

Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners

From: Laura Jester, Administrator

Date: March 3, 2023

RE: Technical Advisory Committee Recommendations

The BWCMC Technical Advisory Committee (TAC) met on March 1, 2023 to discuss the MnDNR's FEMA modeling project, the 5-year CIP, and pros and cons for approaching linear project standards.

Attendees at the TAC meeting included:

City/Partner	Technical Advisory Committee Members and Others
Crystal	Mark Ray
Golden Valley	Drew Chirpich
Medicine Lake	None
Minneapolis	Katie Kowalczyk, Liz Stout, Heidi Ranschau
Minnetonka	None
New Hope	Nick Macklem
Plymouth	Ben Scharenbroich and Chris LaBounty
Robbinsdale	Richard McCoy
St. Louis Park	Erick Francis
Others	Administrator Laura Jester, Commission Engineers Karen Chandler and Jen Koehler, Alternate Commissioner Polzin, Jeff Weiss (MnDNR), Jami Markle (Three Rivers Park District)

MnDNR's FEMA Modeling Project: TAC members had a good discussion with MnDNR staff, Jeff Weiss, regarding the status of the FEMA modeling project and outstanding questions about how to handle pockets of upland storage. The MnDNR will continue working on the project when additional Federal funding is secured later this year. This project does not impact current BCWMC floodplain elevations or the BCWMC's hydrologic and hydraulic model. No recommendations or actions are needed at this time.

At the end of the discussion, the overall consensus regarding the status of this project was:

- 1) MnDNR is not, and is not planning to, ask the BCWMC or cities to create new or to expand existing regulations regarding protection of upland storage areas.
 - a. Examples include smaller storage areas on private property, right-of-way areas (including streets), or other governmental jurisdictional space (such as county and state highways)
 - b. If a city's storm water management plan includes rate control policies, the MnDNR agrees those policies are sufficient, from a regulatory perspective, to protect upland storage.
- 2) MnDNR's remaining work on the FEMA model includes finalizing the floodway. Therefore, there was no discussion at this meeting regarding floodways/flood fringe. This could be a potential item for future discussion with the MnDNR staff.

5-year Capital Improvement Program (CIP): Jami Markle with Three Rivers Park District (TRPD) presented a CIP project request on behalf of TRPD and the cities of Golden Valley and Robbinsdale in the Sochacki Park area. Grimes Pond, North Rice Pond, and South Rice Pond are included in this 62-acre park in Golden Valley and Robbinsdale and are classified as public water wetlands. These wetlands discharge directly to Bassett Creek to the south. The park is jointly operated through a Joint Powers Agreement among TRPD and the two cities. Extremely poor water quality in the three ponds precipitated a <u>subwatershed</u> <u>assessment</u> recently completed by Barr Engineering on behalf of Three Rivers Park District. The Commission Engineers and Administrator participated in a steering group that guided the assessment and reviewed results.

The assessment resulted in a list of projects and best management practices in and around Sochacki Park that would result in improved water quality and improved wetland functions and habitat. Water quality improvements in the ponds would directly result in improvements to Bassett Creek downstream.

The TAC reviewed the request to include \$600,000 in the 2024 and 2025 BCWMC CIP to partner on implementation of the practices recommended in the subwatershed assessment. They also noted the high score of 13 on the CIP Prioritization Matrix; one of the highest scores to date. Additional funding will come from TRPD, grants, etc.

The project fact sheet, CIP prioritization matrix, and recommended CIP are attached to this memo.

Addition of this project to the CIP will require a minor amendment to the 2015 Watershed Management Plan. Amending the Plan to accommodate new CIP projects is a routine activity that has been undertaken several times over the last 8 years.

RECOMMENDATION: The BCWMC Technical Advisory Committee recommends that the Commission add the Sochacki Park Water Quality Improvement Project to the 2024/2025 Capital Improvement Program with a BCWMC budget of \$600,000.

Linear Project Standards: Because of the lengthy discussion with the MnDNR, there was not enough time to review the pros and cons drafted by Commission staff on options to address linear project standards. Nor was there time to discuss Commissioner Welch's idea on this subject from the February Commission meeting. These items were tabled until the March 29th TAC meeting.

Project Category: Water Quality

Project Title: Sochacki Park Water Quality

Improvements

Total Estimated Cost: \$2,300,000 (multiple funding sources)

BCWMC Project Number: [Staff will assign number]

Description:

This project in the cities of Robbinsdale and Golden Valley will reduce total phosphorus by approximately 67 lbs/year, improving water quality within MnDNR protected wetlands and Bassett Creek, reducing chronic erosion and sedimentation, enhancing buffers and wildlife habitat, and improving recreation and educational opportunities. This is a joint project with multiple partners seeking grant funds from multiple sources. BMP recommendations are based on a subwatershed assessment completed in 2022.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BCWMC ad valorem tax levy through Hennepin County	Sta	aff will assign fur	nding year.		

Justification:

Public wetlands within this highly-used regional park are ecologically degraded, negatively impacting Bassett Creek which is impaired for biota. Wetlands do not meet the subwatershed assessment study goals for total phosphorus (concentration of 75 $\mu g/L$), chlorophyll a (concentration of 40 $\mu g/L$), or secchi disk transparency (1 meter). This highly-collaborative project seeks to protect and improve DNR wetlands and Bassett Creek with a holistic approach while enhancing existing and planned nature-based programming in the park. Partners include the cities of Robbinsdale, Golden Valley, and Crystal, Three Rivers Park District (TRPD), MnDNR, and potentially others.

Scheduling and Project Status:

Subwatershed assessment completed by partners in 2022. TRPD is funding the engineering and permitting to a 90% design level in 2023, consistent with BCWMC feasibility study parameters, to improve and strengthen grant applications.

Relationship to BCWMC Plan and Other Projects:

Project is part of the BCWMC trunk system. Project improves or protects water quality in a priority waterbody (Bassett Creek) Project addresses erosion and sedimentation issues.

Project addresses multiple Commission goals (e.g., water quality, runoff volume, aesthetics, wildlife habitat, recreation, education)
Subwatershed draining to project includes more than one community (three cities)

Effect on Annual Operations Costs:

This project is anticipated to have no effect on BCWMC Annual Operations Costs.



Sochacki Park in Robbinsdale and Golden Valley, showing Grimes, North Rice, and South Rice Ponds. Yellow markers show proposed sites for pond creation and restoration activities. Bassett Creek is immediately downstream (south) of South Rice Pond.

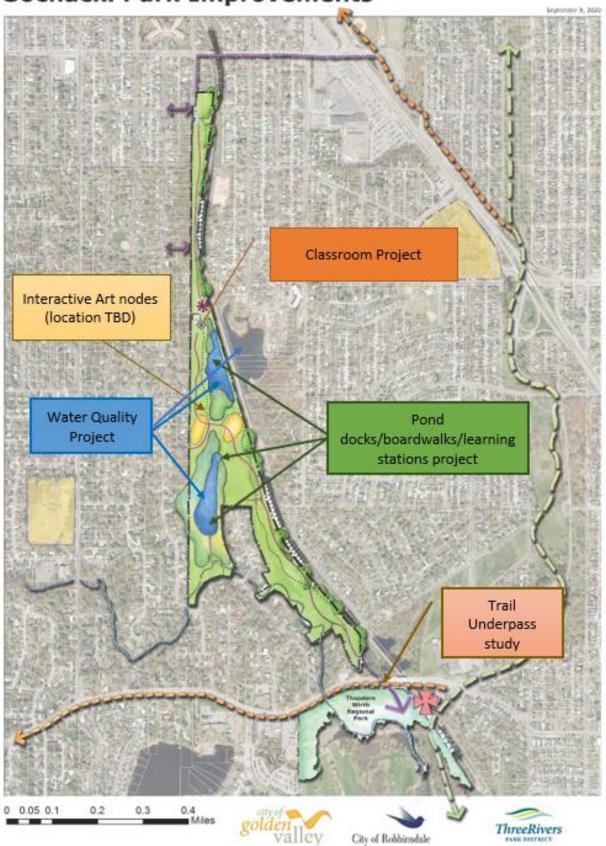
Summary and Planning Level Costs of Proposed Activities, February 17, 2023

BMP ID/ Location	Estimated Annual TP Removal (lbs/yr)	Planning Level Capital Cost Estimate	Recommended Sequence for Implementation
Revegetate/control			
upland soil erosion	NA	\$ 10,000.00	1a
Increased Street			
Sweeping in untreated			
subwatersheds	NA	NA	1 b
Clear inlet/outlet debris,			
remove sediment deltas			
and stabilize erosion			
	NA	\$ 100,000.00	1c
Conduct pond water			
level drawdowns	NA	\$ 154,000.00	1d
Dredge/expand existing			
SR4 pond (Basin J)	33.5	\$ 456,000.00	2a
Construct stormwater			
pond at GR6	14.9	\$ 684,000.00	2b
Construct stormwater			
pond at NR1	3.8	\$ 287,000.00	2c
Construct stormwater			
pond at SR3	3.7	\$ 392,000.00	2d
Alum Treatment of			
Grimes, North and South			
Rice Ponds	11.2	\$ 217,000.00	3
TOTAL	67.1	\$ 2,300,000.00	

Potential Funding Options

- BWSR Clean Water Funds
- Conservation Partners Legacy (for habitat components)
- Hennepin County Opportunity or Stewardship grants
- MPCA grants and MN Public Facilities Authority funds
- MnDNR short term action request grants
- Partner CIP funds (for potential grant match)

Sochacki Park Improvements



BCWMC Project Prioritization Scoring Matrix

				"Jurisdiction" Factors					
Project Name		Protects/improves water quality of priority waterbody (reduces phosphorus loading)	4 pt for >0.3 mg/L	Protects/improves WQ of priority waterbody by reducing chloride loading 1 point = reduction of impervious surface; 2 points = significant reduction of impervious surface; 3 points = project with the aim of reducing chlorides	Addresses approved TMDL or WRAPS	Addresses a flooding concern: 1 pt reduces local flooding <5 structures 2 pt reduces local flooding >5 structures 3 pt reduces intercommunity flooding <5 structures 4 pt reduces intercommunity flooding >5 structures	Part of Trunk System	Protects/restores previous BCWMC investments in infrastructure (CIP projects and Flood Control Project)	Intercommunity watershed
Score Range		2	0-4	2	2	1-4	1	1	1
DeCola Pond F flood storage and diversion	2025 & 2026 Portions of	2	2	2	0	3	0	0	1
SEA School flood storage	BC-2, 3, 8, 10	2	1	1	0	3	0	0	1
Medley Park Stormwater Treatment Facility	ML-12	2	4	0	2	1	0	0	1
Mt. Olivet Stream Restoration Project	ML-20	2	0	0	2	0	0	0	0
Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park	ВС-7	2	0	0	0	1	1	1	1
Parkers Lake Drainage Improvement Project	PL-7	2	4	0	0	0	0	0	0
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	2021-CR_M	2	3	0	0	0	1	1	1
Bassett Creek Park Water Quality Improvement Project	BC-11	2	0	0	0	0	0	0	0
Ponderosa Woods Stream Restoration	ML-22	2	3	0	2	0	0	1	0
Sweeney Lake Alum/Carp Mgmt	SL- 8	2	0	0	2	0	1	1	1

BCWMC Project Prioritization Scoring Matrix

					"Jurisdiction" Factors				
Project Name Score Range			Located in a total phosphorus loading "hot spot": 0 pt for <0.15 mg/L 1 pt for 0.15 - 0.20 mg/L 2 pt for 0.20 - 0.25 mg/L 3 pt for 0.25 - 0.30 mg/L 4 pt for >0.3 mg/L	Protects/improves WQ of priority waterbody by reducing chloride loading 1 point = reduction of impervious surface; 2 points = significant reduction of impervious surface; 3 points = project with the aim of reducing chlorides	Addresses	Addresses a flooding concern: 1 pt reduces local flooding <5 structures 2 pt reduces local flooding >5 structures 3 pt reduces intercommunity flooding <5 structures 4 pt reduces intercommunity flooding >5 structures 1-4	Part of Trunk System	Protects/restores previous BCWMC investments in infrastructure (CIP projects and Flood Control Project)	Intercommunity watershed
Score Kange		2	0-4	2	2	1-4	1	1	1
Crane Lake Improvement Project	CL-3	2	0	0	0	0	0	0	0
Jevne Park Stormwater Improvement									
Project	ML-21	2	0	0	2	1	0	0	0
Bryn Mawr Meadows Water Quality									
Improvement Project	BC-5	2	4	0	0	0	0	0	0
Plymouth Enhanced Street Sweeper		2	4	0	2	0	1	1	0
Crane Lake Chloride Study		2	0	3	2	0	1	1	0
Gleason Lake Road Stormwater Improvements	Plymouth	2	0	0	2	2	0	0	0
Plymouth Creek Restoration - Dunkirk Ln to Yuma	Plymouth	2	0	0	2	2	1	1	0
Plymouth Creek Restoration - Vicksburg Ln to CR9	Plymouth	2	0	0	2	2	1	1	0
Minnaqua Pond/Toledo Ave Stormwater Improvement	Golden Valley	2	3	1	0	3	1	0	0
Golden Valley Enhanced Street Sweeper	Golden Valley	2	4	1	2	0	1	1	1
Sochacki Park Project	Golden Valley	2	4	0	0	0	1	1	1

BCWMC Project Prioritization Scorin

	Opportunity	Secondary Benefit Factors						
Project Name Score Range	Partnership with significant stakeholders (% funding threshold from non-BCWMC/City?)	Coordinated with redevelopment or City/agency infrastructure projects	Protect and enhance riparian or upland wildlife habitat as a secondary benefit	Increase quality and quantity of wetlands 0.5	Reduce runoff volume 0.5	Public education or demonstration value is emphasized through specific project elements	Minimize the spread and impact of AIS as a secondary benefit	Total Score
DeCola Pond F flood storage and diversion	1	0	0.5	0	0	0	0	11.5
SEA School flood storage	1	1	0.5	0	0	0.5	0	11
Medley Park Stormwater Treatment Facility	0	1	0.5	0.5	0	0.5	0	12.5
Mt. Olivet Stream Restoration Project	1	0	0.5	0	0	0.5	0	6
Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park	1	0	0	0	0	0.5	0	7.5
Parkers Lake Drainage Improvement Project	1	0	0.5	0	0	0.5	0	8
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	1	0	0.5	0	0	0.5	0	10
Bassett Creek Park Water Quality Improvement Project	1	1	0.5	0.5	0	0.5	0	5.5
Ponderosa Woods Stream Restoration	0	0	0.5	0.5	0	0.5	0	9.5
Sweeney Lake Alum/Carp Mgmt	1	0	0	0	0	0	0.5	8.5

BCWMC Project Prioritization Scorin

	Opportunity	Factors	Secondary Benefit Factors						
Project Name Score Range	Partnership with significant stakeholders (% funding threshold from non-BCWMC/City?)	Coordinated with redevelopment or City/agency infrastructure projects	Protect and enhance riparian or upland wildlife habitat as a secondary benefit	Increase quality and quantity of wetlands 0.5	Reduce runoff volume 0.5	Public education or demonstration value is emphasized through specific project elements	Minimize the spread and impact of AIS as a secondary benefit	Total Score	
Score Range	1	1	0.3	0.5	0.5	0.3	0.3		
Crane Lake Improvement Project	1	1	0.5	0	0.5	0.5	0	5.5	
Jevne Park Stormwater Improvement Project	0	0	0.5	0.5	0	0.5	0	6.5	
Bryn Mawr Meadows Water Quality Improvement Project	1	1	0	0	0	0.5	0	8.5	
Plymouth Enhanced Street Sweeper	0	0	0	0.5	0	0.5	0	11	
Crane Lake Chloride Study	0	0	0.5	0.5	0	0.5	0.5	11	
Gleason Lake Road Stormwater Improvements	0	1	0	0.5	0.5	0.5	0	8.5	
Plymouth Creek Restoration - Dunkirk Ln to Yuma	0	0	0.5	0.5	0	0.5	0	9.5	
Plymouth Creek Restoration - Vicksburg Ln to CR9	0	1	0.5	0.5	0	0.5	0	10.5	
Minnaqua Pond/Toledo Ave Stormwater Improvement	1	1	0.5	0.5	0.5	0	0	13.5	
Golden Valley Enhanced Street Sweeper	0	0	0	0.5	0	0.5	0	13	
Sochacki Park Project	1	1	0.5	0.5	0?	0.5	0.5	13	

PROPOSED BCWMC 5-year Capital Improvement Program: 2023 - 2028 CIP List (With revisions approved Sept 2022 and updates to Lagoon Dredging Project budget (strikeout))

Project Name	City	#	2020	2021	2022	2023	2024	2025	2026	2027	2028	Totals
Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan Project (DeCola Ponds B&C Improvement Proj. + DeCola Pond F Flood Storage & Diversion Project + SEA School Flood Storage) ⁵	GV, Crystal, New Hope	BC- 2,3,8, 10	\$500,000		\$300,000	2,548,000 ⁵	\$252,000 (SEA School)	\$1,150,000	\$450,000			
WQ improvements in Bryn Mawr Meadows, Main Stem Watershed ²	MPLS	BC-5	\$100,000	\$812,000 ²		\$1,175,000						\$2,087,000
Medley Park Stormwater Treatment Facility ⁴	GV	ML-12			\$400,000	\$950,000 ⁴	\$800,000					\$2,150,000
Mt. Olivet Stream Restoration Project	PLYM	ML-20		\$178,100								\$178,100
Dredging accumulated sediment in Main Stem Bassett Creek Lagoons, Wirth Park ³	GV/MPLS	BC-7		\$600,000	\$1,425,000 ³	\$534,000 \$334,000	\$200,000					\$2,759,000
Stormwater Pond in Jevne Park to alleviate flooding/improve water quality	Medicine Lake	ML-21	\$500,000									\$500,000
Crane Lake Improvement Project @ Ridgedale Dr.	MTKA	CL-3	\$380,000									\$380,000
Parkers Lake Drainage Improvement Project	Plymouth	PL-7		\$485,000								\$485,000
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	Golden Valley	2024- CR-M					\$200,000	\$600,000				\$800,000
Ponderosa Woods Stream Restoration	Plymouth	ML-22					\$475,000					\$475,000
Sweeney Lake Water Quality Improvement Project (alum + carp management) ¹	Golden Valley	SL-8	\$350,000 ¹	\$218,080								\$568,080
Cost share purchase of high efficiency street sweeper	Plymouth	ML-23		\$81,600								\$81,600
Crane Lake Chloride Reduction Demonstration Project at Ridgedale Mall	MTKA	CL-4							\$300,000			\$300,000
Plymouth Creek Restoration Project Dunkirk Lane to Plym Ice Center	Plymouth	2026CR -P							\$1,000,000	\$1,000,000		\$2,000,000
Cost share purchase of high efficiency street sweeper	Golden Valley	BC-12					\$100,000	\$50,000				\$150,000
Toledo Ave/Minnaqua Pond Stormwater Improvements & Flood Reduction	Golden Valley	BC-13								\$400,000	\$500,000	\$900,000
Flood Control Project Double Box Culvert Repairs	MPLS	FCP-1								\$250,000	\$950,000	\$1,200,000
Sochacki Water Quality Improvement Project	GV/Robbs	BC-14					\$2,000,000	\$300,000				\$2,300,000
Estimated Total Project Cost			\$1,830,000	\$2,374,780	\$2,125,000	\$ 5,207,000 \$5,007,000	\$ 2,027,000 \$3,827,000	\$2,100,000	1,750,000	1,650,000	\$1,450,000	
Estimated Use of BCWMC Closed Project Account Funds			\$0	\$500,000	\$100,000	\$400,000 \$200,000	\$0 \$200,000	\$0	\$0	\$0	\$0	
City and Grant Funding			\$330,000 ¹	\$400,000 ²	\$325,000 ³	\$800,000 ⁴ \$1,800,000 ⁵	\$1,700,000 ⁶					
Total Levy			\$1,500,000	\$1,474,780	\$1,700,000	\$2,207,000	\$ 2,027,000 \$1,927,000	\$2,100,000	1,750,000	1,650,000	\$1,450,000	

¹ Federal 319 grant

² Clean Water Fund grant (\$400,000)

³ Clean Water Funds (WBIF) (\$250,000) + Hennepin County Opportunity grant (\$75,000)

⁴ Clean Water Fund Grant (\$300,000) + Golden Valley funds (\$500,000)

⁵ MnDNR grant to city + city funds (\$1,800,000)

⁶ Funding from partners = Robbinsdale, Golden Valley, TRPD, possible grants