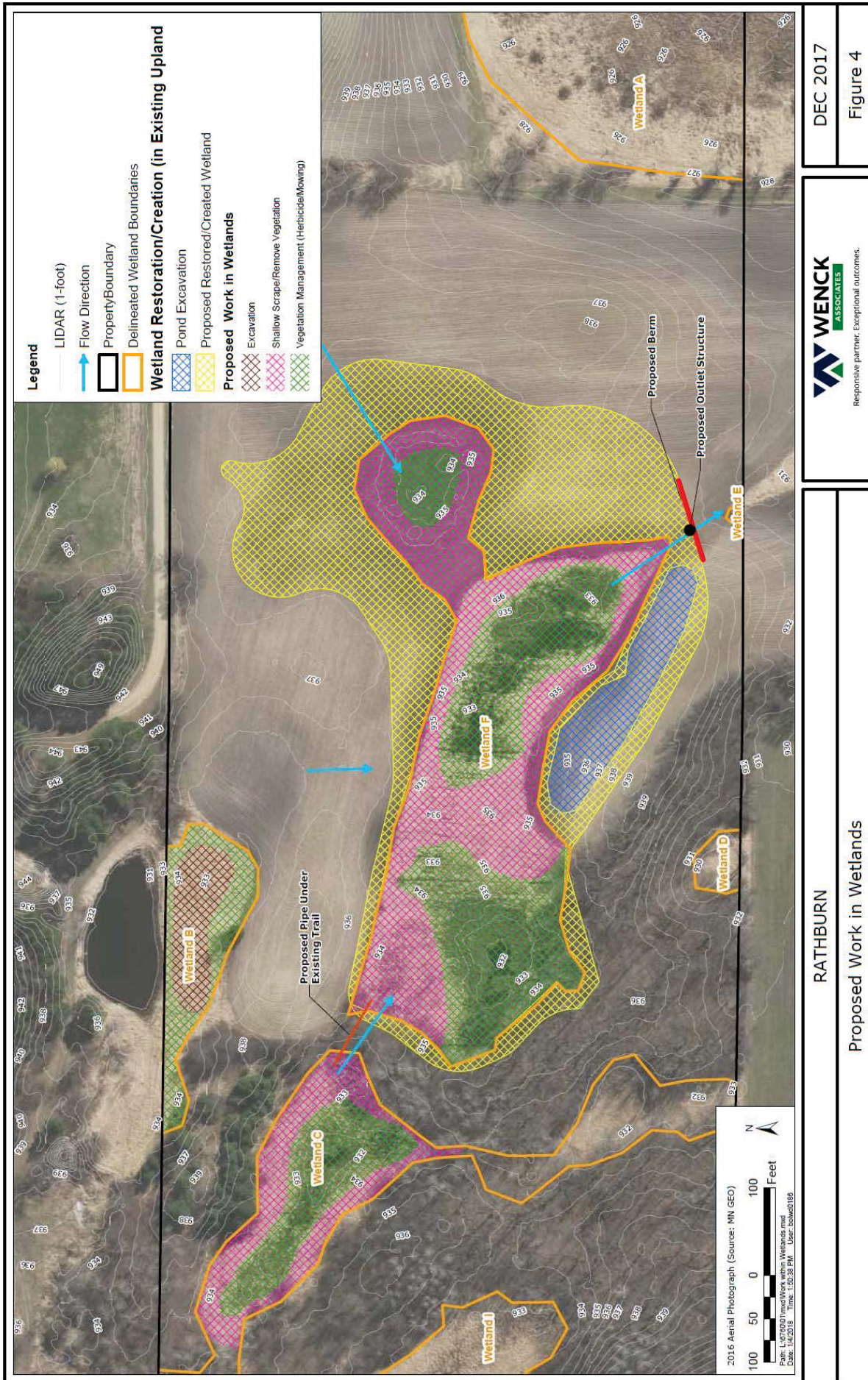


February 9, 2018
Date

Project Location







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E-mail: judie@jass.biz

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Department of Environment and Energy
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E-mail: james.kujawa@hennepin.us

Sundance Greens **Dayton, Project #2018-005**

Project Overview: This site consists of 7 parcels that total 310 acres. Approximately ½ is the Sundance Golf Course and the other ½ agricultural land. The applicant is proposing a long term phased residential development with 665 residential units while maintaining a portion (9 of the 18 holes) of the golf course. Total new impervious area will be 71 acres. The Commission will review this site for Stormwater Management (Rule D), Erosion and Sediment Control (Rule E), Floodplain Alteration (Rule F), and Buffer Strips (Rule I)

Applicant: Sundance Development, LLC, Attn. Mr. Tom Dehn, 11261 Fernbrook Lane N., Maple Grove, MN 55369. Phone: 612-328-2215. Email: tom.dehn@powerlodge.com.

Agent/Engineer: Campion Engineering Services, Inc., Attn. Marty Campion, 1800 Pioneer Creek Center, Maple Plain, MN 55359. Phone: 763-479-5172. Email: mcampion@campioneng.com

Exhibits:

- 1) ECWMC Request for Project Review and Approval, received February 2, 2018.
- 2) Project review fees for a low density (<40% impervious area) new development with floodplain impacts \geq 100 cubic yard. \$6550.
- 3) Preliminary Plans for; Sundance Greens by Campion Engineering, dated January 5, 2018, no signature. (1-11x17 set and 1-electronic submittal)
 - a. Sheet 1 of 45, Cover Sheet
 - b. Sheets 2-6 of 45, Existing Conditions.
 - c. Sheet 7 of 45, Phasing Exhibit,
 - d. Sheets 8-12 of 45, Preliminary Plat
 - e. Sheets 13-17 of 45, Preliminary Sanitary Sewer & Watermain Plan
 - f. Sheets 18-22 of 45, Preliminary Street and Storm Sewer Plan
 - g. Sheets 23-27 of 45, Preliminary Grading Plan
 - h. Sheets 28-32 of 45, Preliminary Storm Water Pollution Plan
 - i. Sheets 33-37 of 45, Preliminary Wetland Impact & Buffer Exhibit,
 - j. Sheet 38 of 45, Preliminary Tree Inventory
 - k. Sheets 39-43 of 45, Preliminary Tree Survey & Removal Plan
 - l. Sheet 44 of 45, Street Details,
 - m. Sheet 45 of 45, Outlet Control Structure Details.

- 4) Stormwater Management Plan, Sundance Greens, by Civil Methods, Inc. dated January 5, 2018. (1 hard copy and 1 electronic submittal)
- 5) Sheet 1 of 1 by Civil Methods, Inc., Sundance Greens Impervious Area Disconnection (1 electronic submittal)
- 6) Wetland Delineation Information;
 - a. Fernbrook Lane Property Wetland Delineation Report by Midwest Natural Resources, Inc. dated November 13, 2017. Approved by Dayton January 16, 2018.
 - b. Sundance/Dehn Development Wetland Boundary Map and Approval Notice of Decision dated February 13, 2017,
 - c. Project 2013-025, Sundance Woods WCA information and City of Dayton notice of decision dated October 7, 2013.

Findings:

- 1) A complete application was received February 2, 2018. The initial decision deadline per MN Statute 15.99 expires April 3, 2018.
- 2) The complete site consists of 310 acres. The Sundance Golf Course is approximately 160 acres of the site with the remaining areas being agriculture fields (~122 acres) with approximately 20 acres of woods and small areas of farmsteads and wetlands. Rush Creek Parkway was constructed through the SE parcel in 2014 for access to the Sundance Woods Development (EC #2013-025).
- 3) The developer proposes to reconfigure the golf course from an 18 hole to a 9 hole course (approximately 80 acres of the site). The remaining areas will be phased in over several years, creating 472 single family lots, 92 multiple family homes and a senior housing facility (665 total residential units).

Floodplain

- 4) There is a large zone A (no base flood elevation determined) floodplain complex that extends through this site.
- 5) No floodplain information was provided with the application for the Commission's consideration. The FEMA floodplain overlay should part of the site plans to properly determine impacts.
- 6) Estimated floodplain elevations should be developed and submitted to the MNDNR and FEMA for a letter of map amendment.
- 7) Based on staff's estimates, a rough estimate of the flood elevations through this site would be from 911.0 on the north end of the site to 907.0 on the south end.
- 8) Based on our interpretation, we estimate floodplain impacts at the following locations;
 - I. The west edge of block 9,
 - II. The access road (Street 2) to and portions of Block 7
 - III. The west portion of Block 12

Stormwater Management Plan

- 9) The project proposes to manage storm water through the use of 8 NURP ponds and 5 Biofiltration basins. Based on initial soils reports, only one of the biofiltration basins will have native soils porous enough to design a true infiltration basin, the rest will be filter basins with underdrains.

10) There are three main discharge points from this development.

- I. This flows to the southwest through a wetland/floodplain complex before it discharges into Rush Creek approximately ½ mile away.
- II. This flows to the south where it discharges in two areas from this property traveling about 500' before entering Rush Creek. *Note: Subcatchment 11 is more critical for runoff and volume controls because of its proximity to the creek and the lack of any restriction of flow like wetlands prior to this water getting to the creek.
- III. This runs to the east/northeast ¾ of a mile where it discharges into Powers Lake which flows into the floodplain/wetland complex and meanders ½ of a mile before it hits Elm Creek.

11) Pre and post-development flow rates for the 2, 10 and 100 year storm events are as follows:

	2-Year (2.9") Runoff Rate (cfs)		10-Year (4.3") Runoff Rate (cfs)		100-year (7.3") Runoff Rate (cfs)	
	Pre-Dev	Post-Dev	Pre-Dev	Post-Dev	Pre-Dev	Post-Dev
#1-Southwest	31.4	19.0	69.3	56.7	235.0	186.5
#2- South	19.4	12.8	42.9	30.8	128.3	62.4
Subcatchment/pond 11	9.85	3.89	24.33	12.25	62.17	22.9
#3-East/Northeast	29.1	12.4	49.6	19.8	212.7	33.2

Prior to final approval of these rates, the issues below with the water volume and quality on this site need to be resolved.

12) Total treatment volume requirements for 70.9 acres of new impervious areas = 283,103 cubic feet prior to any volume credit.

13) Disconnected impervious area credits of 6.5 acres appear to be overstated in the volume analysis. Generally, areas that have channelized water flow greater than 300 feet away from a pipe, pond, and basins can be considered disconnected. For overland flows we use a 75' distance.

14) Pre and post development phosphorus and TSS loads are required. MIDS or PondNet analysis for post development loads is the Commission's acceptable models. Pre-development phosphorus loads are based on existing land use. Cropland=1.0 lbs./ac., woodland/wetland=0.1 lbs./ac, grassland (golf course) is 0.4 lbs. ac. Existing hard surface should be based on NURP or MIDS models.

15) Modeling or computations for the filter basin drawdown times for a 1.1" runoff event will be necessary. 48 hour drawdown times are required.

16) Area 12 was discussed in the narrative as an infiltration basin, exfiltration will have to be modeled per MPCA guidelines based on the soils in place. We recommend percolation tests or similar analysis for determining exfiltration potentials.

17) We will require details on the bio-filtration basins. This must include construction information (or similar) as follows;

- I. Underdrains must be constructed with Schedule 40 or SDR smooth wall PVC pipe (or a similar pipe and corresponding 'n' value)
- II. Minimum 3" #57 (3/4-1") stone around the pipe

- III. Minimum 2" chocking stone (1/2" minus)
 - IV. Minimum 0.5% pipe slope
 - V. One underdrain for every 1000 sq. ft. of surface area.
 - VI. Include at least 2 observation /cleanouts for each underdrain, one at the upstream end and one at the downstream end. Cleanouts should be at least 4 inches diameter vertical non-perforated schedule 40 PVC pipe, and extend to the surface. Cap cleanouts with a watertight removable cap.
 - VII. For underdrains that daylight on grade, include a marking stake and animal guard
 - VIII. Avoid filter fabric. (Pipe socks may be needed for underdrains imbedded in sand. If pipe socks are used, then use circular knit fabric)
 - IX. Use solid sections of non-perforated PVC piping and watertight joints wherever the underdrain system passes below berms, down steep slopes, makes a connection to a drainage structure, or daylights on grade.
 - X. Filter basin sequencing must be very specific as it relates to your site. The basin sequencing must ensuring the basin is constructed or reconstructed after the site has permanent stabilization established or the plan must state how it will be protected during the interim (perimeter silt fence alone is not adequate)
- 18) Topsoil is specified for a portion of the engineered soil mix on the biofiltration basins. Generally sand and leaf/grass compost mix (80%-20% ratio) is recommended. If topsoil will be used, the specifications for the topsoil will be required in the plans.
- 19) Pre-treatment is needed on basins 2aP, 11P (bio-filter basin), 10aP, and 12P.
- 20) The outlet to pond 8P appears to be landlocked.
- 21) A good opportunity exists to enhance wetland 5 for a more aesthetic pleasing wetland basin for the future residents.
- 22) Ponds 1, 3, 4, and 6 have mean average depths of <4.0'. The Commission requires NURP ponds have a mean average depth (Cumulative storage/surface area at NWL) of 4.0 or greater.

Erosion and Sediment Controls

- 23) A new application with an erosion and sediment control (and/or SWPPP) and grading plan must be submitted for each phase of construction as this project progresses. At this time we will need Phase I grading and erosion control plans. We will review each phase for consistency with the approved SWMP, grading and erosion controls. Specific construction sequencing must be provided with each phase identifying all the temporary, interim and permanent erosion control practices for that phase and the timing of said practices. Specifics for the filter basin (see item X above) must also be provided.

Wetland Buffers

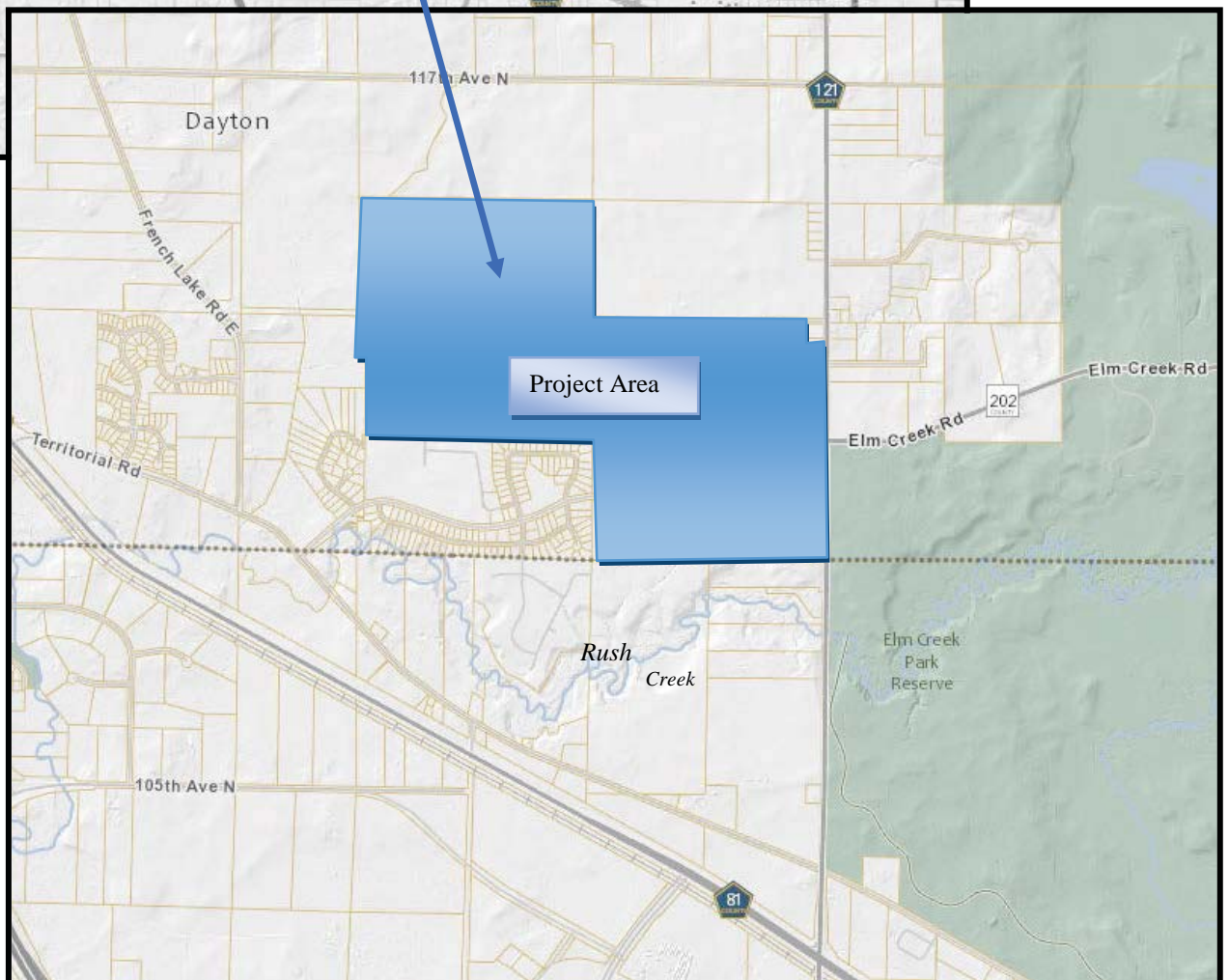
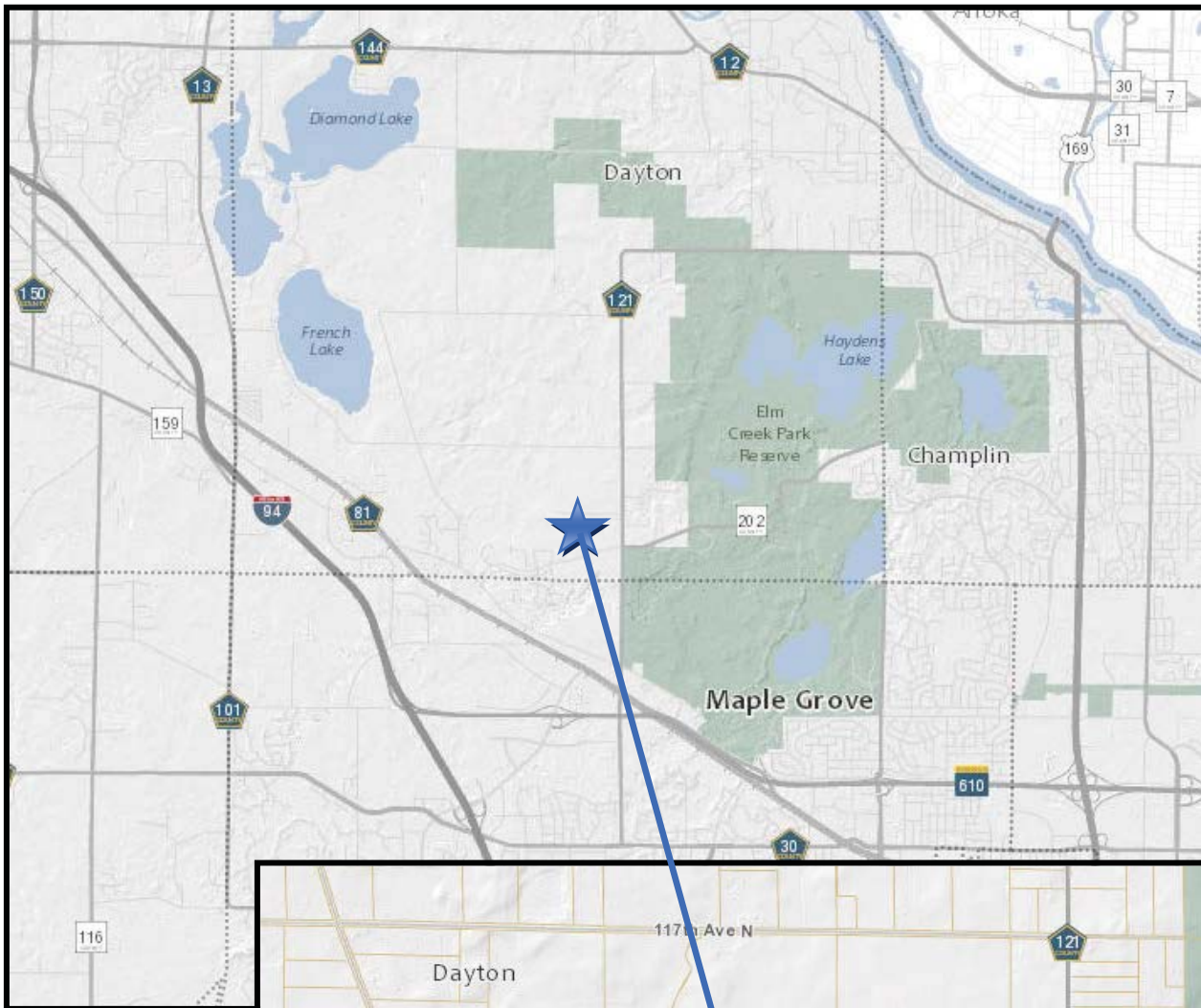
- 24) Wetland buffers must be shown on the plans with monumentation. The golf course will have to buffer their wetlands.

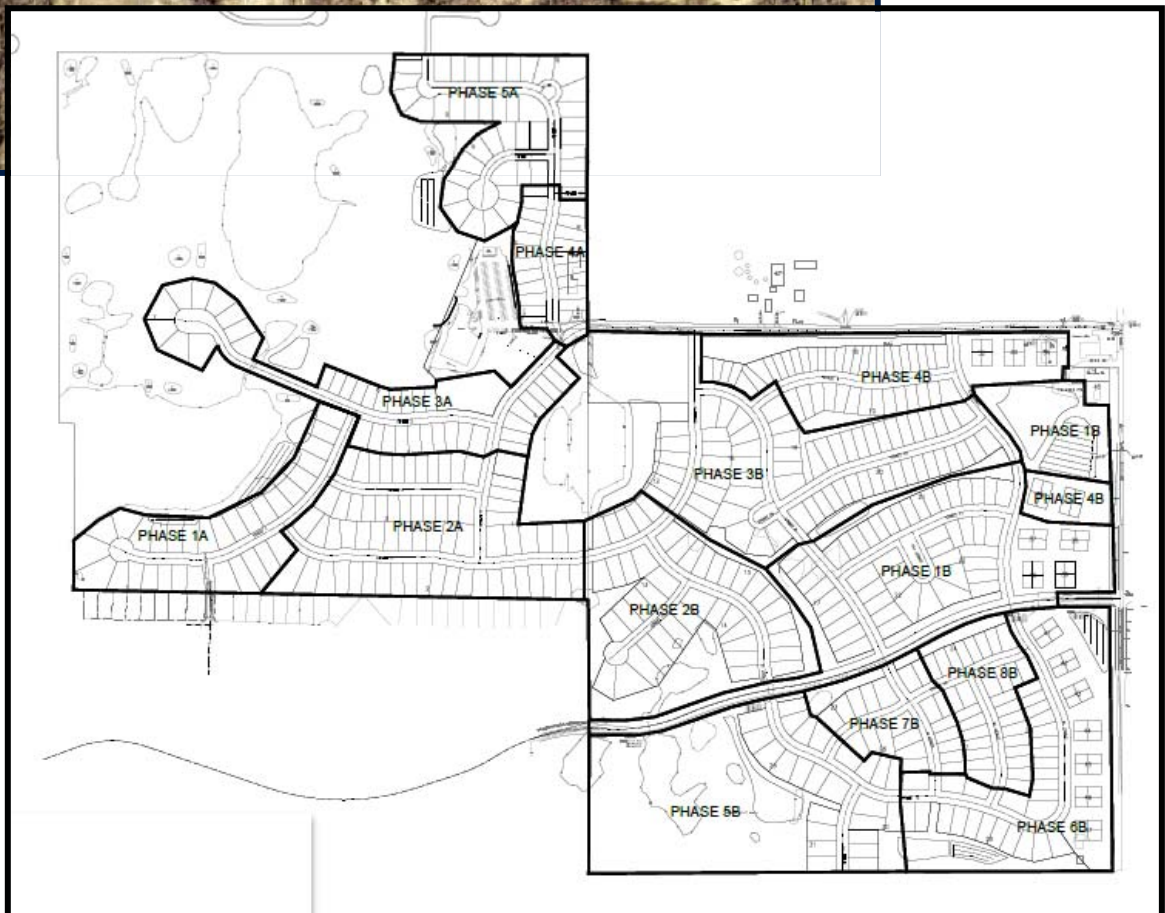
Recommendation: None at this time.





Hennepin County
Department of Environment and Energy
Advisor to the Commission

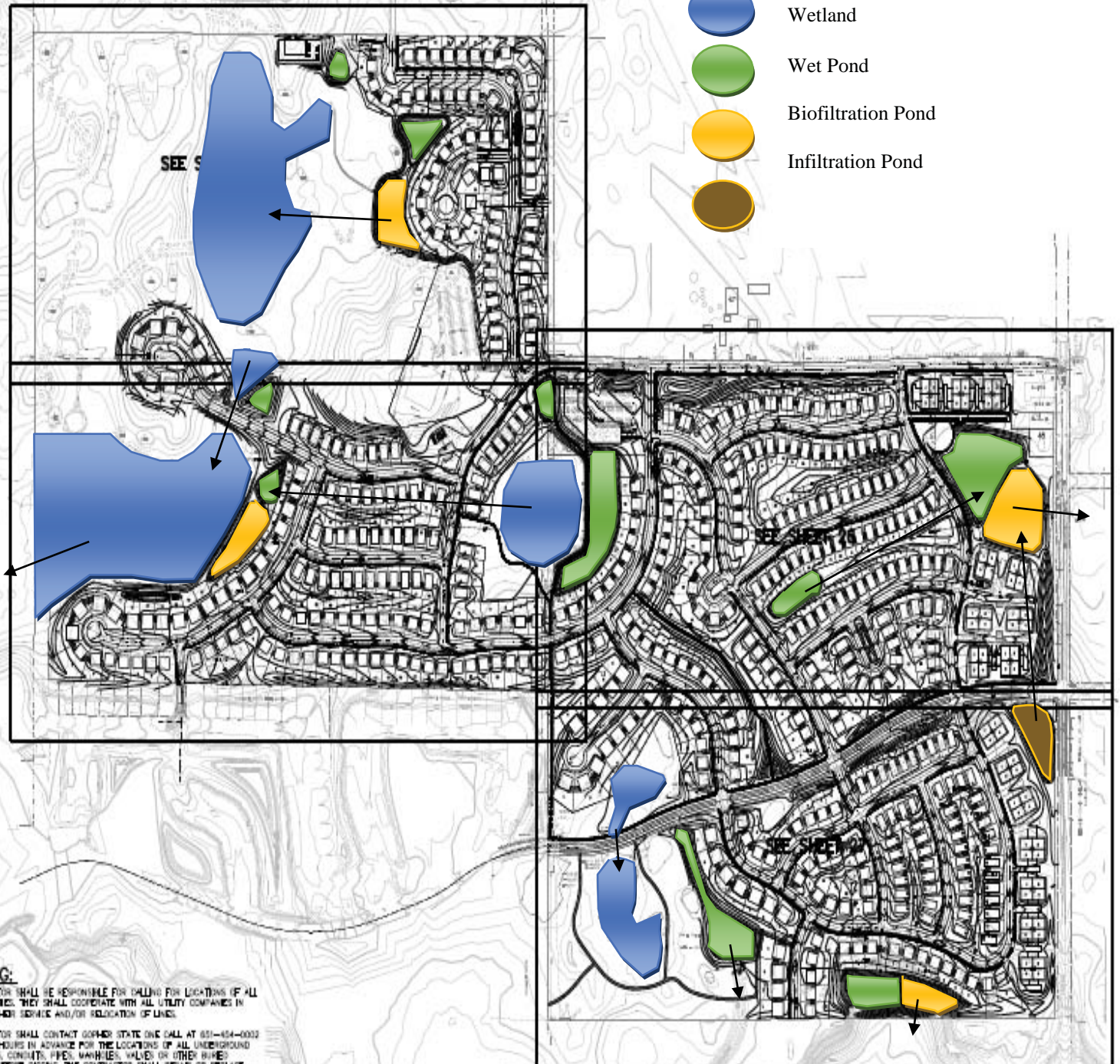


February 23, 2018
Date





-  Wetland
-  Wet Pond
-  Biofiltration Pond
-  Infiltration Pond



WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COORDINATE WITH ALL UTILITY COMPANIES IN MAINTAINING 1-800 SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0000 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0000
TOLL FREE: 1-800-252-1198

Minnesota Wetland Conservation Act

Notice of Decision

Item 04a_an

Local Government Unit (LGU) Elm Creek Watershed Management Commission	Address 3235 Fernbrook Ln N, Plymouth, MN 55447
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1. PROJECT INFORMATION

Applicant Name Mike Wittkop	Project Name 6270 Hunter Road incidental wetland/no-loss	Date of Application 3/1/18	Application Number 2018-006W
<input checked="" type="checkbox"/> Attach site locator map.			

Type of Decision:

<input type="checkbox"/> Wetland Boundary or Type	<input checked="" type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input type="checkbox"/> Deny
Summary (or attach):		

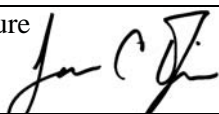
2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: March 5, 2018		
<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Approved with conditions (include below)	<input type="checkbox"/> Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

A no-loss exemption is requested for driveway construction across an existing ditch at the above mentioned address. 711 sq. ft. of fill will be placed in an area marked as a wetland in a 2013 wetland delineation approved by the LGU on this lot. Based on historic aerial photographs and the existing ground adjacent to the ditch, this area of fill will occur in a ditch that was constructed to drain water from the roadway at the time Hunter Lane was constructed. This area was upland prior to road and ditch construction. Per MN WCA Rules Chapter 8420.0105 Scope, Subp. 2. D. Chapter 8420 does not regulate impacts to incidental wetlands. *Incidental wetlands include.drainage ditches...or excavations constructed in non-wetlands solely for the purpose of....stormwater drainage* Thus Chapter 8420 does not regulate this fill material and a wetland replacement process is not necessary.

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name James C. Kujawa	Title Technical Advisor to the LGU	
Signature 	Date March 5, 2018	Phone Number and E-mail 612-348-7338 James.kujawa@hennepin.us

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT.

Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands. Item 04a_an

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

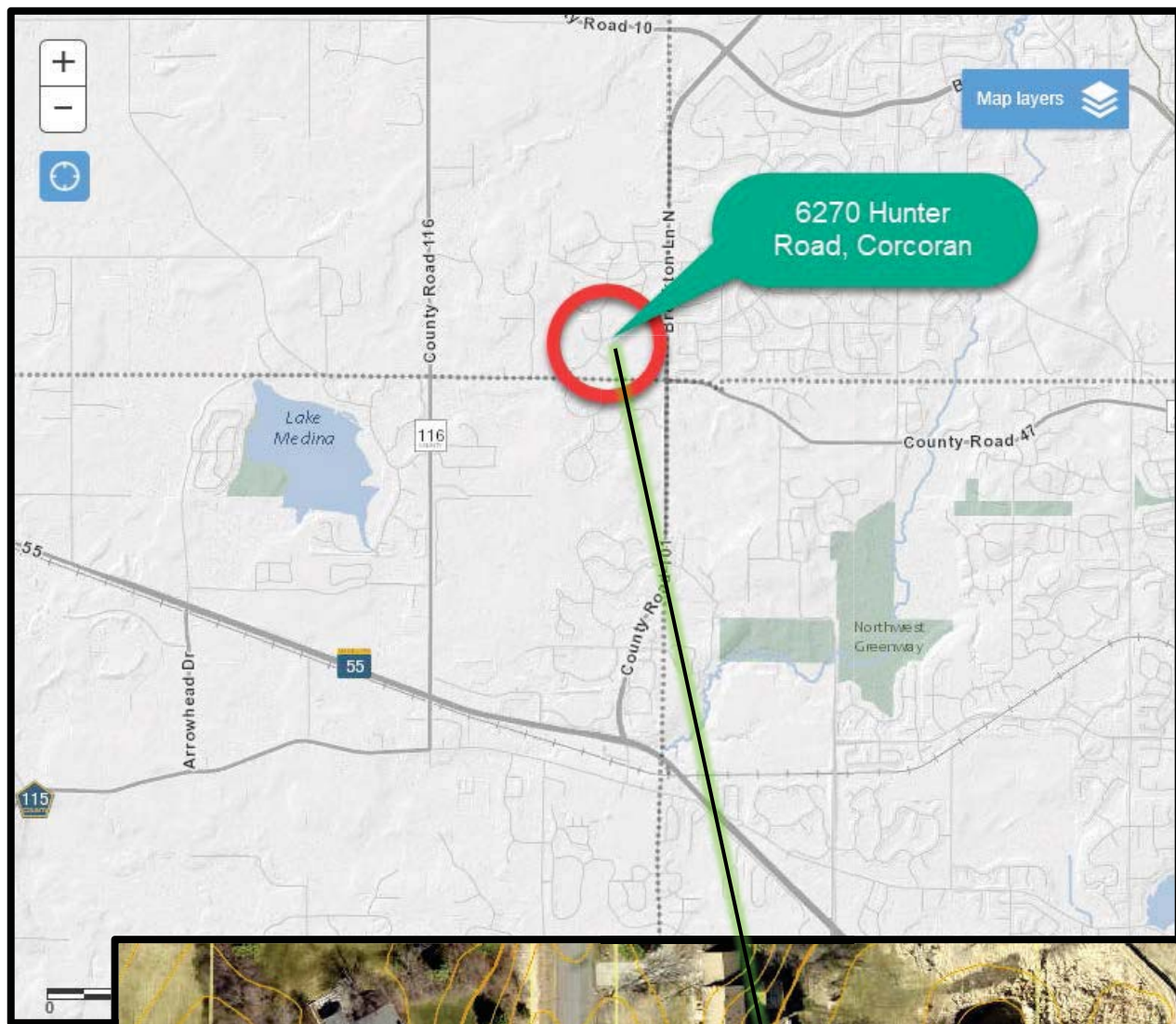
<input checked="" type="checkbox"/> Appeal of an LGU staff decision. Send petition and \$0 fee (if applicable) to: Elm Creek Watershed Management Commission 3235 Fernbrook Ln N Plymouth, MN 55447	<input type="checkbox"/> Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
---	---

4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: Stacey Lijewski (email only: Stacey.Lijewski@hennepin.us)
<input checked="" type="checkbox"/> BWSR TEP member: Ben Carlson (email only: ben.carlson@state.mn.us)
<input type="checkbox"/> LGU TEP member (if different than LGU Contact):
<input checked="" type="checkbox"/> DNR TEP member: Becky.Horton@state.mn.us
<input type="checkbox"/> DNR Regional Office (if different than DNR TEP member)
<input type="checkbox"/> WD or WMO (if applicable):
<input checked="" type="checkbox"/> Applicant and Landowner (if different) miwittkop@gmail.com. pemberton@sathre.com; TKaster@alliant-inc.com
<input checked="" type="checkbox"/> Members of the public who requested notice: (email only) City of Corcoran: Mike Prichard, mpritchard@ci.corcoran.mn.us
<input checked="" type="checkbox"/> Corps of Engineers Project Manager: Melissa Jenny (email only): Melissa.M.Jenny@usace.army.mil
<input type="checkbox"/> BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:
<input checked="" type="checkbox"/> Location map
<input checked="" type="checkbox"/> Survey with no-loss area outlined.
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>



elm creek

Watershed Management Commission

Item 04a_ao

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338
E-mail: james.kujawa@hennepin.us

Copper Creek of Nottingham **Maple Grove, Project #2018-007**

Project Overview: This is a 4.03 acre in-fill project in the Nottingham development section of Maple Grove. It is located about ¼ mile northeast of the intersection of Nottingham Parkway at Bass Lake Road along 73rd Place/Xene Lane Cul-de-sac. Nine (9) new single family residential lots are proposed. The Commission's review will for compliance to the Commissions 3rd Generation STWMP Rules and Standards.

Applicant: Copper Creek Real Estate Group, Inc. 14198 Commerce Ave. NE, Prior Lake, MN 55372. Phone: 952-447-2700. Email: gcs@coppercreek.mn

Agent/Engineer: Oliver Surveying & Engineering, Inc., Attn. Lynn Caswell, 580 Dodge Avenue, Elk River, MN 55340. Phone: 763-441-2072. Email: lcaswell@oliver-se.com

Exhibits:

- 1) ECWMC Request for Plan Review and Approval, received February 20, 2018.
- 2) Copper Creek of Nottingham Preliminary Site Plans dated February 12, 2018. No signature. No electronic copy.
 - a. Sheet 1 of 8, Title Sheet
 - b. Sheet 2 of 8, Existing Conditions
 - c. Sheet 3 of 8, Preliminary Plat
 - d. Sheet 4 of 8, Preliminary Grading Plan
 - e. Sheet 5 of 8, Preliminary Utility Plan
 - f. Sheets 6&7 of 8, Tree Zone and Preservation Plan
 - g. Sheet 8 of 8, Landscape Plan.
- 3) Stormwater Management Plan Information, dated February 12, 2018. (no electronic copy)
 - a. Existing and proposed HydroCad Design Information with soils and Atlas 14 site information
 - b. Sheet 1 of 1, Existing and proposed drainage exhibit.

Findings:

- 1) A complete application was received February 20, 2018. The initial decision period deadline per MN Statute 15.99 is April 21, 2018.
- 2) This site drains to the north via existing storm sewer pipe approximately 750' into a stormwater pond adjacent to a large wetland/floodplain complex. The water from the stormwater pond drains approximately 3,500 feet before entering the main stem of Elm Creek just south of Weaver Lake Road.

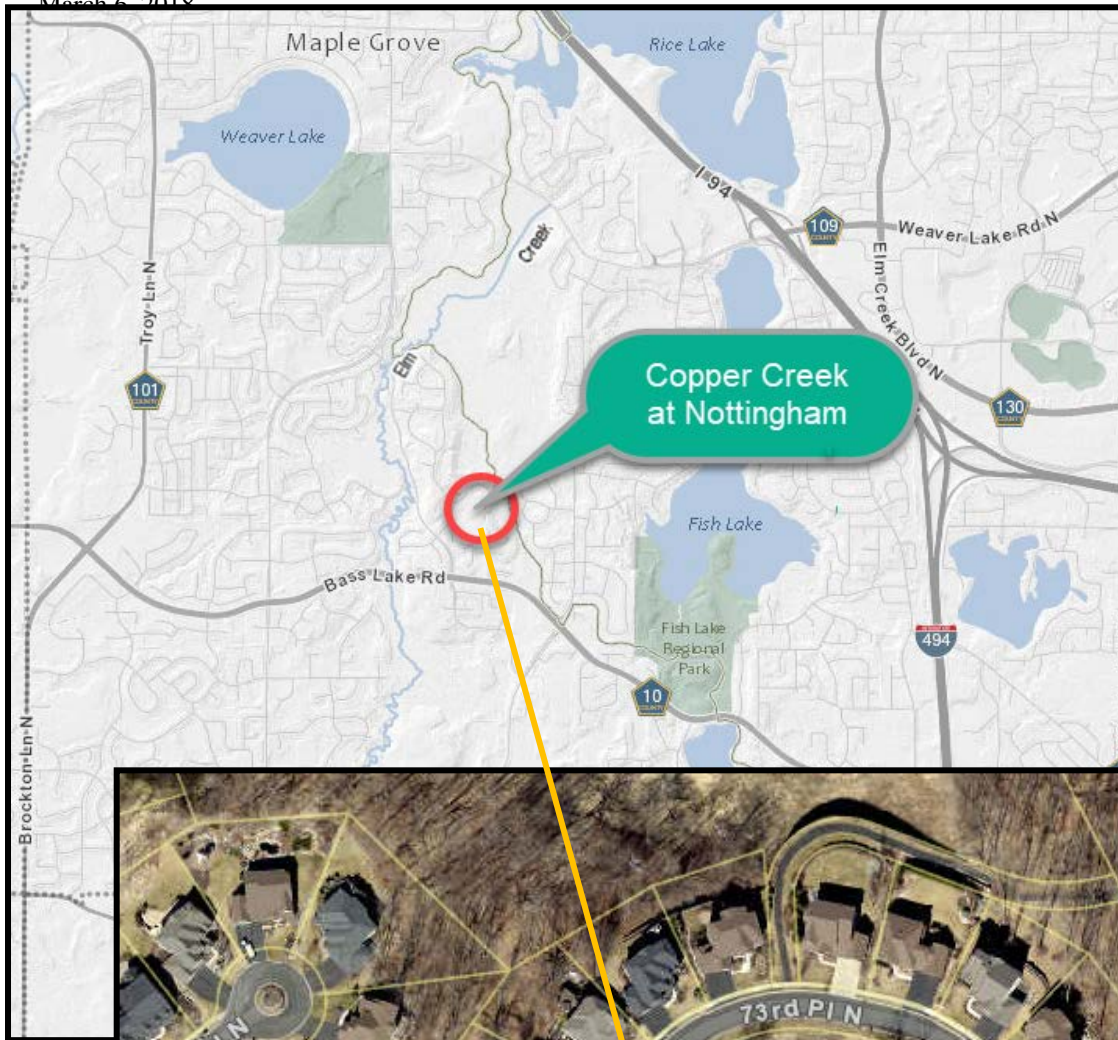
- 3) For stormwater treatment, the applicant is proposing two ponding areas by expanding an existing low area along their west property line and building an additional pond in the NE corner of their site.
- 4) No nutrient or abstraction information was provide with the submittal. An analysis of the post development treatment for these loads cannot be determined.
 - a. Based on the PondNet model, pre-existing phosphorus loads will be 1.3 lbs/yr from this site.
 - b. Post development abstraction requirements will be 3,594 cubic feet (based on 0.9 ac. new impervious area)
- 5) Proposed ponds as designed do not have any appreciable water quality or abstraction benefits.
 - a. Pond 1 has a mean average depth of 1.6 feet. The Commission standard is 4.0'
 - b. No infiltration, filtration, or bio-filtration is proposed. Infiltration is not feasible on this site due to tight soil conditions.
- 6) Generally, the City of Maple Grove operates and maintains stormwater facilities in residential areas. This must be confirmed by the City, or the applicant will be required to provide a recorded O & M agreement between the property owners and the City for said work.
- 7) No erosion and sediment controls plans were provided with the site plans.
 - a. Temporary sediment ponding and outlet control details must be provided for subcatchment 3S.
 - b. Dual silt fence must be provided to protect the existing wetland.
 - c. Additional silt fence must protect all other areas where drainage flows off site.
 - d. Temporary and permanent vegetation restoration must be provided for the site once rough grading is complete and when utility work is done.
- 8) The City of Maple Grove is the LGU in charge of administering the Wetland Conservation Act on this site. No wetlands were shown on the site plan for this property, although there is an existing wetland that appears to be on the north edge of Lots 2 and 3.
- 9) Wetland buffers with monumentation must be provided per the Commission standard of 25' average/10' minimum adjacent to any wetland on site or where a buffer would extend onto the site. Based on the outlet elevation of the wetland on the HOA property to the north, the wetland elevation should be assumed to be at 1.0' above the invert unless a delineation shows otherwise.

Recommendation: None at this time.

Hennepin County
Department of Environment and Energy
Advisor to the Commission



March 6, 2018
Date



Three Rivers Park District Cooperative Agreement with the Elm Creek Watershed Management Commission

I. GENERAL PURPOSE

It is the general purpose of the parties within this Agreement to obtain water quality data for selected streams and lakes within the Elm Creek Watershed. The scenic beauty and recreational potential that the streams and lakes may provide become compromised as pollution and degradation increase through urbanization within the Elm Creek Watershed. The water quality of Elm Creek and its tributaries directly or indirectly affects the quality of all other natural systems within the Elm Creek Watershed, including water quality of streams and lakes partly or wholly within the boundaries of municipal and/or Three Rivers Park District-owned lands. In order to preserve waters in a natural state, it is therefore necessary to monitor and protect water quality within and beyond municipal or parkland boundaries. The Elm Creek Watershed Management Commission and Three Rivers Park District share a common need to assess the current water quality of streams and selected lakes in the Elm Creek Watershed and to identify the sources of pollutants which result in water quality problems.

II. MONITORING EFFORTS

Stream Sampling

Three Rivers Park District Monitoring

Under this Agreement, Three Rivers Park District will be responsible for monitoring three sampling stations every year. The specific sampling sites monitored will be determined each year prior to the start of the sampling season. Monitoring efforts will begin shortly after spring thawing (early to mid-April) and continue until the onset of freezing conditions (early November). Three Rivers Park District will be responsible for the installation and maintenance of automated sampling equipment for each monitoring station. The below table provides a list of sampling sites with data collected and used for the development of the Elm Creek Watershed TMDL. These sites will be considered for the contractual annual monitoring under this Agreement. The Elm Creek Watershed Management Commission does reserve the right to select other sites of particular interest as part of this Agreement.

Site	Location
Hamel	Elm Creek at Hamel
ECER	Elm Creek at Elm Road
EC77	Elm Creek at 77th Avenue
EC81	Elm Creek at County Road 81
RT	Rush Creek at Territorial
RC116	Rush Creek at County Road 116
RCTH	Rush Creek at Trail Haven
RC101	Rush Creek at County Road 101
DCZ	Diamond Creek at Zanzibar
SD	Diamond Creek at South Diamond Lake Road
DC	Diamond Creek in Elm Creek Park Reserve
ECHO	Elm Creek at Hayden Outlet

At a minimum, the Three Rivers Park District, under this Agreement, will be responsible to collect continuous flow measurements at each sampling site. All of the sampling stations have open channel morphology that require the development of a stage-discharge rating curves for the determination of continuous flow measurements. Three Rivers Park District will be responsible for the manual measurements of flow at different stream elevations to estimate the flow at each sampling site based on these stage-discharge rating curves.

The Elm Creek Watershed Management Commission may request, under this Agreement, the collection of water quality nutrient data at these monitoring sites in addition to the continuous flow measurements. The Three Rivers Park District will be responsible for the collection of water quality nutrient concentrations at the pre-approved selected sampling stations. Flow-weighted composite water samples will be collected from automated samplers to monitor storm event nutrient concentrations. Three Rivers Park District will also collect grab samples from the sampling sites to establish nutrient concentrations during base flow conditions. Approximately, 10% of all of the water samples collected will have a field duplicate collected for quality assurance measures.

All water samples collected will be delivered to the Three Rivers Park District certified laboratory. At a minimum, the samples will be analyzed for the following water quality constituents:

- Total Phosphorus
- Soluble Reactive Phosphorus
- Total Nitrogen
- Total Suspended Solids

The Elm Creek Watershed Management Commission may request, under this Agreement, analysis of other water quality constituents for specific projects.

Three Rivers Park District will estimate the nutrient loading for each sampling site when water quality nutrient concentrations are collected simultaneously with continuous flow measurements.

The Elm Creek Watershed Management Commission under this Agreement will provide financial support to assist with the monitoring efforts of the pre-approved sampling sites.

United States Geological Survey Monitoring

Under this Agreement, the USGS will monitor and maintain a continuous recording stream gauging station on Elm Creek within the Elm Creek Park Reserve of Three Rivers Park District. The USGS gauging station will monitor continuous flow measurements as well as automated sample collection of water quality data that corresponds to specific storm events. The continuous flow measurements and water quality data will be used to estimate nutrient loading at the sampling site.

The Elm Creek Watershed Management Commission and Three Rivers Park District under this Agreement will provide financial support to assist with the monitoring efforts of the USGS stream gauging station on Elm Creek within the Elm Creek Park Reserve.

Lake Sampling

Three Rivers Park District Monitoring

Under this agreement, Three Rivers Park District will be responsible for monitoring the water quality of four lakes annually, and any additional lakes that have been approved for monitoring by the Elm Creek Watershed Commission. The below table includes those lakes that were identified in the Elm Creek Watershed TMDL and WRAPS documents. The Category I lakes are identified as “Sentinel Lakes” (Elm Creek Watershed Third Generation Plan) and will be monitored every year. The Category II lakes are proposed to be occasionally monitored because these are lakes that have water quality data collected within the last ten years. The Category III lakes are recommended to be monitored within the next 5 years because they currently have insufficient data for an assessment determination of trophic conditions.

Lake	DNR #	Lake Classification	
		Category	Shallow/Deep
Fish	27-0118	Category I	Deep
Weaver	27-0117	Category I	Deep
Rice-Main	27-0116	Category I	Shallow
Diamond	27-0125	Category I	Shallow
Mill Pond	27-0061	Category II	Shallow
Goose	27-0122	Category II	Shallow
Mud	27-0112	Category II	Shallow
Cowley	27-0169	Category II	Shallow
Sylvan	27-0171	Category II	Shallow
Cook	27-0120	Category II	Shallow
Henry	27-0175	Category II	Shallow
Prairie	27-0177	Category II	Shallow
Jubert	27-0165	Category III	Shallow
Dubay	27-0129	Category III	Shallow
Laura	27-0123	Category III	Shallow

Lake sampling will occur bi-weekly after ice-out (April/May) through the completion of fall turnover (October). Physical water quality parameters (temperature, dissolved oxygen, conductivity, and pH) will be collected at 1-m intervals from surface to bottom at the deepest location within each lake. Water clarity will also be measured for each lake using a secchi disk. A 2-m composite surface water sample will be collected for each lake. Those lakes that are deep enough for the onset of stratification will have samples collected at the top of the hypolimnion and 1-m from the bottom with a Kemmer bottle. Approximately, 10% of all of the water samples collected will have a field duplicate collected for quality assurance measures.

All water samples collected will be delivered to the Three Rivers Park District certified laboratory. The Three Rivers Park District will analyze all water quality constituents within sampling holding times. All laboratory analysis will follow Standard Operating

Procedures approved by Minnesota Pollution Control Agency (MPCA) and/or Minnesota Department of Health (MDH). The laboratory will also follow QA/QC standard operating procedures. The water chemistry constituents for lake sampling include the following parameters:

Sample	Lake	Water Quality Constituents Analyzed			
	Classification	TP	SRP	TN	Chl-a
Surface 0-2 Composite	Deep/Shallow				
Top of Hypolimnion	Deep				
1-m from Bottom	Deep				

The Elm Creek Watershed Management Commission may request and approve the additional analysis of other water quality constituents that may pertain to specific projects.

The Elm Creek Watershed Management Commission under this Agreement will provide financial support to assist with the monitoring efforts of the pre-approved sampling sites.

III. COOPERATIVE AGREEMENT

This AGREEMENT made and entered into as of the date of execution written below, by and between the Elm Creek Watershed Management Commission, hereinafter “the Commission,” and the Three River Park District, hereinafter “Park District.”

WITNESSETH:

WHEREAS, the cities of Champlin, Corcoran, Dayton, Maple Grove, Medina, Plymouth, and Rogers, by a Joint Powers Agreement, created the Commission for the purposes of guiding development and protecting and preserving natural resources in the Elm Creek Watershed; and

WHEREAS, the parties, pursuant to Minn. Stat. S471.59 and Minn. Stat. S398.09(g), have legal authority to enter into this Agreement and to do and perform the things herein agreed;

NOW, THEREFORE, in consideration of the mutual promise and obligations herein made and assumed by each of the parties hereto, the parties agree as follows:

IV. OBLIGATIONS AND DUTIES

The Commission, with the services of its technical advisor, currently the Hennepin County Department of Environment and Energy, shall be responsible for;

- Administering the stream monitoring and gauging program and data analysis efforts.
- Administering the lake monitoring program.

- Administering the other components of the Commission's water quality program, including the collection of samples and/or other field data as necessary.

The Park District shall provide access to mutually agreeable sampling sites located within the Elm Creek Park Reserve upon prior notification by the Commission to the Park District of sampling dates and provide water quality information to persons utilizing the parklands as the Park District deems necessary.

Information obtained from the water quality monitoring program shall be used to compile a long-term data record of the condition of key lakes and stream reaches within the watershed, identify problem areas where better land-use practices are needed to control erosion and other forms of pollution, and evaluate the effectiveness of management activities. This information shall be used to modify the Management Plan and policies of the Commission.

V. METHOD OF COST SHARING

The Commission agrees to reimburse the Park District for the completion of the stream and lake monitoring performed under this contract agreement for a period of five years 2018-2022. Details of the reimbursement are below.

- Stream monitoring costs include:
 - Continuous flow measurements = \$2100/site = \$6300/3 sites
 - Water Quality Nutrient Analysis = \$300/site = \$900/3 sites
- Lake Sampling costs include:
 - Category I "Sentinel Lakes" = \$8100/4 lakes
 - Deep Lakes = \$2500/lake = \$5000/2 lakes
 - Shallow Lakes = \$1550/lake = \$3100/2 lakes
 - Category II & III Lakes = \$1550/shallow lake

The Commission shall remit to the Park District the cost of these projects on or before December 31st of the year of the data collection. The Park District shall prepare a final report of all receipts and disbursements upon completion of the projects.

Since the seven communities in addition to the Park District benefit from these monitoring results, the Park District agrees herein to reimburse the Commission 1/8 or 12.5% of the monitoring costs for the stream (including the USGS monitoring site) and lake monitoring on those water bodies on which the Park District owns a portion of the shoreline, not to exceed \$5,000 in the calendar years of 2017 and 2018, \$5,500 in the calendar years of 2019 and 2020, and \$6,000 in the calendar year of 2021.

The Park District shall remit to the Commission the cost of its share of these projects on or before December 31st of the year of the data collection. The Commission shall prepare a final report of all receipts and disbursements upon completion of the projects.

VI. TERMINATION

This Agreement shall be in effect through December 31, 2022 at which time it will be considered for renewal.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day of execution written below.

Attest:

THREE RIVERS PARK DISTRICT

By: _____
John Gunyou, Chair, Board of Commissioner

Date: _____

By: _____
Boe Carlson, Superintendent

Date: _____

Attest:

ELM CREEK WATERSHED MANAGEMENT COMMISSION

By: _____
Judie A. Anderson, Administrator

Date: _____

By: _____
Doug Baines, Chair, Board of Commissioner

Date: _____

Hennepin County Proposal to Provide FEMA Floodplain Modeling and Mapping

March 7, 2018

Project Understanding and Approach

The purpose of this project is to update the Special Flood Hazard Areas shown on the FEMA Floodplain maps that are located within the Elm Creek Watershed. In order to accomplish this, the existing Elm Creek Hydrologic and Hydraulic models will be created/updated in current modeling packages acceptable to the Minnesota DNR. The areas to be studied are those presented to us by the Minnesota DNR in their figure for the Elm Creek Watershed as attached. There are both detailed and non-detailed areas that require work under this scope to be included in this project.

In general, the scope of this proposal is to:

1. Update the Hydrology modeling for the watershed using either HEC-HMS or SWMM.
2. Update Creek Hydraulics using HEC-RAS
3. Create Floodway and Floodplain shapefiles using HEC-RAS mapper
4. Create Depth Grids using the RAS Mapper built into HEC-RAS
5. Create New Work Maps showing the new SFHA and other information required by the DNR
6. Other reports and documentation of the work

Task 1: Meetings

Several Meetings will be required at various states between project partners. We assume the Minnesota DNR will provide meeting agendas and notes for each of these meetings. We anticipate the following meetings:

1. Kickoff Meeting: An overall meeting to introduce the project. Attendees would include representatives from Elm Creek, Hennepin County, the Minnesota DNR, and a representative of the cities. The purpose of the meeting will be to introduce the overall project tasks and schedule and get all expectations on the table.
2. Meeting with all cities in the watershed: The purpose of this meeting will be to review data needs to complete the studies as required. Specific topics will include availability of data and identification of any specific areas of concern from the cities representatives.
3. 90% Progress Meeting / Flood Risk Review Meeting (FRR): This meeting is to present near final work products, discuss any outstanding issues, and determine the final scheduling.

Task 2: Data Collection and Organization

Hennepin County will provide each City a data request for all record plan information required for their particular city in addition to any information the Minnesota DNR may request. Hennepin County proposes to provide this list at the meeting under Task 1 where the project is introduced to the Cities.

Specifically, Hennepin County will request:

- Any drainage system maps showing all stormwater features such as ponds and pipes.
- Land use mapping showing existing and proposed land uses
- Any information including construction plans and as-built plans for any crossing locations of the special flood hazard areas identified on mapping.

In addition, Hennepin County will compile:

- USGS Gauging station data
- LIDAR Data from the MNDNR and prepare for use in modeling
- Previous TR-20 and HEC-2 Modeling for Elm Creek.

Hennepin County will review the compiled data and identify areas that require further investigation, whether that is digging deeper to find information or identifying areas where others may need to conduct a survey to obtain the information.

Task 3: Provide Required Survey Locations for others to complete survey

Hennepin County will work with the Minnesota DNR to identify all locations where a detailed site survey is required to comply with the Minnesota DNR's required scope of work for crossings. The information will be provided to the Minnesota DNR or a contractor of the DNR's choosing to collect the survey data. Hennepin County will review all supplied survey data for errors and provide direction for additional survey as needed as a result of errors and or omissions.

Deliverables:

- Survey location figures

Task 4: Hydrology Update

This task will result in an updated model of the Elm Creek Watershed, better reflecting current conditions as opposed to the present modeling dating back to the 1970's. This effort will build upon the existing modeling that currently exists for the watershed which includes the original TR-20 modeling from the 1970's and the HydroCAD model created from the TR-20 model as part of the Elm Creek Channel study conducted in the mid 2000's.

A new model, using either HEC-HMS or SWMM will be created. The previous watershed boundaries will be reviewed for consistency with the 2011 LIDAR data collected by the DNR, as well as information on storm drainage systems provided by each of the cities. Non-detailed areas will also be analyzed at a level to permit the non-detailed hydraulic analysis to occur.

Runoff will be determined using a method agreeable to the Minnesota DNR. While the current models use a curve number approach, other methods will be discussed and an agreement reached on one to use that meets the needs of this project as well as furthers the potential of future studies. Rainfall distributions will also be reviewed, including for snowmelt to ensure the proper method is selected.

Peak runoff rates for the 10%, 4%, 2%, 1% and 0.2% annual chance flood events will be determined for both detailed and non-detailed study areas. Peak flows will be calibrated with the flow data available from the USGS gauging station located on Elm Creek near Champlin.

Calibration to known flows at the USGS stream gauge on Elm Creek near Champlin will be provided as part of this task.

Internal QA/QC on the hydrology modeling will be done using internal Hennepin County staff to verify input data and output results.

Deliverables:

- An updated/new hydrologic model of the Elm Creek Watershed in HEC-HMS or SWMM
- A technical memorandum describing the assumptions and methods used to create the model and results
- Documentation of the QA/QC analysis from Hennepin County and the DNR.

Task 5: Hydraulics Update (Detailed Study Areas)

This task will create a revised hydraulic model of the Elm Creek Watershed in HEC-RAS. The proposed models will be a completely new model created from scratch instead of trying to replicate the previous HEC-2 models created in the 1970's. This will be done for all detailed areas shown in the DNR figure for the Elm Creek Watershed. The Hydraulic analysis will be done for the 10%, 4%, 2%, 1%, and 0.2% peak flood events. In order to create this model, the following tasks will be performed:

- Cut new cross sections at all old cross section locations (cross section locations already available in GIS) using the DNR's LIDAR data for overbank areas. Inchannel geometry will be created from the DNR requested survey bridge crossings, other channel survey locations, and as-built areas. Determine Manning's N values based on current conditions for overbank and channel areas,
- Run the models and review, revise, and troubleshoot.

Floodway analysis would be conducted on all detailed study areas as identified in the figure supplied by the DNR.

Similar to the Hydrology task, the initial QA/QC will be provided by internal Hennepin County staff who will review inputs and model outputs.

Deliverables:

- HEC-RAS models for each stage of the analysis and flood events.
- Documentation of responses to the QA/QC review process.

Task 6: Hydraulic Update (Non Detailed Study Areas)

Non-detailed study areas will be analyzed in a different manner. Areas identified on the figure supplied by the DNR as non-detailed study areas will still be analyzed with HEC-RAS where appropriate, and for all storm events as done in the detailed study areas. However, cross sections will be based solely on cross sections cut using the DNR's LIDAR data. No channel data will be collected or determined for this modeling. In addition, only as-builts or construction plans will be used to determine information for all culverts or bridge crossings.

QA/QC will be provided by the Hennepin County internal staff.

Deliverables:

- HEC-RAS model(s)
- Cross Sections data and locations where not previously identified
- Documentation of QA/QC has been resolved

Task 7 – Mapping Products

For detailed study areas, inundation maps for the 1%, 0.2% and floodway scenarios will be developed and produced using the RAS mapper functions of HEC-RAS and then edited in the Arc-GIS environment. For non-detailed study areas, only the 1% events will be mapped.

The maps produced by the RAS mapper package and then edited in Arc-GIS will be QA/QC'd for conformance with the model results. This step can be done internally by Hennepin County staff and documentation of all QA/QC processes and steps will be provided.

The information from these steps will then be imported into the required shapefile format provided by the DNR.

Depth Grids will also be generated in the same fashion and events as documented above. QA/QC and documentation will also be provided.

Deliverables:

- Final Work Maps in digital format (PDF)
- Final Depth Grids for all return intervals as documented above.
- Final shapefiles for flood inundation areas, cross sections, and stream centerlines.
- Documentation of the QA/QC process

Task 8 – Narrative Products

Elm Creek/Hennepin County will provide written narrative documentation at the 60, 90 and 100% levels. All steps will be distributed to the DNR and all cities in the watershed for comment and review. The 90% document will reflect the comments and changes from the 60% review, and the final document will address and additional comments from the 90% stage.

The summary report will document the process of creating the hydrology, hydraulics, and mapping products.

Budget:

The total budget proposed for this task is \$92,772.45. This is based on a rate of \$71.09 per hour from Hennepin County.

Task	Task Description	Hours	Cost
1	Meetings	35	\$2,488.15
2	Data Collection and Organization	40	\$2,843.60
3	Survey Location Identification	30	\$2,132.70
4	Hydrologic Analysis	275	\$19,549.75
5	Hydraulic Analysis – Detailed	425	\$30,213.25
6	Hydraulic Analysis – Non-Detailed	175	\$12,440.75
7	Mapping Products	225	\$15,995.25
8	Narrative	100	\$7,109.00
	Grand Total:	1305	\$92, 772.45

Schedule:

Kickoff Meeting: March 2018

Hydrology to IAHR: June 2018

Hydraulic Model Submittal to DNR for Review: December 2018

Revised Model Submittal to DNR: May 2019

Draft Floodplain Shapefiles and Depth Grids to DNR: September 2019

60% Narrative to DNR for Review and Comment: October 2019

All Final Files to DNR: February 2020

Note that this schedule is shifted later than the suggested DNR schedule due to staffing constraints and timing of starting the project.

Technical Memo



Item 07b

To: Elm Creek WMO Commissioners
From: Diane Spector, Wenck Associates, Inc.
Date: March 6, 2018
Subject: Rush Creek Headwaters SWA Status Report

This report details Rush Creek Headwaters Subwatershed Assessment project progress through February 2018.

Budget status:

Budget*	\$56,700.00
Through 1/31/18	\$39,054.70
2/1/18 – 2/28/18	\$6,093.12
Balance	\$11,552.18

*For Wenck Associates services only, excluding JASS or Hennepin County services

February 2018 Activities:

- Met with Core Team to review prioritization scheme and BMP costs and removals
- Met with TAC in February to review prioritized BMPs
- Completed the prioritization scheme for the other five management units, estimated cost and removals
- Continued drafting report

Expected March and April 2018 Activities:

- Complete draft report
- Meet with Core Team (late March) to review draft report and identified BMPs
- Meet with TAC (April) to review draft report and identified BMPs
- Meet with focus group to review draft report and identified BMPs

Technical Memo



Item 07c

Responsive partner.
Exceptional outcomes.

To: Shingle Creek/West Mississippi WMC Commissioners

From: Ed Matthiesen, P.E.
Diane Spector

Date: March 2, 2018

Subject: Watershed-Based Funding Pilot Update

A second “pre-meeting” of watershed administrators was held February 27, 2018 to discuss options for allocating the Metro Area One Water One Plan (1W1P) Watershed-Based Funding Pilot Program dollars over the next few years. Diane Spector attended for the watersheds, and Commissioner Bert Orred from Crystal attended as well. Amy Juntunen was also present to represent the Elm Creek and Pioneer-Sarah Creek Commissions.

As a reminder, Hennepin County will be receiving \$1.018 million per year for the next two years, to be expended by December 31, 2021. The group discussed several issues and will meet one more time before Hennepin County convenes the formal planning meeting to which all eligible entities will be invited.

1. One question from the previous meeting was whether all 57 cities and watersheds in the county would be eligible and involved in deciding priorities and writing the work plan for the coming planning period. BWSR did confirm that all 57 entities are eligible to apply, but that any activities and projects must be in a watershed plan. Projects that are on a city CIP but not on a watershed CIP by July 1, 2018 are not eligible. In addition, all 57 entities are eligible to participate in the planning process. However, when the formal meeting invitation is issued, a city can decline to participate, or simply not attend the formal meeting, which will be considered declining. A city that declines to participate can still apply for funding for a project through the watershed if it is on the watershed’s CIP.
2. The group heard updates from the approaches being considered by other counties, which tend to lean towards simply passing through the funds to the WMOs in the county based on some formula, typically 50% land area/50% tax base.
3. There was extensive discussion initiated by Diane to consider allocating some amount of funds “off the top” to undertake collaborative activities regarding chloride management. All agreed that it was something everyone had in common, and could benefit from a wider ranging, more visible approach. Topics discussed include more and wider geographical range of certification workshops; mass marketing; possible partnership with the Minnesota Nursery and Landscape Association (MNLA), which is already spearheading the StopOverSalting movement and the proposed limited liability legislation; targeted outreach to churches, school districts, multi-housing associations, etc.; and possibly a small grant program to help smaller owner-operators to afford to retrofit their equipment and purchase items such as temperature sensors, etc. to help them make more informed

decisions about rates of salt application. An ad hoc subcommittee volunteered to flesh out this idea and come up with a rough cost estimate.

4. One of the options discussed at the first pre-meeting was considering allocating funds and making prioritization decisions based on basins (see Figure 1). The watershed representatives spent a few minutes in their basin groups to talk about their potential priorities. For the Minnesota River basin, the priority was on chloride reduction. For the Mississippi River basin, it was on nutrient reduction and chloride reduction. For the Crow River basin, it was nutrient reduction, noting that they were especially dependent on willing landowners.
5. The group preliminarily discussed the following three funding options below for further refinement and presentation at the formal planning meeting:
 - a. Set aside a \$ amount for chloride mgmt, allocate the balance on either b) or c) below;
 - b. Allocate the full amount to basins based 50% land area/50% tax base, basin WMOs would then allocate based on their own strategies; and
 - c. Allocate the full amount to WMOs based 50% land area/50% tax base
6. Next steps: a subcommittee of watershed reps (including Diane) will meet over the next few weeks to flesh out possible collaborative chloride management ideas and rough costs, and basin reps will flesh out their priority projects.
7. The informal group will meet one more time to refine options to be presented to the formal planning group in 6-8 weeks and to discuss possible priority projects (the Commissions' current CIPs are in Tables 3 and 4). The final work plan, priorities, and measurable outcomes must be completed by June 30, 2018.

Table 1. Allocations to major basins based 50% land area/50% tax base.

Basin	Estimated Annual \$	WMOs in Basin
Minnesota	\$219,048	Riley-Purgatory-Bluff Cr WD, Nine Mile Cr WD, Lower Minnesota WD, Richfield-Bloomington WMO
Mississippi	\$784,147	Bassett Cr WMO, Elm Cr WMO (part), Minnehaha Cr WD, Mississippi WMO, Shingle Cr WMO, West Mississippi WMO
Crow	\$64,783	Elm Cr WMO (part), Pioneer-Sarah Cr WMO

Table 2. allocations to WMOs based 50% land area/50% tax base.

	Simple Allocation (50/50)
Lower Minnesota WD	\$34,638
Minnehaha Creek WD	\$276,923
Nine Mile Creek WD	\$102,104
Riley Purgatory Bluff Creek WD	\$62,098
Bassett Creek WMO	\$76,185
Elm Creek WMO	\$149,456
Mississippi WMO	\$116,559
Pioneer Sarah Creek WMO	\$64,784
Richfield-Bloomington WMO	\$20,208
Shingle Creek WMO	\$75,690
West Mississippi WMO	\$39,355

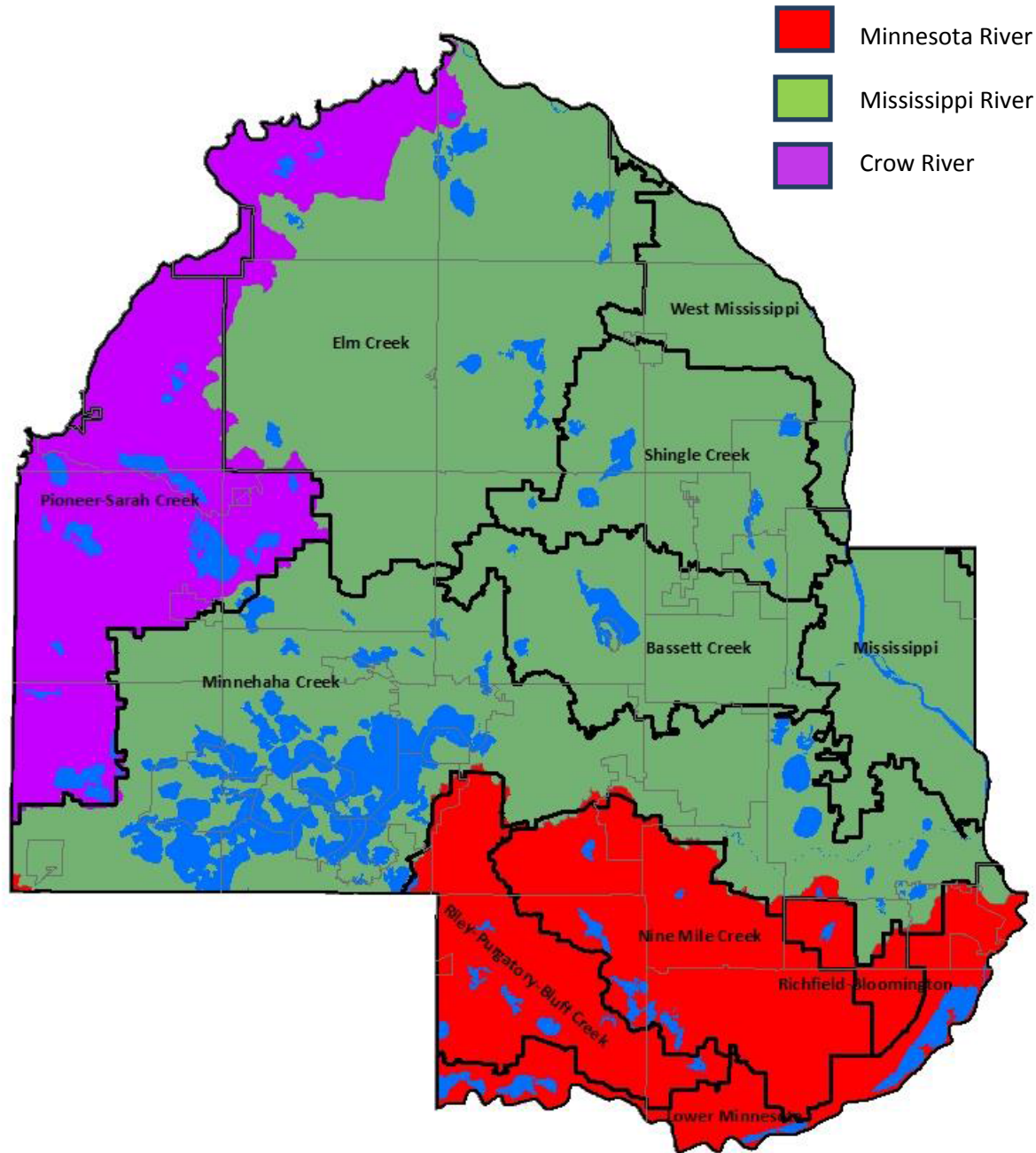


Figure 1. Watershed Management Organizations (WMOs) by major basin.

Table 3. Most current Shingle Creek WMO CIP.

CAPITAL IMPROVEMENT PROGRAM	2018	2019	2020	2021	2022
Cost Share Program	200,000	200,000	200,000	200,000	200,000
Commission Contribution	100,000	100,000	100,000	100,000	100,000
Local Contribution	100,000	100,000	100,000	100,000	100,000
Maple Grove Pond P57		648,000			
Commission Contribution		162,000			
Local Contribution		486,000			
Maple Grove Pond P33		574,000			
Commission Contribution		143,500			
Local Contribution		430,500			
Maple Grove Pond P55			855,000		
Commission Contribution			213,800		
Local Contribution			641,200		
Shingle Cr Brookdale Pk Habitat Enhncmnt		150,000			
Commission Contribution		37,500			
Local Contribution		112,500			
Lake Internal Load Improvement Project	200,000		200,000		200,000
Commission Contribution	200,000		200,000		200,000
Local Contribution					
Mpls Webber Park Stream Restoration		500,000			
Commission Contribution		125,000			
Local Contribution		375,000			
Shingle Cr Restor, Regent/Brooklyn Blvd			400,000		
Commission Contribution			100,000		
Local Contribution			300,000		
Mpls Flood Area 5 Water Quality Projects		6,000,000			
Commission Contribution		250,000			
Local Contribution		5,750,000			
Shingle Cr or Bass Cr Restor Project	500,000	500,000			
Commission Contribution	125,000	125,000			
Local Contribution	375,000	375,000			
Becker Park Infiltration Project	2,500,000				
Commission Contribution	250,000				
Local Contribution	2,250,000				
Palmer Creek Estates Bass Cr Restor				450,000	
Commission Contribution				112,500	
Local Contribution				337,500	
Partnership Cost-Share BMP Projects	100,000	100,000	100,000	100,000	100,000
Commission Contribution	50,000	50,000	50,000	50,000	50,000
Local Contribution	50,000	50,000	50,000	50,000	50,000
TOTAL PROJECT COST	3,500,000	8,672,000	900,000	750,000	500,000
TOTAL COMMISSION SHARE	725,000	993,000	663,800	262,500	350,000
TOTAL CITY SHARE	2,775,000	7,679,000	450,000	487,500	150,000

Table 4. Most current West Mississippi WMO CIP.

CAPITAL IMPROVEMENT PROGRAM	2018	2019	2020	2021	2022
Cost Share Program	100,000	100,000	100,000	100,000	100,000
Commission Contribution	50,000	50,000	50,000	50,000	50,000
Local Contribution	50,000	50,000	50,000	50,000	50,000
Mississippi Crossings Phase A Rain Gardens					
Commission Contribution					
Local Contribution					
Mississippi Crossings Phase B Infiltration Vault	200,000				
Commission Contribution	50,000				
Local Contribution	150,000				
Champlin Woods Trail Rain Gardens		180,000			
Commission Contribution		45,000			
Local Contribution		135,000			
Wetland Restoration Project		250,000			
Commission Contribution		62,500			
Local Contribution		187,500			
New Project					
Commission Contribution					
Local Contribution					
TOTAL PROJECT COST	\$300,000	\$530,000	\$100,000	\$100,000	\$100,000
TOTAL COMMISSION SHARE	100,000	157,500	50,000	50,000	50,000
TOTAL CITY SHARE	200,000	372,500	50,000	50,000	50,000

319 Grant Application: Nutrient Reduction through Better Lawn Maintenance

Fortin Consulting, Inc. is applying for a 319 Grant: Nutrient Reduction through Better Lawn Maintenance to continue the turfgrass maintenance certification classes we have offered in the past. We are seeking partners to host the classes. We have room left to add up to 5 classes, and possible participation in the soil testing/bmp recommendation pilot trials. We estimate the partner in-kind costs will be around \$1,000, plus costs to provide refreshments and lunch \$300 - \$500 depending on class size. You may charge for the lunch/refreshments if needed.

The purpose of this project is to reduce loading of nutrients to surface waters and groundwater from outdoor maintenance activities through pollution prevention. The project will include training over 500 maintenance professionals through 20 Turfgrass Maintenance trainings, and a pilot test(s) working with an estimated 50 - 100 homeowners to test their soils and provide individualized recommendations for fertilizer and other BMPs.

Project goals are:

- 1.) provide turfgrass maintenance professionals with information and tools to reduce nutrient loading from turfgrass,
- 2.) survey maintenance professionals on current practices, practices needing improvement, resources to help improve practices, and identify barriers to adopting specific best management practices
- 3.) provide soil tests and site specific fertilizer and other bmp recommendations to trial group(s) of residents
- 4.) survey participating residents to determine if they have adopted recommended bmps
- 3.) communicate with local organizations implementing TMDLs the information gained from the maintenance professionals, and the residential homeowner soil testing trial to assist with prioritizing TMDL implementation efforts

Please contact Carolyn Dindorf, Fortin Consulting at 63-478-3606 or carolyn@fortinconsulting.com with any questions or to partner with us. Thank you.

The following provides more details on the partner responsibilities.

Class description

The turfgrass maintenance class is a six hour course (plus half an hour for lunch). Below is a description of the class. Class times can be adjusted if needed, but a good time slot is 8:00 – 2:30 with check in starting at 7:30 or 7:45. The class will run until about 2:00 or a little earlier depending on questions and discussion, and then they take the optional certification test which usually takes 15 - 30 minutes.

Through presentations and class exercises, participants will learn how to integrate science with practical turfgrass maintenance while minimizing impacts on the environment.

- Use fertilizers, pesticides effectively to save time and money, and minimize environmental impacts, yet produces turfgrass that meets your expectations.
- Understand the life cycle of turfgrass and common weeds and use this information to more effectively manage turfgrass.
- Take and read soil test results to select the proper fertilizer and apply it at the correct rates.
- Irrigate more efficiently and effectively.
- Ensure that mowing and other practices protect turfgrass health and minimize impacts on surface and groundwater.

Attendees will be given a Turfgrass Maintenance manual and Matrix they can take with them.

FCI responsibility

We will arrive early to make sure the AV equipment is working and set up items we use in the class. We usually will have 2 instructors, an environmental professional and a turfgrass expert.

We will provide manuals, pencils, handouts, tests, and calculators for use during the class. We will run the class and manage the time. After the class, we will correct the tests and submit them to MPCA. We will summarize the class evaluation and exercise. The summaries will be provided to you.

We are available to answer any questions you have about the class or hosting.

Host/Partner responsibility

The host is responsible for finding the class venue, advertising, registration, and refreshments – usually coffee and a snack in the morning, and lunch. Please provide lunch for the 2 instructors too. If you need to charge a fee to cover your refreshment expenses, you may do that. We have seen fees ranging from \$10 - \$25. However, know that you will be competing with free classes hosted by other partners. The fee may discourage attendance, but if it is small it doesn't and may help ensure they show up for the class.

Venue

Attendees need to be able to take notes, complete class exercises and take the test, so classroom style setup is needed. We would like a table in front for items we use for demonstration and a podium if it is available. The room should be set up prior to our arrival. Our trainers will come in about an hour before the start of class to set up, so we will need to have someone to let us in if the doors are locked. Generally we aim for at least 35 people in a class, with a minimum of 12 to hold the class. Larger classes are welcome as long as your location can hold more people and they can see the projector screen.

We will use your A/V equipment (LCD projector, microphone) if it is available, or we can bring ours. We will bring our own laptop computer. We do need a white wall or screen. Please let us know what A/V equipment will be available so we will know what to bring.

Advertising

The target audience for this class includes city park staff, private maintenance companies, property managers, hospitals and schools.

We can provide a couple of flyer templates you can use and edit as needed to add your specific information and/or a registration form, and a class description which you can use in emails or social media.

Class day

On the day of the class the host is responsible for the following:

- Make sure the doors are open so we can get in about 1 hour prior to start time
- Set up the room, make sure you know how to operate any AV equipment or have someone available to help if needed
- Make coffee and set up any refreshments
- If you'd like to get the class started and welcome the class participants and say something about your programs, you are welcome to do that. Just let us know what you'd like to do. We can introduce ourselves and run the rest of the class. If you have any information or fliers you'd like to provide to participants, you are welcome to do that.
- Check in class participants (please provide a list of participants and their organizations to us after the class. We are tracking this for the grant reports.
- Make arrangements for lunch
- Clean up

You are welcome to attend the class or have staff present as needed to complete the above tasks.

Technical Memo



Item 08a

Responsive partner.
Exceptional outcomes.

To: Shingle Creek/West Mississippi WMC Commissioners
From: Diane Spector
Date: March 2, 2018
Subject: Education and Outreach Update

WMWA

A reminder that WMWA has switched over its email distribution system for the WaterLinks e-newsletter from Hennepin County to MailChimp. If you wish to keep getting it (or to newly subscribe), go to westmetrowateralliance.org/contact.html and sign up. The next issue of Water Links will be out in the 2nd quarter of 2018 and will feature summer-related content. The next WMWA meeting is Tuesday, March 13, 2018 at Plymouth City Hall.

WMWA is also planning in 2018 to continue facilitating native plant sales by linking up native growers with community events such as festivals and farmer's markets. WMWA would pay any booth fees charged by the event sponsor and advertise the event and the grower would be free to sell plants.

Website/Social Media

The website Google Analytics for February 2018 are attached, as are the Facebook insights for the last 28 days for both Shingle Creek and WMWA. As a reminder, Reach is the number of times a post was viewed in a Facebook feed, Engagement is an action- a click, comment, share, or reaction. It was a pretty slow month in February, especially compared to January with the exciting carp capture photos and TV coverage. Both Amy and Diane were out on vacation for a few of those weeks, so there were limited posts.

Shingle Creek FB Metrics


Last 28 days: 108 total Likes, 127 Reaches, 30 Engagements.

Z:\West Metro Water Alliance\2018\M-Mar ed outreach update.docx

West Metro Water Alliance (WMWA) Metrics

Last 28 days: 125 total Likes, 307 Reaches, 77 Engagements


Published ▾	Post	Type	Targeting	Reach <i>i</i>	Engagement
02/21/2018 8:08 pm	 This kid is right on.			25 	2 1 
02/15/2018 2:03 pm	 https://us15.campaign-archive.com/?e=881372da5a&u=0f1c1920			24 	1 0 
02/15/2018 8:31 am	 Hiring Administrative Assistant. Part-time, 25 hours/week, with ben			89 	7 2 
02/14/2018 4:51 pm	 Who should attend: Contractors, staff and volunteers who maintai			22 	0 0 
02/14/2018 12:48 pm	 West Metro Water Alliance share d Metro Area Children's Water Fe			28 	4 1 
02/14/2018 12:31 pm	 West Metro Water Alliance share d Capitol Region Watershed Dist			20 	2 0 
02/13/2018 10:22 am	 West Metro Water Alliance share d Pioneer-Sarah Creek Watershe			42 	2 2 
02/12/2018 4:06 pm	 Do you want to find out what are t he common issues facing our lak			18 	0 2 
02/12/2018 12:41 pm	 Please read...and share!			9 	0 0 
02/08/2018 4:20 pm	 Kids around Minnesota--and the world--are "improving water's jour			62 	2 5 
02/08/2018 3:23 pm	 Please check out and subscribe to our quarterly newsletter, WaterL			220 	10 7 
02/05/2018 3:18 pm	 West Metro Water Alliance share d Mississippi Watershed Manage			30 	5 1 
02/01/2018 2:38 pm	 Master Water Stewards hard at work!			29 	3 2 



West Metro Water Alliance
Published by Amy Juntunen (?) · February 8 at 3:23pm ·

Please check out and subscribe to our quarterly newsletter, WaterLinks! We recently had to change our newsletter provider so if you did not receive this via Email, please re-subscribe by clicking this link: <https://mailchi.mp/4895dc307853/water-links-signup>

In this newsletter - Tons of Carp Removed on Twin Lake!
<http://mailchi.mp/6ed5339a4e5d/waterlinks-newsletter-vol-11>



WaterLinks Newsletter, Vol. 11

MAILCHIMP

Performance for Your Post

220 People Reached

7 Likes, Comments & Shares ⓘ

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0 Comments	0 On Post	0 On Shares
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4 Shares	4 On Post	0 On Shares
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Media Alert

For Immediate Release

Contact: John Bly, john@metroblooms.org, 651-699-2426

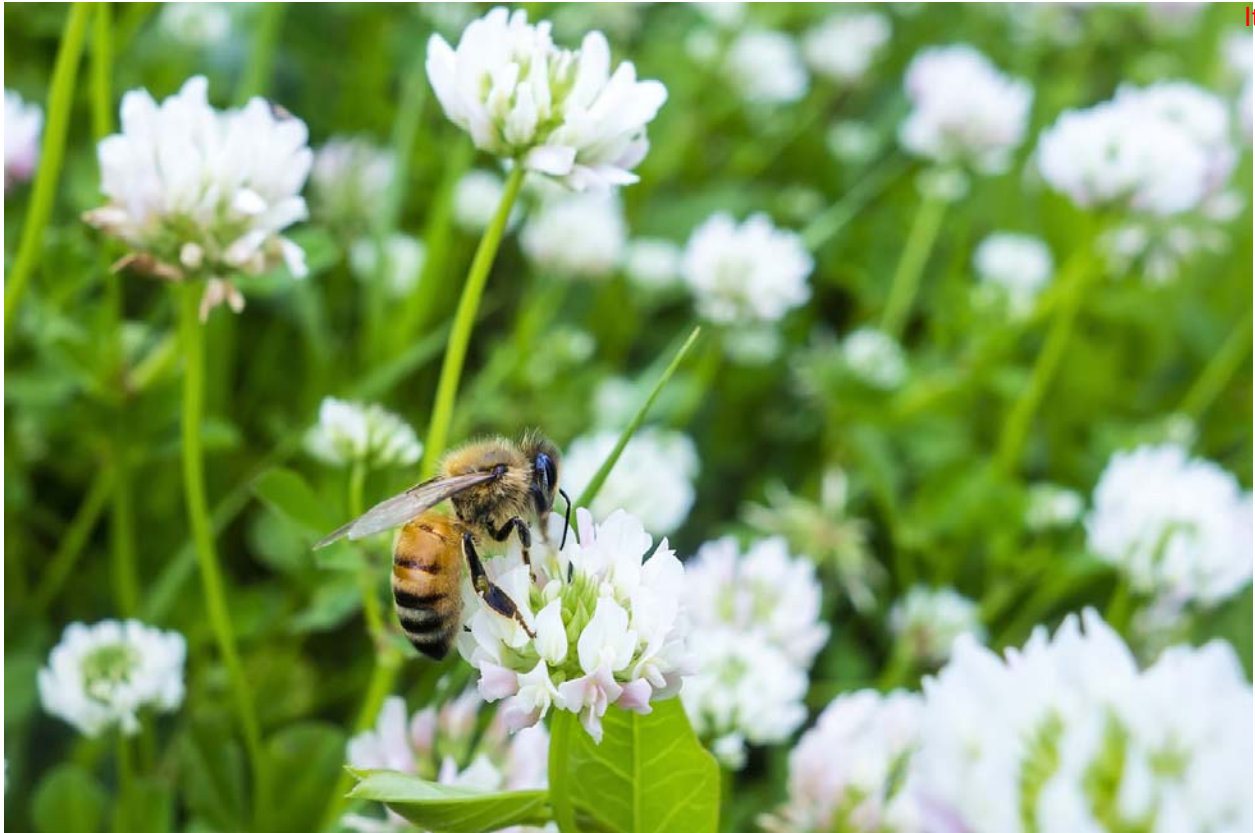
Learn How to Create a Resilient Yard

2018 Blue Thumb workshops hosted by Metro Blooms

What?	<p>Unseasonably warm weather, long periods of drought, and flooding rains are the new normal in Minnesota. Metro Blooms is offering two types of resilient yard presentations this year: <i>Resilient Yard Workshops</i> and <i>Turf Alternative</i> workshops.</p> <ul style="list-style-type: none"> • <i>Resilient Yard Workshops (2.5 hours)</i>: Provide a framework to understand the importance of resilience and how it can be fostered in your yard through a variety of practices, including how to install your own raingarden. Following presentation, attendees receive one-on-one design assistance from Blue Thumb Landscape Designers, Hennepin County Master Gardeners, and Master Water Stewards to create a plan for your own yard. • <i>Turf Alternative Workshops (1.5 hours)</i>: Your guide to a low-maintenance lawn. This 1-hour presentation overviews the benefits and options before providing step-by-step instructions to establishing water- and pollinator-friendly perennial ground covers. Suggested turf alternatives minimize the need for irrigation and chemical inputs while maintaining a useable lawn. The presentation is followed by a group discussion to identify and overcome common obstacles faced by homeowners. <p>All workshops attendees receive information about installation cost share programs and Blue Thumb resources to help get a project in the ground.</p>
When?	March-June 2018
Where?	11 Twin Cities metro locations + 1 workshop in Prescott, Wisconsin
How to Register?	<p>Visit metroblooms.org or call 651-699-2426 Cost: \$15 per household unless otherwise noted. Register soon, some locations fill up fast. You can also mail your registration to Workshop Registration, P.O. Box 17099, Minneapolis, MN 55417. Enclose a check payable to Metro Blooms, and include the workshop location, your name, address, phone number and email address.</p>
Why?	<p>Increasingly severe changes in Minnesota's weather patterns are impacting all of us, but these changes are felt most strongly in our cities. Impermeable surfaces (roads, roofs, parking lots, and unhealthy compacted soils) excel at soaking up and retaining heat from the sun, and also contribute to huge amounts of runoff, carrying pollution into our waters. Resilient yards do the opposite: shed and shade the sun's heat, but soak up and infiltrate stormwater, cleaning and using it to help cool the surrounding landscape. A resilient yard not only survives extreme weather—it also helps us thrive in spite of it.</p>
	<p>Workshops presented by Metro Blooms, sponsored by the Cities of Minneapolis, Plymouth, Robbinsdale, Crystal, Brooklyn Park, Brooklyn Center, New Hope, St. Louis Park, and Edina, Hennepin County Master Gardeners, Minnehaha Creek Watershed District, Nine Mile Creek Watershed District, Shingle Creek and West Mississippi Watershed Management Commission, Rice Creek Watershed District, Elm Creek Watershed Management Commission, Bassett Creek Watershed Management Commission, and Friends of Freedom Park.</p> <p>Metro Blooms, a local non-profit organization, works to strengthen communities by promoting environmentally-sound landscaping that beautifies neighborhoods and protects our environment. Metro Blooms coordinates the Blue Thumb partnership – a network of public and private partners working towards planting for clean water.</p>

Register now. Some locations fill up fast. The \$15 workshops are offered March - June:

Date	Day	Time	Workshop Location	Workshop Type
March 28	Wednesday	12:30-2:30PM	Prescott, WI; exactly location TBD (Free)	Turf Alternatives
March 29	Thursday	6-8:30 PM	St. Louis Park City Hall (Free to residents)	Resilient Yards
April 4	Wednesday	6:30-9 PM	Champlin City Hall	Resilient Yards
April 4	Wednesday	6:30-8 PM	Armatage Recreation Center, Minneapolis	Turf Alternatives
April 10	Tuesday	6-8:30 PM	Longfellow Recreation Center, Minneapolis	Resilient Yards
April 12	Thursday	6:30-8 PM	St. Louis Park City Hall (Free to residents)	Turf Alternatives
April 17	Tuesday	6-8:30 PM	St. Barnabas Church, Plymouth (Free to residents)	Resilient Yards
April 17	Tuesday	TBD	Edina, exact location TBD	Turf Alternatives
April 19	Thursday	6-8:30 PM	Nokomis Recreation Center, Minneapolis	Resilient Yards
April 24	Tuesday	TBD	Edina, exact location TBD	Resilient Yards
April 24	Tuesday	6:30-8 PM	Longfellow Recreation Center, Minneapolis	Turf Alternatives
April 28	Saturday	11-1:30 PM	North Regional Library, Minneapolis (Free)	Resilient Yards
May 3	Thursday	6:30-8 PM	Nokomis Recreation Center, Minneapolis	Turf Alternatives
May 10	Thursday	6-8:30 PM	Crystal Community Center	Resilient Yards
May 15	Tuesday	6-8:30 PM	Brooklyn Center Community Center	Resilient Yards
May 19	Saturday	11-12:30PM	North Regional Library, Minneapolis (Free)	Turf Alternatives
May 23	Wednesday	6-8:30 PM	Armatage Recreation Center, Minneapolis	Resilient Yards
May 31	Thursday	6-8:30 PM	Audubon Recreation Center, Minneapolis	Resilient Yards
June 7	Thursday	6:30-8 PM	Audubon Recreation Center, Minneapolis	Turf Alternatives



elm creek

Watershed Management Commission

Item 09a

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
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701 Fourth Ave. South, Suite 700
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March 7, 2018

Mr. Ken Ashfeld
Public Work Director
City of Maple Grove
12800 Arbor Lakes Parkway
Maple Grove, MN 55369

Re: Draft Local Surface Water Management Plan

Dear Mr. Ashfeld;

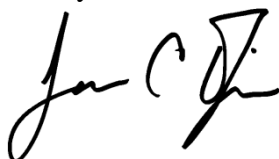
On behalf of the Elm Creek Watershed Management Commission, I have reviewed the City of Maple Grove's Draft Surface Water Management Plan dated January 2018 (received on January 26, 2018) for conformance with the Commission's 3rd Generation Watershed Management Plan and per MN Statutes 103B and Minnesota Rules 8410. The following comments, recommendations and clarifications are provided for the City's consideration in their final plan;

- 1) Because the water quality of Cook Lake is in such excellent condition and with development pressure in and around the lake increasing, a lake protection/preservation plan should be considered to protect the value of this resource.
- 2) The 1999 Management Plans developed for the city lakes strive for a 'B' water quality grade on all lakes. Although this may be practical for some of the lakes, it would be quite costly if not impossible to achieve on others. Updating and refining these expectations should be considered.
- 3) Section 5.2.2, Erosion and Sedimentation Issues; an erosion issue has come to the Commission's attention in the past along the Rice Lake channel, just upstream of CR30 (generally between 14000 and 14100 92nd Place N.) The residents in this area have undercutting of the lake bed/channel section on the east side of the lake. The shoreline is being undermined, creating unstable and sloughing conditions.
- 4) In Section 6.5, no mention is given to how the City would like to address the County Ditch system within its jurisdiction. All of County Ditch's 11 and 22 and portions of County Ditch's 21 and 16 still reside in Maple Grove. In the past the city had a desire to transfer this drainage system per MN Statute 383B.61. If this is still your wish, it should be addressed in your SWMP.
- 5) In Table 7.1, CIP projects #4 and #13 appear to be the same project.

- 6) Table 7.1 project #4 identifies DNR Wetland 27-0437 for improvement. This wetland is in Corcoran and would have to be improved at the behest of and in cooperation with the City of Corcoran.
- 7) The lower value wetland buffer requirements the City of Maple Grove has per their Wetland Systems District Code do not meet the Commissions standards. The Commission requires all wetlands, regardless of quality, have a minimum 10' buffer and an average 25' buffer around them. In addition, the Commission requires an average 50' buffer and minimum 25' buffer on Elm, Rush and the North Fork of Rush Creeks. Per the City's wetland systems district code, the City requires a 10' minimum buffer width on all wetlands not considered high quality and does not address buffers along their creek systems.

Thank you for the opportunity to review your Surface Water Management Plan. Please contact me at 612-348-7338 if you have any questions on this information.

Sincerely,

A handwritten signature in black ink, appearing to read 'James C. Kujawa', with a stylized flourish at the end.

James C. Kujawa
Technical Advisor to the Commission

cc Judie Anderson Executive Secretary, ECWMC
 Rick Lestina, City of Maple Grove
 Stephanie Hatten, WSB Associates
 Judy Sventek, Metropolitan Council

elm creek Watershed Management Commission

2017 WORK PLAN IN REVIEW

Minnesota Rule 8410.0150 requires the Commission to submit to the Board of Water and Soil Resources a financial report, activity report and audit report for the preceding fiscal year. 8410.0150 Subp. 3 outlines the content of the annual activity report. It includes an assessment of the previous year's annual work plan and development of a projected work plan for the following year.

Following is a summary of the work undertaken by the Elm Creek Watershed Management Commission in 2017 to meet the goals, objectives, and projected work plan outlined in its *2016 Annual Report*. The Commission identified the following activities in 2017:

- ☑ Continued to review local development/redevelopment plans for conformance with the standards outlined in the Commission's third generation Watershed Management Plan. *Fifty-three projects were reviewed by the Commission in 2017. The Commission does not have a permit program.*
- ☑ Served as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the cities of Champlin and Corcoran. *The Commission continued to serve as the LGU for Champlin and Corcoran. In 2017 Technical staff assisted approximately 50 landowners/agency/developer contacts with wetland-related questions. On behalf of the Commission they reviewed the following types of wetland applications: 25 wetland boundary/type; eight no-loss, two exemptions, three sequencing, and two wetland replacement plans. Wetland impacts totaled 14,765 SF; wetland replacement totaled 28,775 SF. Five WCA violations were investigated and resolved. Two others were determined to not be WCA/Commission violations. The Commission was involved in 12 Technical Evaluation Panels (TEPs) throughout the watershed. The Elm Creek Commission does not have a wetland banking program.*

At year-end, the City of Champlin agreed to take over full LGU responsibility for WCA on January 1, 2018. Further, the Commission voted to invoice back to the affected city(ies) all costs related to its role as the LGU for WCA, effective January 1, 2019.

- ☑ Conducted lake and stream monitoring programs to track water quality and quantity conditions. *The Commission monitored Diamond, Fish, and Weaver Lakes, and Rice Lake Main Basin in cooperation with Three Rivers Park District. Abbreviated monitoring occurred on Lake Jubert through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP) in 2017.*
- ☑ Continued to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS). *Stream monitoring continued at the Champlin monitoring station where both grab samples and storm runoff samples were collected and analyzed for various parameters. In cooperation with Three Rivers Park District, the Commission conducted a dissolved oxygen longitudinal survey for Diamond Creek and a nutrient and dissolved oxygen longitudinal survey in upper Rush Creek at five locations in 2017.*
- ☑ Promote river stewardship through the River Watch program. *Four sites on Elm and Rush Creeks were monitored in 2017.*

- ☒ Participate in the Minnesota Wetland Health Evaluation Program (WHEP). *Five wetlands located in the Crow Hassan Park Reserve and the Elm Creek Park Reserve were monitored in 2017.*
- ☒ Assist member communities in preparing and adopting their local water management plans. *The City of Medina submitted, and the Commission approved, Chapter 11 of its 2040 Comprehensive Plan. The City's Surface Water Management Plan was revised, updated and included in their Comprehensive Plan as Chapter 11. It is anticipated the remaining communities will submit their local plans for approval by the deadline of December 31, 2018.*
- ☒ Complete informal and formal reviews of the Elm Creek TMDL and WRAPS reports. Obtain US EPA approval of the TMDL document and MPCA approval of the WRAPS report. *The WRAPS report was approved by the Minnesota Pollution Control Agency on December 16, 2016 and the TMDL was approved by the US Environmental Protection Agency on June 26, 2017. Both documents have been uploaded to the MPCA and Commission websites.*
- ☒ Use results of WRAPS study to establish priority areas and complete subwatershed assessments to identify specific BMPs that feasibly and cost-effectively reduce nutrient and sediment loading to impaired water resources. *The Commission was awarded a \$50,280 Clean Water Fund (CWF) Accelerated Implementation Program grant to complete a subwatershed assessment in four key subwatersheds in the headwaters of Rush Creek and North Fork Rush Creek.*
- ☐ Develop model manure management ordinance to regulate placement of new small non-food animal operations, require member cities to adopt that or other ordinances and practices to accomplish its objectives. *This task is being undertaken by the Technical Advisory Committee and will be a priority in 2018.*
- ☒ Continue as a member of the West Metro Water Alliance (WMWA). *The Commission continued to support the WMWA Educator Program and contribute articles to its e-newsletter Water Links. The Commission promoted the Watershed PREP (Protection, Restoration, Education, and Prevention) program to reach every 4th grade science class in the watershed. 846 students in 30 classes in the Elm Creek watershed participated in Lesson 1: What is a Watershed and Why do we Care? and 442 students in 15 classes participated in Lesson 2: The Incredible Journey.*

The Watershed Prep educators also presented at the Basswood Science Night, the Plymouth Home Expo and the Plymouth Kids Fest.

In 2017 the Commission also collaborated on the Pledge to Plant for Pollinators and Clean Water project and further development of the new WMWA website.
- ☒ Participate as an exhibitor at Plymouth's Home Expo. *The Commission participated in the Expo on April 7-8, 2017.*
- ☒ Continue as a member of Blue Thumb and WaterShed Partners and a partner in the NEMO (Nonpoint Education for Municipal Officials) program. *The Commission continues to support these organizations/ programs with their financial and in-kind contributions.*
- ☒ Co-sponsor Rain Garden Workshops in conjunction with the Commission's Education and Public Outreach Program. *Raingarden workshops were conducted in the cities of Champlin and Plymouth on April 6 and April 11, respectively.*
- ☒ Work in partnership with Hennepin County to help build relationships with the agricultural community in the watershed in order to encourage TMDL implementation. *Karl Hakanson, U of M Extension Educator, Kirsten*

Barta, Rural Conservationist, and Jim Kujawa, Surface Water Resource Specialist, presided over a field day in August to inform about a dozen horse stable managers how one of their neighbors, along with County resources, redesigned a stable and pasture system for improved horse health, ease of management, and water quality.

☒ *In addition, Barta worked with local landowners to assist them in becoming compliant with the 2015 Minnesota Buffer Law. Prior to the November 1, 2017 deadline, when buffers are required to be in place on all public waters, the following was determined:*

<u>Parcel Status</u>	<u>No. of parcels</u>
Compliant	46
Pending site visit	3
Plan in place/pending installation	14
Non-Compliant/No Response	30
TOTAL	93

Landowners who have not responded or gotten their property into compliance will be referred to the Board of Water and Soil Resources (BWSR) for enforcement.

☒ *Seek grant funding to assist with the costs associated with projects identified on the Commission's CIP. Four CIP projects - Phase 3 of the Fox Creek Streambank Stabilization Project in Rogers, Phase 2 of the Rush Creek Main Stem Restoration project in Maple Grove, the Mill Pond Fishery and Habitat Restoration project in Champlin, and the Rain Garden at Independence Avenue Construction project in Champlin; were certified through the ad valorem taxing process for funding by Hennepin County.*

In conjunction with this effort, the Commission adopted two resolutions in 2017. Resolution 2017-01 adopted a Minor Amendment to the Third Generation Watershed Management Plan to add two projects to the Commission's CIP, remove one project from the Commission's CIP, and shift the timing of funding of four projects currently listed on the Commission's CIP. Resolution 2017-02 ordered the four projects certified above, designated the members responsible for construction, and designated the Commission cost-share funding.

Grant-related funding through the Commission was not sought for these four projects.

☒ *Continue to support City-sponsored projects as they are identified. The Commission continues to identify projects on its CIP for funding either through the Commission's CIP budget or grant funding. In 2016 the Commission applied for, and received, a BWSR Competitive Grant (Projects and Practices) in the amount of \$200,000 for the Internal Phosphorus Loading Control Project on Fish Lake and a BWSR Competitive Grant (Accelerated Implementation Grant) in the amount of \$50,280 for the Rush Creek Headwaters Subwatershed Assessment Project.*

The alum treatment of Fish Lake took place on September 18-21, 2017. A total of 95,349 gallons of alum was applied to 120 acres of the lake at depths greater than 20 feet. The next steps include collecting sediment cores to determine the alum dosage calculations in 2018 and continuing to monitor the lake to determine the effectiveness of the first treatment.

On December 7, 2017, Wenck Associates, Commission staff, and City of Corcoran staff attended an Open House to which all the property owners living in the Corcoran and Rogers portion of the Rush Creek Subwatershed study area were invited. After reviewing runoff predictions with local landowners, the end result will be a series of detailed maps showing recommended best management practices, and a set of actions, costs, and pollutant reductions expected.

☒ *Adopt a 2018 operating budget. At its May 10, 2017 regular meeting, the Commission approved a 2018 operating budget totaling \$910,445, with assessments to the member cities totaling \$225,000.*

☒ Continue to populate and maintain the Commission's website www.elmcreekwatershed.org to provide news to residents of the watershed. *In 2016 the Commission transferred its current website to a new mobile-ready platform.*

In 2017, there were 2,001 new visitors and 44 repeat visitors that resulted in 3,290 individual sessions and 7,448 page views. The average pages viewed per session is 2.26. 1,188 visitors came to the site through search engines like Google, Yahoo, and Bing. 535 visitors directly entered the website. 354 visitors came through "referrals" from other websites like Hennepin County, member cities, WMWA, and other local watersheds. 18 visitors came to the site through Facebook.

The website is regularly updated with meeting and project information, and articles and information about projects and studies undertaken by the Commission.

☒ Publish an annual activities report summarizing the Commission's yearly activities and financial reporting. *The 2016 Annual Activity Report was accepted by the Commission at its April 12, 2017 meeting.*

APPROVED FEBRUARY 14, 2018

elm creek

Watershed Management Commission

2018 WORK PLAN

Minnesota Rule 8410.0150 requires the Commission to submit to the Board of Water and Soil Resources a financial report, activity report and audit report for the preceding fiscal year. 8410.0150 Subp. 3 outlines the content of the annual activity report. It includes an assessment of the previous year's annual work plan and development of a projected work plan for the following year. The 2017 Work Plan accomplishments were accepted at the February 14, 2018 meeting.

The Commission's Third Generation Watershed Management Plan identifies issues, priorities and goals for the ten-year period 2015-2024. Following is a projected work plan for 2018.

1. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan. Review the current project review fee schedule for fiscal conformity.
2. Continue to serve as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the City of Corcoran.
3. Enter into a new five-year cooperative agreement with Three Rivers Park District to share in the costs of conducting lake and stream monitoring in the watershed.
4. Conduct lake and stream monitoring programs to track water quality and quantity conditions. The Commission will undertake stream monitoring, both flow and water quality, at monitoring sites DC on Diamond Creek, RT on Rush Creek main stem, and EC77 on Elm Creek above Rice Lake. In addition, four sentinel lakes (Fish, Weaver, Diamond, and Rice Lake-main basin) will be monitored on a bi-weekly basis. Finally, longitudinal surveys will be continued, dependent on the results of the 2017 DO monitoring on Diamond Creek and at locations within the Upper Rush Creek subwatershed. All monitoring outlined in this section will be conducted in cooperation with Three Rivers Park District.
5. Fund the monitoring of two lakes through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP).
6. Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS).
7. Promote river stewardship through Hennepin County's River Watch program with three sites in 2018.
8. Participate in the MN Wetland Health Evaluation Program (WHEP) with four wetlands in 2018.
9. Assist member communities in preparing and adopting their local water management plans. Advise member cities that have not completed their local plans of the revised requirements under Rule 8410.0160, subp. 6.

10. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants. This task is not required in 2018.
11. Continue as a member of the West Metro Water Alliance (WMWA). Continue to support the WMWA Educator Program and contribute to its e-newsletter *Water Links*. Promote the Watershed PREP program to reach every 4th grade science class in the watershed. Participate in the Planting for Clean Water project. Conduct native plant sales at various city events around the watershed.
12. Continue as a member of Blue Thumb and WaterShed Partners and a partner in the NEMO (Nonpoint Education for Municipal Officials) program.
13. Co-sponsor Rain Garden Workshops in conjunction with WMWA as part of the Commission's Education and Public Outreach Program. Metro Blooms will host two different workshops in 2018, *Resilient Yards* and *Turf Alternatives*. The WMWA watersheds will host four *Resilient Yard* workshops, one in each watershed, as well as one *Turf Alternatives* workshop. Workshops will be held in the following cities: Plymouth (Shingle Creek), Crystal/New Hope/Golden Valley (Bassett Creek), Brooklyn Center/Brooklyn Park (West Mississippi), and Champlin (Elm Creek).
14. Develop a model manure management ordinance/policy regulating the placement of new small nonfood animal operations using the City of Medina ordinance as a reference. Require member cities to adopt that ordinance or other ordinances and practices that will accomplish its objectives. The Technical Advisory Committee will continue to work on development of this ordinance/policy.
15. Work in partnership with Hennepin County's agriculture specialist to help build relationships with the agricultural community in the watershed in order to encourage TMDL implementation.
16. Work with the Hennepin County Rural Conservation Specialist in assisting cities with incorporation of the manure management ordinance/policy into their own ordinances/working with landowners. Assist landowners as they identify BMPs for implementation as part of the Rush Creek Subwatershed Assessment.
17. Seek grant funding to assist with the costs associated with projects identified on the Commission's CIP. A call for CIPs went out to the cities in January 2018. Proposed CIPs and CIP updates will be reviewed for inclusion on the Commission's CIP by the Technical Advisory Committee at their February meeting. The TAC's recommendations will be forwarded to the Commission. This activity will require a Minor Plan Amendment.
18. Undertake the Internal Phosphorus Loading Control Project on Fish Lake. This project spans the years 2017-2019. An initial alum treatment occurred in September 2017. The next steps include collecting sediment cores to determine the alum dosage calculations and continuing to monitor the lake to determine the effectiveness of the first treatment. The second treatment will occur in spring 2019.
19. Undertake the Rush Creek Headwaters Subwatershed Assessment Project. This project also spans the years 2017-2019. In December 2017 an Open House was held for property owners living in the Corcoran portion of the Study Area. The approximately 50 folks who attended the Open House shared information about known problems and issue, and observations about conditions in their area. Wenck Associates and the Core Team will review this information as they move forward with the assessment.

In 2018 the following tasks will be undertaken:

- Desktop prioritization and feasibility analysis of the structural BMPs sited using Agricultural Conservation Planning Framework (ACPF) GIS model/tool.
- Produce final list of proposed structural BMPs, evaluate their cost-benefit

- Identify non-structural (cultural) BMPs to include in final report
 - Produce final report describing study area, water quality issues/concerns, and proposed list of structural and cultural BMPs to improve water quality.
 - Work with willing landowners and begin identifying BMPs for grant funding opportunities
20. Continue to support City-sponsored projects using the ad valorem funding mechanism. CIPs included on the Commission's CIP schedule will be considered for ad valorem funding recommendation by the Technical Advisory Committee.
 21. Adopt a 2019 operating budget.
 22. Continue to populate and maintain the Commission's website www.elmcreekwatershed.org to provide news to residents, students, developers and other individuals interested in the water resources of the watershed. Using the tool Weebly, continue to update and enhance the website, adding links to other websites as well as to other useful information.
 23. Publish an annual activities report summarizing the Commission's yearly activities and financial reporting. The *2017 Annual Activity Report* will be available at the Commission's April 11, 2018 meeting.
 24. The Commission will continue to meet with representatives from the Board of Water and Soil Resources, other water management organizations, counties, and cities regarding a possible move from a competitive funding model towards a more systematic Clean Water Funding model for local water management authorities on a watershed basis. If all watershed organizations in Hennepin County choose to create a collaborative group for the watershed-based funding, that share of funds is available for Hennepin County projects. If the WMOs choose to remain with competitive-based grant funding, that money will be pooled with counties who also choose to remain competitive-based. This decision must be made by June 30, 2018.

APPROVED FEBRUARY 14, 2018