

elm creek Watershed Management Commission

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AGENDA Technical Advisory Committee February 13, 2019

1. Call TAC meeting to Order.
 - a. Approve agenda.*
 - b. Approve Minutes of last TAC meeting.*
2. SWA Cost Share Applications.*
 - a. Corcoran.
 - b. Dayton.
3. 2019 Capital Improvement Program.*
4. Internal Load Projects.*
5. Use of wetlands for irrigation purposes - discussion. *(Please refer to meeting materials from November TAC meeting.)*
6. Other Business.
7. Next meeting _____.
8. Adjourn meeting of TAC.

Z:\Elm Creek\Meetings\Meetings 2019\02 TAC Meeting Agenda.docx

*in meeting packet
**available at meeting

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November 14, 2018 Minutes Technical Advisory Committee (beginning on page 1) and Regular Meeting (beginning on page 3)

I. A meeting of the **Technical Advisory Committee (TAC)** for the Elm Creek Watershed Management Commission was convened at 10:01 a.m., Wednesday, November 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; Sarah Nalven, Wenck Associates, Dayton; 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); and Judie Anderson, JASS.

Also present: Ken Guenther, Corcoran; Doug Baines, Dayton; and Steve Christopher, Board of Water and Soil Resources (BWSR).

II. Motion by Vlach, second by Mattson to **approve the agenda**. *Motion carried unanimously.*

Motion by Kujawa, second by Simmons to **approve the minutes** of the April 11, 2018 TAC meeting. *Motion carried unanimously.*

[Nalven arrived 10:07.]

III. Subwatershed Assessments.

A. **Cost Share Policy Recommendations.** Staff provided draft recommendations* regarding the subwatershed assessment (SWA) section of the Commission's current cost share policy.*

1. Under item c of the subwatershed assessment section, it is recommended that some clarification be added, for example: *"Undertaken at the discretion of the Commission based on the information provided by cities in the completed SWA cost share application form."*

2. Staff propose the following timeline for evaluating and executing SWA projects:

- a. January 15 – applications are due from cities
- b. February TAC meeting – Technical staff will have reviewed applications and prepared recommendations for the consideration of the TAC to be brought to the February Commission regular meeting.
- c. March – Budget work
- d. March/April following year – SWA delivered to Commission
- e. August – BWSR grant applications due for implementation funding

[Tuominen arrived 10:19.]

B. Staff also created a draft Subwatershed Assessment Cost Share application form.* The following criteria are suggested for evaluating the applications:

- 1. Subwatershed is identified in the MPCA WRAPS or TMDL report as a priority

elm creek Watershed Management Commission

TAC and Regular Meeting Minutes – November 14, 2018

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2. Sponsor city shows active staff and financial support for implementation of projects identified within the SWA

3. Sponsor city has the ability to leverage outside funding for implementation

As this process is implemented and multiple applications are received, it may become necessary to devise a ranking system to prioritize the SWAs.

C. Current Cost Share Policy.* Discussion resulted in the following revisions to the SWA section of the current cost-share policy:

The Elm Creek Watershed Management Commission may consider Commission- or City-generated requests to undertake subwatershed assessments (SWAs). Primarily, SWAs will be completed in rural areas suspected of being high-nutrient loading and will be specific enough to identify potential load-reducing projects. SWAs will be

a. ~~Identified in areas outside of the Municipal Urban Service Area (MUSA).~~

b. *Supported by the City in which the SWA is located.*

c. *Undertaken at the discretion of the Commission.*

d. *Funded by a ~~\$15,000~~ maximum cap (grant or Commission funding) of \$15,000 or 25% of the cost of the SWA, whichever is lower, and a 20% match (cash or in-kind) by the City requesting the SWA.*

Motion by Fisher, second by Scharenbroich to forward the proposed revisions to the Commission for consideration and adoption. *Motion carried unanimously.*

IV. Use of wetlands for irrigation purposes.

This topic was brought forth by Medina Commissioner Elizabeth Weir. In her October 12, 2018 email* to Staff, Weir expressed concern regarding the use of wetlands for irrigation, citing the recent approval of Project Review 2018-032W Encore Development in Corcoran.

Staff consulted with Ben Carlson, BWSR, who in turn spoke with Jennie Skanke, DNR Hydro southern metro. They agreed that discharging ground water into a wetland would not negatively affect the wetland's ecology, chemistry, biota, etc.

Staff also received a response from Alex Yellick, Anderson Engineering, regarding iron in wetland systems. Yellick provided excerpts from two articles entitled, "Treatment Wetlands"* by Kadlec and Wallace and Mitsch and Gosselink on the subject.

It was a consensus to defer this subject to another meeting so that Weir can be present to take part in the discussion.

V. Buffer Law.

Barta reported that the Buffer Law requirements going forward require Staff to check each parcel in the county at least once every three years and spot check up to 15% of parcels. Hennepin has opted to section the county into thirds and check 1/3 each year, beginning in 2019. Those residents chosen to have a spot check done will be notified by letter. Letters will go out late winter/early spring.

VI. There being no further business, the meeting of the Technical Advisory Committee was adjourned at 11:21 a.m. The TAC will tentatively reconvene on Wednesday, January 9, 2019.

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DATE: FEBRUARY 5, 2019
TO ELM CREEK WATERSHED COMMISSION TECHNICAL ADVISORY COMMITTEE
FROM: JIM KUJAWA
RE: 2019 CIP PROJECTS/BUDGET

Background

The Commission has elected to fund capital projects through an ad valorem tax levy. Under the authority provided by MN Stat 103B.251, Subd. 5, the Commission has the authority to certify for payment by the county all or part of the cost of an approved capital improvement. The Commission will pay up to 25 percent of the cost of qualifying projects. This amount will be shared by all taxpayers in the watershed, with the balance of the project cost being shared by the local government(s) participating in or benefiting from the improvement.

- The Commission's maximum annual share of an approved project is up to \$250,000.
- The Commission will use a maximum annual levy of \$500,000 as a working guideline.
- The cities' share will be a minimum of 75% of the cost of the project.

In 2018 the Commission approved 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, Maple Grove, | \$ 75,000 |
| 2) | Elm Creek Stream Restoration Reach D, Plymouth, | \$212,500 |
| 3) | Elm Creek Stream Restoration Phase III, Champlin, | \$100,000 |
| 4) | Downs Road Trail Rain Garden, Champlin, | \$ 75,000 |

Information

Attached please find the current CIP spreadsheet as approved by the Commission in 2018. The 2019 Capital Improvement Program has the following items listed for funding:

- | | | |
|----|------------------------------------------|-----------|
| 1) | Special Studies | |
| | a. TMDL Implementation Special Study | \$ 25,000 |
| | b. Stream Segment Prioritization | \$ 10,000 |
| 2) | High Priority Steam Restoration Projects | |
| | a. Fox Creek, South Pointe, Rogers | \$ 22,500 |
| | b. Other High Priority Stream Projects | \$125,000 |

c.	2016-MG-02 Rush Creek Main*	\$ 25,000
3)	High Priority Wetland Improvements	
a.	Stone's Throw Wetland, Corcoran*	\$112,500
4)	Other	
a.	Agricultural BMP's Cost-Share	\$ 48,000
b.	Hickory Dr. Stormwater Improvements, Medina*	\$ 56,250
c.	Downtown Regional Stormwater Pond Corcoran*	\$ 10,000
Total CIP's		\$434,250

*CIP Project Submittal Form attached.

Recommendation;

- 1) Reviews the CIP's listed for 2019 and,
 - Receive input from Rogers, Corcoran and Medina as to their willingness to move forward on their respective CIP's for 2019,
 - Discuss other changes and opportunities for the CIP listings for 2019.
- 2) Provide a recommendation to the Elm Creek Watershed Commission which projects to fund for their 2019 Capital Improvement Program.

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Table 4.5. Elm Creek Third Generation Plan Capital Improvement Program

Description	Location	Priority	Est Proj Cost	Partners	Funding Source(s)	Estimated Commission Cost					
						2015	2016	2017	2018	2019	2020-2024
<i>Special Studies</i>											
TMDL Implementation special study	Watershed	H	225,000	Cities, HCEED	Operating budget	0	25,000	25,000	25,000	25,000	125,000
Stream segment prioritization	Watershed	H	20,000	Cities, HCEED, TRPD	Operating budget	10,000	0	0	0	10,000	0
<i>High Priority Stream Restoration Projects</i>				Cities, TRPD	Cities, TRPD, county levy, grants						
Elm Cr Reach E	Plymouth	H	1,086,000	Commission, Plymouth	County Levy - levied in 2015	250,000					
CIP-2016-RO-01 Fox Cr, Creekview	Rogers	H	321,250	Commission, Rogers	County Levy - levied in 2016	0	80,312	0	0	0	0
Mississippi Point Park Riverbank Repair	Champlin	M	300,000		County Levy - levied in 2016	0	75,000	0	0	0	0
Elm Creek Dam	Champlin	H	7,001,220		County Levy - levied in 2016	0	187,500	0	0	0	0
Tree Thinning and Bank Stabilization Project	Watershed	H	50,000			0		50,000	50,000	50,000	350,000 350,000
Fox Cr, Hyacinth	Rogers	M	360,000		County Levy - levied in 2017	0	0	90,000 112,500	0	0	0
Fox Cr, South Pointe, Rogers	Rogers	M	90,000			0	0	22,500	0	22,500	0
Other High Priority Stream Project	Watershed	H	500,000			0	0	0	125,000	125,000	250,000
CIP-2016-MG-02 Rush Creek Main	Maple Grove		1,650,000		County Levy - levied in 2016		75,000	75,000	75,000	25,000	
CIP-2016-MG-03 Rush Creek South	Maple Grove		675,000						168,750		
CIP-2017-PL-01 EC Stream Restoration Reach D	Plymouth		850,000	City, County, Comm	City, County, Comm				212,500		
<i>High Priority Wetland Improvements</i>				Cities	Cities, Commission						
DNR #27-0437	Maple Grove	L	75,000			0	0	0	0	0	18,750
Stone's Throw Wetland	Corcoran	M	450,000			0	0	112,500	112,500	112,500	0
Other High Priority Wetland Projects	Watershed	L	100,000			0	0	0	0	0	25,000
CIP-2016-MG-01 Ranchview Wetland Restoration	Maple Grove		2,000,000					250,000	250,000		
<i>Lake TMDL Implementation Projects</i>				Cities, lake assns.	Cities, Comm, grants, owners						
Mill Pond Fishery and Habitat Restoration	Champlin	H	5,000,000		County Levy - levied in 2017	0	0	250,000	0	0	0
Other Priority Lake Internal Load Projects	Watershed	M	100,000			0	0	0	0	0	25,000
	Maple Grove	H	300,000	City, TRPD, Comm, lake assn	County Levy - levied in 2016		75,000				
Stonebridge	Maple Grove	M	200,000		required and cannot until stormwater treatment systems are installed during street reconstruction project	0		50,000	0	0	0
Rain Garden at Independence Avenue	Champlin	L	300,000		County Levy - levied in 2017	0		75,000	0	0	0
CIP-2016-CH-01 Mill Pond Rain Gardens	Champlin	M	400,000			0	0	100,000	100,000	100,000	
Other Priority Urban BMP Projects	Watershed	L	200,000			0	0	0	0	0	50,000
<i>Other</i>											
Livestock Exclns, Buffer & Stabilized Access	Watershed	M	50,000	Cities, owners, U Extension, NRCS	Cities, owners, Comm, NRCS	0	0	0	50,000	0	50,000
Agricultural BMPs Cost Share	Watershed	H	50,000	Cities, owners, U Extension, NRCS	Cities, owners, Comm, NRCS	0		50,000	50,000	50,000-48,000	100,000 152,000
CIP-2016-RO-04-CIP-2017-RO-1 Ag-BMPs-Cowley-Sylvan Connections BMPs	Rogers		300,000	City, Comm	City, Comm, BWSR				75,000		
CIP-2016-RO-03 Downtown Pond Exp & Reuse	Rogers		406,000						101,500		
Hickory Drive Stormwater Improvement	Medina		225,000	City, Comm, Grants						56,250	
SE Corcoran Wetland Restoration	Corcoran		400,000	City, Comm, 319 Grant						100,000	100,000
Downtown Regional Stormwater Pond	Corcoran		50,000	City, Comm						10,000	
Elm Creek Stream Restoration Phase III	Champlin	H	400,000						100,000		
Downs Road Trail Raingarden	Champlin	H	300,000						75,000		
Elm Creek Stream Restoration Phase IV	Champlin	H	600,000							150,000	150,000
Lowell Pond Raingarden	Champlin	H	400,000							100,000	100,000
Rush Creek Headwaters SWA BMP Implementation	Corcoran/Rogers	H	200,000	cities, county, TRPD	cities, county, TRPD, owners						50,000
Hydrologic & Hydraulic Modeling	Watershed	L	25,000	HCEE	Commission	0	0	0	25,000	0	0
Fourth Generation Plan	Watershed	L	70,000		Commission	0	0	0	0	0	70,000
TOTAL STUDIES			245,000		COMM SHARE TOTAL STUDIES	10,000	25,000	25,000	25,000	35,000	125,000
TOTAL CIPS			24,334,470		COMM SHARE TOTAL CIPS	\$ 250,000	\$ 492,812	\$ 625,000	\$ 1,857,750	\$ 361,350	\$ 888,750
			25,284,470			\$	437,500	\$	462,500	\$ 434,250	\$ 1,490,750
Projects levied in prior years	Projects added/revise in 2017	Projects levied in 2017, payable 2018	Projects added/revise in 2018								

Draft

CIP-46

EXHIBIT A

line 14

Elm Creek Watershed Management Commission
Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.
A second page may be used to provide complete responses.)

City	ROGERS
Contact Name	JOHN SEIFERT
Telephone	(763) 428-8580
Email	jseifert@ci.rogers.mn.us
Address	22350 South Diamond Lake Road, Rogers, MN 55374
Project Name	South Pointe Stream Bank Stabilization
Is project in Member's CIP? (x) yes () no	Proposed CIP Year = 2016

	Total Estimated Project Cost	Amount
	Estimated Commission Share (not to exceed \$250,000)	\$ 90,000
	City of Rogers Storm Water Utility, Grants	\$ 22,500
		\$ 67,500
		\$
	1. What is the scope of the project? This project will provide stabilization and protection along 600 feet of stream bank tributary to Fox Creek at its headwaters.	
	2. What is the purpose of the project? What water resource(s) will be impacted by the project? The segment of Fox Creek between Pointe Circle and Erickson Park currently experiences erosion and stream bank failure from periodic high flow velocities. This project will provide stabilization for the stream banks and reduce sediment transport along Fox Creek and ultimately the Crow River.	
	3. What is the anticipated improvement that would result from the project? Habitat enhancement, protection for wooded upland areas, water quality improvement (Sediment Load Reduction: 12 - 24 tons/year, Phosphorus Load Reduction 12 - 24 lbs/year)	
	4. How does the project contribute to achieving the goals and programs of the Commission? This project will reduce erosion and improve water quality.	
0/10	6. Does the project result from a regulatory mandate? () yes (x) no How?	
0/10/20	7. Does the project address one or more TMDL requirements? (x) yes () no Which? North Fork Crow River Turbidity and Dissolved Oxygen TMDL	
0/10/20	8. Does the project have an educational component? () yes (x) no Describe.	
0/10	9. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? (x) yes () no Identify the LGUs. City of Rogers	
10/20	10. Is the project in all the LGUs' CIPs? (x) yes () no	
1-34	(For TAC use) 11. Does project improve water quality? (0-10) 12. Prevent or correct erosion? (0-10) 13. Prevent flooding? (0-5)	14. Promote groundwater recharge? (0-3) 15. Protect and enhance fish and wildlife habitat? (0-3) 16. Improve or create water recreation facilities? (0-3)
TOTAL (poss 114)		Z:\Elm Creek\Management Plan\2010 Plan Amendment\Exhibit A_EC.docx

CIP-2016-MG-02

EXHIBIT A

like 16

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.
A second page may be used to provide complete responses.)

City	Maple Grove		
Contact Name	Rick Lestina		
Telephone	763-494-6354		
Email	rlestina@ci.maple-grove.mn.us		
Address	12800 Arbor Lakes Parkway, Maple Grove, MN 55398		
Project Name	Rush Creek, Main - Stream Restoration		
1. Is project in Member's CIP? (X) yes () no	Proposed CIP Year = 2016		
Total Estimated Project Cost			Amount
Estimated Commission Share (not to exceed \$250,000)			\$1,650,000
Other Funding Sources (name them)			\$250,000
City of Maple Grove			\$1,400,000
			\$
2. What is the scope of the project? The City of Maple Grove is proposing a project to stabilize and restore approximately 11,000 feet of Rush Creek east of I-94 and west of Fernbrook.			
3. What is the purpose of the project? What water resource(s) will be impacted by the project? Decrease the potential for further bank instability that likely would occur subsequent to the development of the watershed and restore the channel with native vegetation for additional stability and habitat purposes.			
4. What is the anticipated improvement that would result from the project? Subsequent to development, it is likely that stormwater discharge from the adjacent and upstream watershed will increase. This project will significantly reduce the potential for bank erosion and sediment transport downstream. The restoration of native vegetation will provide a habitat for wildlife and a natural area for aesthetic value and study.			
5. How does the project contribute to achieving the goals and programs of the Commission? This project improves the water quality within Rush Creek and reduces the amount of sediment and nutrients reaching Elm Creek. This project will increase the oxygenation of water discharged to Elm Creek.			
0/10 6. Does the project result from a regulatory mandate? () yes (X) no How? There is no mandate for the City to undertake this project. However, this project will assist with for meeting the water quality goals for Elm Creek.			
0/10/20 7. Does the project address one or more TMDL requirements? (X) yes () no Which? Although no formal implementation plan has been approved, projects that address stream bank stability will be critical in meeting the water quality goals for Elm Creek.			
0/10/20 8. Does the project have an educational component? (X) yes () no Describe. The project will involve the establishment of a native grass channel and retention of the some quality forest buffer. The area will serve as a City demonstration in regards to the value of a buffer for water quality and wildlife purposes.			
0/10 9. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? (X) yes () no Identify the LGUs. Maple Grove			
10/20 10. Is the project in all the LGUs' CIPs? (X) yes () no			
1-34 (For TAC use)			
11. Does project improve water quality? (0-10)	14. Promote groundwater recharge? (0-3)		
12. Prevent or correct erosion? (0-10)	15. Protect and enhance fish and wildlife habitat? (0-3)		
13. Prevent flooding? (0-5)	16. Improve or create water recreation facilities? (0-3)		
TOTAL (poss 114)	Z:\Elm Creek\CIPs\2016 submittals\MG-02_Rush Creek - Main Restoration.doc		

Rush Creek Restoration

This project involves the stabilization of the erosional sites in a 2900 linear foot portion of Rush Creek within the proposed The Enclave on Rush Creek project. The initial erosion was likely due to increase flows from the developing watershed. Erosion has caused encroachment into the adjacent woods and trees and other debris to fall into the creek. The debris in the creek has resulted in diversion of flows to the toe of slopes causing accelerated erosion in most outside bend locations. The erosion has created vertical slopes that range in height from 4 to 10 plus feet.



Slope loss can be as high as 10 feet in some areas along Rush Creek.

Based on the preliminary estimates there are 1,584 linear feet of creek channel that require improvements and stabilization. Control of the erosion at these sites will help minimize loss and encroachment into the woods and future adjacent lots and the planned regional trail. The approach for the channel improvements include:

- Removal of fallen trees and debris from channel to eliminate diversion of flows to toe of slope.
- Removal of select trees along the banks of the creek that appear to be a hazard and close to falling into the channel and causing additional accelerated erosion.
- Installation of Stream Barbs along many of the outside bends with erosion. Stream Barbs protect the bank by shifting the stream flows away from the stream bank experiencing erosion. The stream barbs are a stream restoration design that will allow sediment to naturally deposit upstream of the barbs, push the flows back to the center of the channel and create a hydraulic jump in the stream that will help dissipate energy and create some pool habitat for fish.

- Native seeding and shrub planting along the erosion sites will also be done to provide deep root structures and protect the slopes from erosion.
- Vertical slopes will be re-graded to less severe slopes (2:1) to allow for stabilization.

The above discussed approach was used successfully in the Rush Creek Improvement project completed in 2006 under the City Project Number 06-16 within the Dunlavin Woods development.



Stream Barbs and Shrubs from 2006 project still functioning to protect slopes along Rush Creek (photo December 2015).

EXHIBIT A

line 21

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.
A second page may be used to provide complete responses.)

City	Corcoran and Rogers		
Contact Name	Kent Tove, Corcoran City Engineer, John Seifert, Rogers Public Works Supt.		
Telephone	Kent Tove: 763-479-4209; John Seifert: 763-428-8580		
Email	ktove@wenck.com; jseifert@rogersmn.gov		
Address	City of Corcoran, 8200 County Road 116, Corcoran, MN 55340 City of Rogers Public Works, 22350 South Diamond Lake Road, Rogers, MN 55374		
Project Name	Stone's Throw Wetland Restoration (Name will change)		
1. Is project in Member's CIP? () yes (x) no	Proposed CIP Year = 2019		
2. Has a feasibility study or an engineering report (circle one) been done for this project? () yes (x) no			
Total Estimated Project Cost			Amount
Estimated Commission Share (up to 25%, not to exceed \$250,000)			\$450,000
Other Funding Sources (name them): grants, municipal budgets			\$112,500
			\$337,500
			\$450,000
3. What is the scope of the project? Details TBD, but this multi-city effort would address the impairments in Rush Creek.			
4. What is the purpose of the project? What water resource(s) will be impacted by the project? The purpose is to address the impairments (bacteria, dissolved oxygen, fish bioassessment) in Rush Creek.			
5. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) The project would improve Rush Creek by decreasing bacteria, increasing dissolved oxygen, and/or improving conditions to support fish. Size of area treated TBD. (To be updated.)			
6. How does the project contribute to achieving the goals and programs of the Commission? This project would improve water quality in Rush Creek.			
0/10 7. Does the project result from a regulatory mandate? (x) yes () no How? The project results from a regulatory mandate to implement TMDL projects and report on their progress through municipal MS4 programs.			
0/10/20 8. Does the project address one or more TMDL requirements? (x) yes () no Which? The Elm Creek Watershed-Wide WRAPs, expected to be approved by the EPA in 2017, lists this project as a protective strategy for Rush Creek.			
0/10/20 9. Does the project have an educational component? () yes (x) no Describe. An educational opportunity may arise when the Regional Trail is installed. Educational signage could explain wetland functions, Elm Creek watershed, identification of vegetation. Would involve partnership with Three Rivers Park District.			
0/10 10. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? (x) yes () no Identify the LGUs. The City of Rogers contracts with Kjolhaug Environmental for LGU services; Elm Creek Watershed Management Commission (ECWMC) is the LGU for Corcoran.			
10/20 11. Is the project in all the LGUs' CIPs? (x) yes (x) no The project is on ECWMC's CIP, but not on Rogers' CIP. (To be updated.)			
1-34 (For TAC use) 12. Does project improve water quality? (0-10) 13. Prevent or correct erosion? (0-10) 14. Prevent flooding? (0-5)	15. Promote groundwater recharge? (0-3) 16. Protect and enhance fish and wildlife habitat? (0-3) 17. Improve or create water recreation facilities? (0-3)		
TOTAL (poss 114)	Adopted April 11, 2012		

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.
A second page may be used to provide complete responses.)

City	City of Medina
Contact Name	Steve Scherer, Public Works Director, Dusty Finke, City Planner
Telephone	763-473-8842; 763-473-8846
Email	Steve.scherer@medinamn.gov ; dusty.finke@medinamn.gov
Address	2052 County Road 24, Medina, MN 55340
Project Name	Hickory Drive Stormwater Improvement

1. Is project in Member's CIP? (X) yes () no	Proposed CIP Year = 2019
2. Has a feasibility study or engineering report (circle one) been done for this project? () yes (X) no	

Total Estimated Project Cost	Amount
Estimated Commission Share (up to 25%, not to exceed \$250,000)	\$ 225,000
Other Funding Sources (name them) – City will seek additional grant or clean water funding; City stormwater utility and assessments for remainder	\$ 56,250
	\$ 168,750
	\$

3. What is the scope of the project? Install stormwater pond for 8.3 acre drainage area (50% impervious). Stabilize approximately 300 linear feet of gully erosion. Install approximately 700 feet of curb and 600 feet of storm sewer to capture and direct stormwater to improvements.

4. What is the purpose of the project? What water resource(s) will be impacted by the project? The purpose of the project is to reduce nutrient loading to Elm Creek, which is adjacent to the project area. Drainage to Elm Creek is currently not treated.

5. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) Jim Kujawa has estimated the phosphorus removal would be approximately 26.6 lbs/year. This removal is estimated to consist of an estimated 16 lbs/year for the pond plus 10.6 lbs/year phosphorus reduction for the gully/erosion improvements.

6. How does the project contribute to achieving the goals and programs of the Commission? The proposed project will reduce nutrient loading to Elm Creek, reduce runoff rate to Elm Creek, address implementation of the Elm Creek Watershed TMDL, and reduce erosion of the gully draining to Elm Creek.

0/10	7. Does the project result from a regulatory mandate? () yes (X) no How? The stormwater improvement is not triggered by a permit requirement, but is consistent with TMDL implementation.
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0/10/20	8. Does the project address one or more TMDL requirements? (X) yes () no Which? Elm Creek Watershed TMDL
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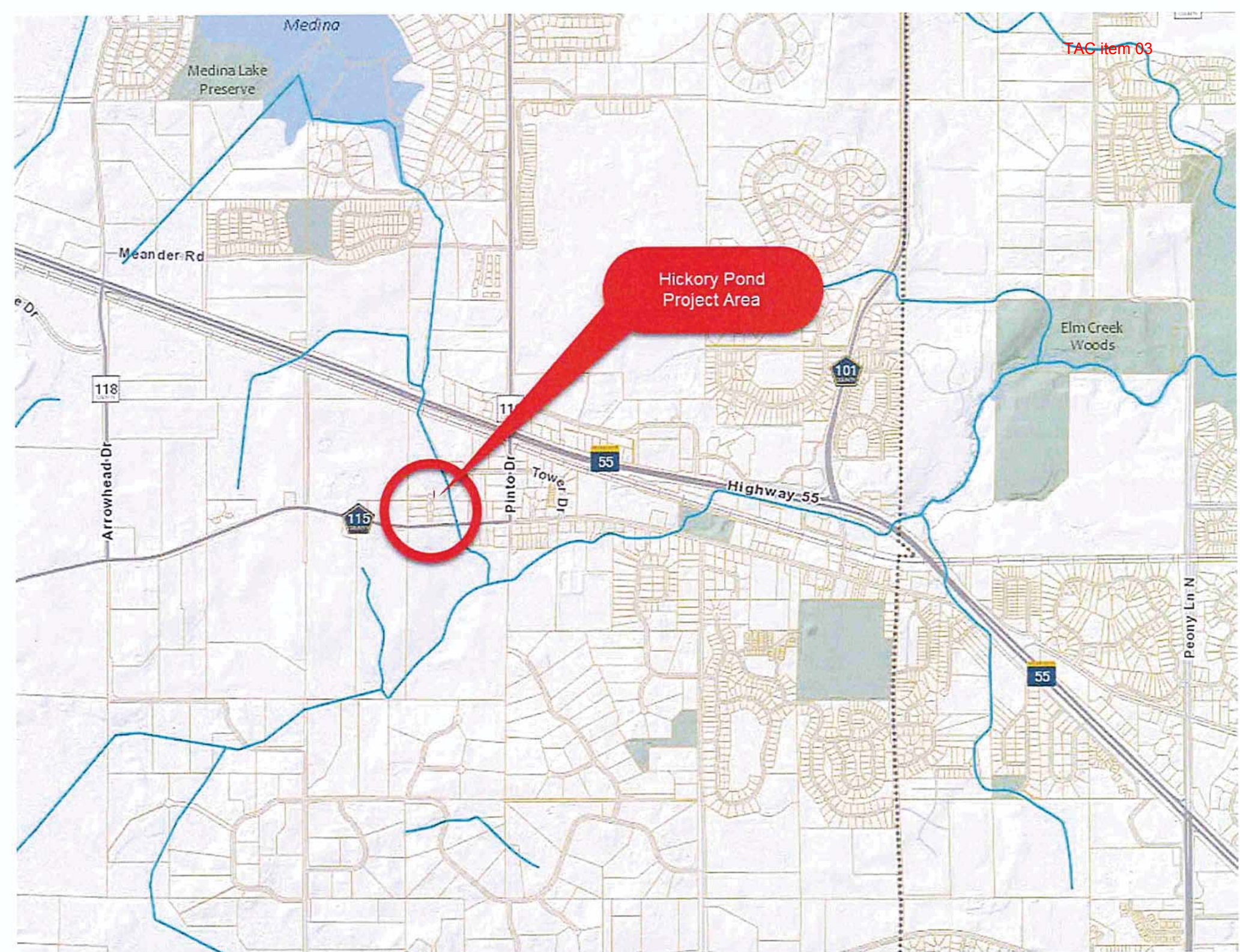
0/10/20	9. Does the project have an educational component? (X) yes () no Describe. Information related to the benefits of the project will be included in newsletters and public meetings related to the project. The anticipated location of the pond does not lend itself well to educational signage, but the City will search for options.
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0/10	10. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? (X) yes () no Identify the LGUs. City of Medina
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10/20	11. Is the project in all the LGUs' CIPs? (X) yes () no
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1-34	(For TAC use)	12. Does project improve water quality? (0-10)	15. Promote groundwater recharge? (0-3)
		13. Prevent or correct erosion? (0-10)	16. Protect and enhance fish and wildlife habitat? (0-3)
		14. Prevent flooding? (0-5)	17. Improve or create water recreation facilities? (0-3)

TOTAL (poss 114)	Adopted April 11, 2012
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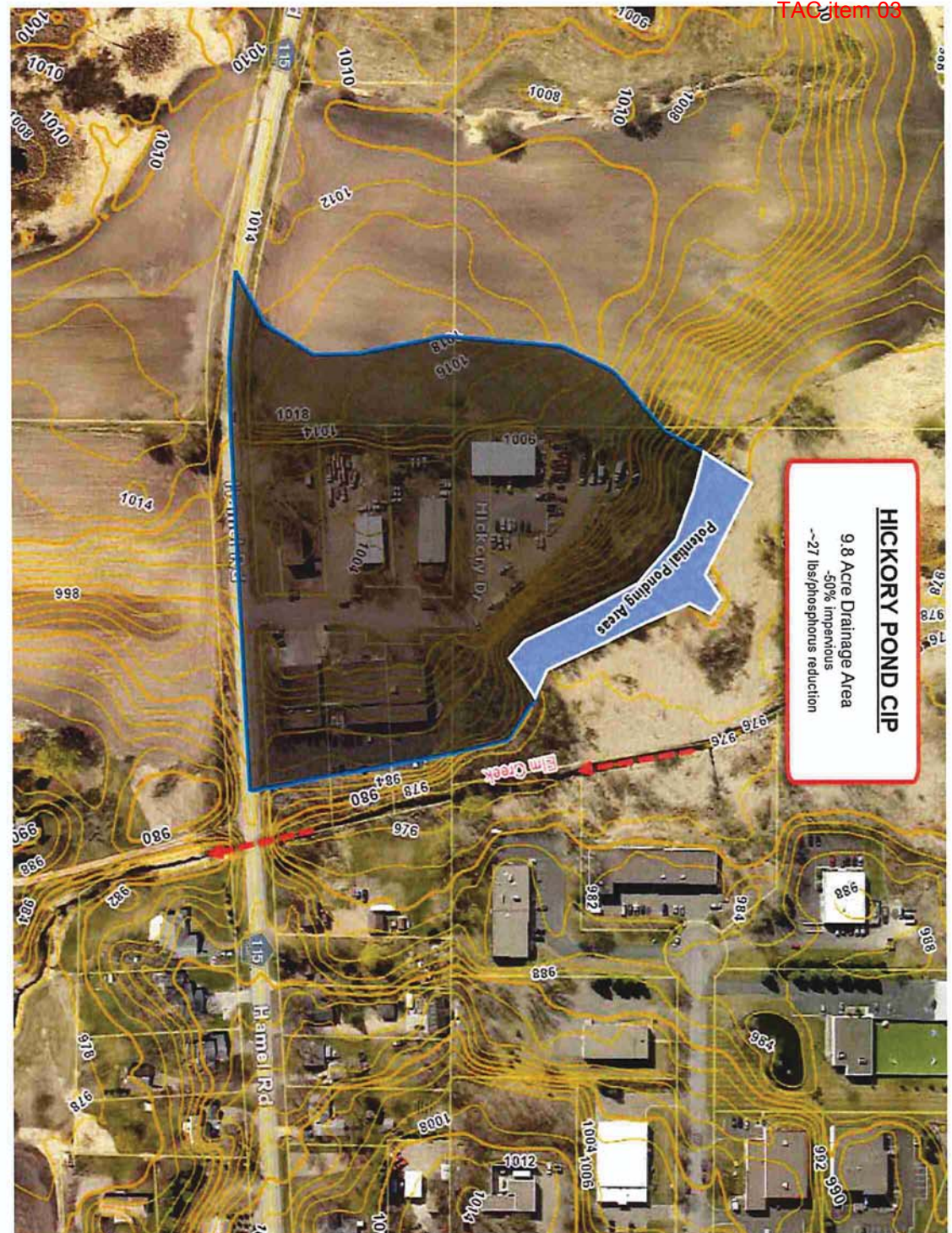


EXHIBIT A

line 39

**Elm Creek Watershed Management Commission
Capital Improvement Project Submittal**

*(This submittal will be rated on its completeness and adherence to the goals of the Commission.
A second page may be used to provide complete responses.)*

City	Corcoran	
Contact Name	Kevin Mattson	
Telephone	763 400 7028	
Email	kmattson@ci.corcoran.mn.us	
Address	8200 County Road 116, Corcoran, MN 55340	
Project Name	Downtown Regional Stormwater Improvement Project	
1. Is project in Member's CIP? (X) yes () no Proposed CIP Year = 2019		
2. Has a feasibility study or an engineering report (circle one) been done for this project? (X) yes () no		
Total Estimated Project Cost		Amount
Estimated Commission Share (up to 25%, not to exceed \$250,000)		\$ 50,000
Other Funding Sources (name them) <i>City Budget, City In-kind</i>		\$10,000
		\$ 40,000
		\$
3. What is the scope of the project? <i>Cleanout regional stormwater pond and retrofit with filtration for enhanced water quality treatment.</i>		
4. What is the purpose of the project? What water resource(s) will be impacted by the project? <i>South Fork of Rush Creek.</i>		
5. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) <i>Industrial Park treatment of +/- 25 acres.</i>		
6. How does the project contribute to achieving the goals and programs of the Commission? <i>Improved water quality treatment of existing development.</i>		
0/10	7. Does the project result from a regulatory mandate? () yes (X) no	How?
0/10/20	8. Does the project address one or more TMDL requirements? (X) yes () no Which? <i>Nutrients</i>	
0/10/20	9. Does the project have an educational component? (X) yes () no Describe. <i>Educate business owners and public.</i>	
0/10	10. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? () yes () no Identify the LGUs. <i>Unknown at this time</i>	
10/20	11. Is the project in all the LGUs' CIPs? () yes (X) no	
1-34	(For TAC use) 12. Does project improve water quality? (0-10) 13. Prevent or correct erosion? (0-10) 14. Prevent flooding? (0-5)	15. Promote groundwater recharge? (0-3) 16. Protect and enhance fish and wildlife habitat? (0-3) 17. Improve or create water recreation facilities? (0-3)
TOTAL (poss 114)		Adopted April 11, 2012

1 Table 4.5. Elm Creek Third Generation Plan Capital Improvement Program

Description	Location	Priority	Est Proj Cost	Partners	Funding Source(s)	Estimated Commission Cost					
						2015	2016	2017	2018	2019	2020-2024
<i>Special Studies</i>											
TMDL implementation special study	Watershed	H	225,000	Cities, HCEED	Operating budget	0	25,000	25,000	25,000	25,000	125,000
Stream segment prioritization	Watershed	H	20,000	Cities, HCEED, TRPD	Operating budget	10,000	0	0	0	10,000	0
<i>High Priority Stream Restoration Projects</i>				Cities, TRPD	Cities, TRPD, county levy, grants						
Elm Cr Reach E	Plymouth	H	1,086,000	Commission, Plymouth	County Levy - levied in 2015	250,000					
CIP-2016-RO-01 Fox Cr, Creekview	Rogers	H	321,250	Commission, Rogers	County Levy - levied in 2016	0	80,312	0	0	0	0
Mississippi Point Park Riverbank Repair	Champlin	M	300,000		County Levy - levied in 2016	0	75,000	0	0	0	0
Elm Creek Dam	Champlin	H	7,001,220		County Levy - levied in 2016	0	187,500	0	0	0	0
Tree Thinning and Bank Stabilization Project	Watershed	H	50,000			0		50,000	50,000	50,000	250,000 350,000
Fox Cr, Hyacinth	Rogers	M	360,000		County Levy - levied in 2017	0	0	90,000 112,500	0	0	0
Fox Cr, South Pointe, Rogers	Rogers	M	90,000			0	0	22,500	0	22,500	0
Other High Priority Stream Project	Watershed	H	500,000			0	0	0	125,000	125,000	250,000
CIP-2016-MG-02 Rush Creek Main	Maple Grove		1,650,000		County Levy - levied in 2016		75,000	75,000	75,000	25,000	
CIP-2016-MG-03 Rush Creek South	Maple Grove		675,000						168,750		
CIP-2017-PL-01 EC Stream Restoration Reach D	Plymouth		850,000	City, County, Comm	City, County, Comm				212,500		
<i>High Priority Wetland Improvements</i>				Cities	Cities, Commission						
DNR #27-0437	Maple Grove	L	75,000			0	0	0	0	0	18,750
Stone's Throw Wetland	Corcoran	M	450,000			0	0	112,500	112,500	112,500	0
Other High Priority Wetland Projects	Watershed	L	100,000			0	0	0	0	0	25,000
CIP-2016-MG-01 Ranchview Wetland Restoration	Maple Grove		2,000,000					250,000	250,000		
<i>Lake TMDL Implementation Projects</i>				Cities, lake assns.	Cities, Comm, grants, owners						
Mill Pond Fishery and Habitat Restoration	Champlin	H	5,000,000		County Levy - levied in 2017	0	0	250,000	0	0	0
Other Priority Lake Internal Load Projects	Watershed	M	100,000			0	0	0	0	0	25,000
	Maple Grove	H	300,000	City, TPRD, Comm, lake assn	County Levy - levied in 2016		75,000				
Stonebridge	Maple Grove	M	200,000	retrofit of some addl stormsewer treatment systems will not occur during street reconstruction project		0		50,000	0	0	0
Rain Garden at Independence Avenue	Champlin	L	300,000		County Levy - levied in 2017	0		75,000	0	0	0
CIP-2016-CH-01 Mill Pond Rain Gardens	Champlin	M	400,000			0	0		100,000	100,000	100,000
Other Priority Urban BMP Projects	Watershed	L	200,000			0	0	0	0	0	50,000
<i>Other</i>											
Livestock Excluss, Buffer & Stabilized Access	Watershed	M	50,000	Cities, owners, U Extension, NRCS	Cities, owners, Comm, NRCS	0	0	0	50,000	0	50,000
Agricultural BMPs Cost Share	Watershed	H	50,000	Cities, owners, U Extension, NRCS	Cities, owners, Comm, NRCS	0		50,000	50,000	50,000 48,000	100,000 152,000
CIP-2016-RO-04 CIP-2017-RO-1 Ag BMPs-Cowley-Sylvan Connections BMPs	Rogers		300,000	City, Comm	City, Comm, BWSR				75,000		
CIP-2016-RO-03 Downtown Pond Exp & Reuse	Rogers		406,000						101,500		
Hickory Drive Stormwater Improvement	Medina		225,000	City. Comm, Grants						56,250	
SE Corcoran Wetland Restoration	Corcoran		400,000	City. Comm, 319 Grant						100,000	100,000
Downtown Regional Stormwater Pond	Corcoran		50,000	City. Comm						10,000	
Elm Creek Stream Restoration Phase III	Champlin	H	400,000						100,000		
Downs Road Trail Raingarden	Champlin	H	300,000						75,000		
Elm Creek Stream Restoration Phase IV	Champlin	H	600,000							150,000	150,000
Lowell Pond Raingarden	Champlin	H	400,000							100,000	100,000
Rush Creek Headwaters SWA BMP Implementation	Corcoran/Rogers	H	200,000	cities, county, TRPD	cities, county, TRPD, owners						50,000
Hydrologic & Hydraulic Modeling	Watershed	L	25,000	HCEE	Commission	0	0	0	25,000	0	0
Fourth Generation Plan	Watershed	L	70,000		Commission	0	0	0	0	0	\$70,000
TOTAL STUDIES			245,000		COMM SHARE TOTAL STUDIES	10,000	25,000	25,000	25,000	35,000	125,000
TOTAL CIPS			24,334,470		COMM SHARE TOTAL CIPS	\$ 250,000	\$ 492,812	\$ 935,000	\$ 1,357,750	\$ 851,250	\$ 988,750
			25,284,470					\$ 437,500	462,500	\$ 434,250	\$ 1,490,750
Projects levied in prior years	Projects added/revised in 2017			Projects levied in 2017, payable 2018		Projects added/revised in 2018					



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 Plymouth, MN 55447
 (763) 553-1144
 Fax: (763) 553-9326
 judie@jass.biz

February 6, 2019

To: Elm Creek Technical Advisory Committee
 Fr: Judie Anderson
 Re: Consider Adopting Policy
 For Lake Internal Load Projects

Staff was requested to provide a copy of the Shingle Creek/West Mississippi Watershed Management Commissions' policy regarding Lake Internal Load projects to the Elm Creek Commission's Technical Advisory Committee meeting in order to begin a discussion relative to adopting a similar policy. Research has determined that SCWM has not adopted a policy as such. Rather, a "policy" for funding these projects was approved as part of a Minor Plan Amendment in 2015.

Following are excerpts from Wenck Associates' May 8, 2015 Technical Memo to the Commissions regarding proposed internal load projects:

Background

Lake Internal Load Improvement Projects. The Shingle Creek CIP includes \$200,000 for lake internal load projects in 2015, 2017, and one in the 2018-2022 period. The project narrative lists several potential projects identified in the lake nutrient TMDLs. The projects are proposed to be funded 25% from Commission (county levy) funds and 75% from local funds. The proposed 2015 project for work in 2016 is carp tracking and removal in the Twin and Ryan Lake chain, and aeration in Upper Twin Lake.

The 13 lake TMDLs now in implementation in the Shingle Creek watershed recommend internal load improvements for several of the lakes. These projects could include rough fish removal and installation of fish barriers, chemical treatment such as alum, drawdowns, whole-lake aquatic vegetation treatment, etc. Typically, implementation emphasizes reducing the load from external sources before completing internal load reductions. Some lakes ... may require internal load reductions if external load reduction is insufficient to meet state water quality goals. Potential lakes to be improved include the following (not in priority order):

1. Twin Lake. (Crystal, Brooklyn Center, Robbinsdale) 2015 Project: Rough fish tracking and removal, fish barriers, and aeration system; Future Project: aquatic vegetation treatment.
2. Pomerleau. (Plymouth) Chemical treatment.
3. Cedar Island (Maple Grove) Rough fish removal, fish barriers, drawdown.
4. Eagle Lake (Maple Grove) Aquatic vegetation treatment.

Recommendation

The TAC recommended that the SCWM Commissions consider funding internal load projects at 100% rather than 25%, and the Commissions agreed. The amendment would fund internal load projects 100% by the Commissions starting in 2016.