



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners
From: Technical Advisory Committee and Administrator Jester
Date: April 10, 2025

RE: Recommendations on 5-year Capital Improvement Program

At their meetings in February and March, the BCWMC Technical Advisory Committee (TAC) reviewed the 5-year Capital Improvement Program (CIP) including potential projects that could be added to the CIP and changes to schedules or budgets.

As approved at the February Commission meeting, the CIP project to repair the Double Box Culvert was moved to 2026 and a feasibility study is currently underway for that project.

The TAC recommends additional adjustments to the existing CIP including:

- moving the next project in the Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan Project (BC-2,3,8,10) to start in 2027 with the budget increased from \$1.1M to \$2M;
- moving the Crane Lake Chloride Reduction Demonstration Project (CL-4) to start in 2027 because the feasibility study will not be completed in time to implement in 2026; and
- moving the Toledo Ave/Minnaqua Pond Stormwater Improvements & Flood Reduction (BC-13) to start in 2028.

The TAC also reviewed the Fernbrook Regional Stormwater Improvement Project, requested by the City of Plymouth to be added to the CIP starting in 2027. (See the project fact sheet, maps, and prioritization matrix in Attachment A.) TAC Chair Scharenbroich (Plymouth) reported that this project would be constructed on a 7-acre parcel in an area north of Hwy 55 lying between Fernbrook Ave. to the west and I-494 to the east. The project would alleviate flooding issues in the area and would reduce or eliminate flooding of garages at an apartment complex where flooding is common, and which is within an Environmental Justice - Climate Vulnerability zone identified by the City. The project would also improve water quality downstream in Plymouth Creek and Medicine Lake. The project was originally scoped by Barr Engineering for the City of Plymouth (see Technical Memorandum attached with online meeting materials) with planning level costs, including land acquisition, of \$5.6M. As scoped in the technical memorandum as option 1, the project would create about 13.5 acre-feet for flood storage and reduce total phosphorus by about 13.8 lbs/year.

The Fernbrook project scored a 13 on the Commission's CIP prioritization matrix which is on the high end when compared to other existing CIP projects.

TAC Recommendation:

The TAC recommends the attached 5-year Capital Improvements Program (Attachment B) that includes shifts to budgets and timing of three projects (as noted above), and the addition of the Fernbrook Regional Stormwater Improvement Project with the first three years of funding slated for 2027 – 2029.

[The draft **10-year CIP** is currently under review by the Plan Steering Committee and the TAC. This longer timeframe will capture the remaining funds needed for the Fernbrook project. Actual Commission contribution to the project is negotiable after the feasibility study is complete and before the project is officially ordered by the Commission. (For instance, land acquisition is a *potentially* eligible project cost and may or may not be part of the Commission’s CIP cost.)]

The addition of the Fernbrook project requires a minor amendment to the 2015 Watershed Management Plan because this project is not included in the current CIP.

Staff Recommendation:

If the Commission approves the TAC-recommended 5-year CIP, the Commission should set a public hearing on a proposed minor plan amendment for its June 18, 2025 meeting.

ATTACHMENT A

Project Category: Water Quality & Water Capacity

Project Title: Fernbrook Regional Stormwater Improvements

Total Estimated Cost: \$5,600,000

BCWMC Project Number: PC-1

Description:

This project in the city of Plymouth will construct a regional stormwater treatment system to reduce flooding and improve water quality in downstream Plymouth Creek and Medicine Lake in the area north of Highway 55 on Fernbrook Lane.

Source of Project Funding	2026	2027	2028	2029	2030
CIP Account – BCWMC ad valorem tax levy through Hennepin County		\$0.5M	\$0.5M	\$2M	

Justification:

The City of Plymouth is concerned with existing flooding and water quality concerns around the area of Fernbrook Ln N and Harbor Lane N. The flood reduction and water quality goals as outlined in the attached Technical Memorandum from Barr Engineering (contracted separately from watershed work) outlines the proposed improvements and potential water quality and quantity benefits.

Scheduling and Project Status:

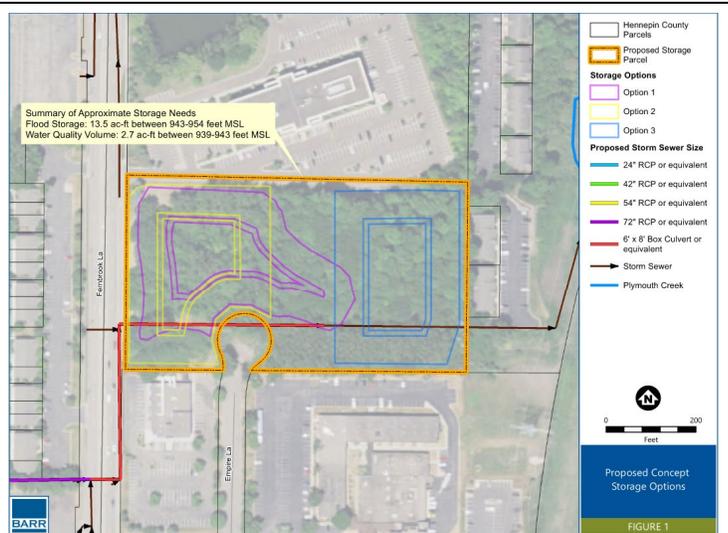
[Staff will provide this information.]

Relationship to BCWMC Plan and Other Projects:

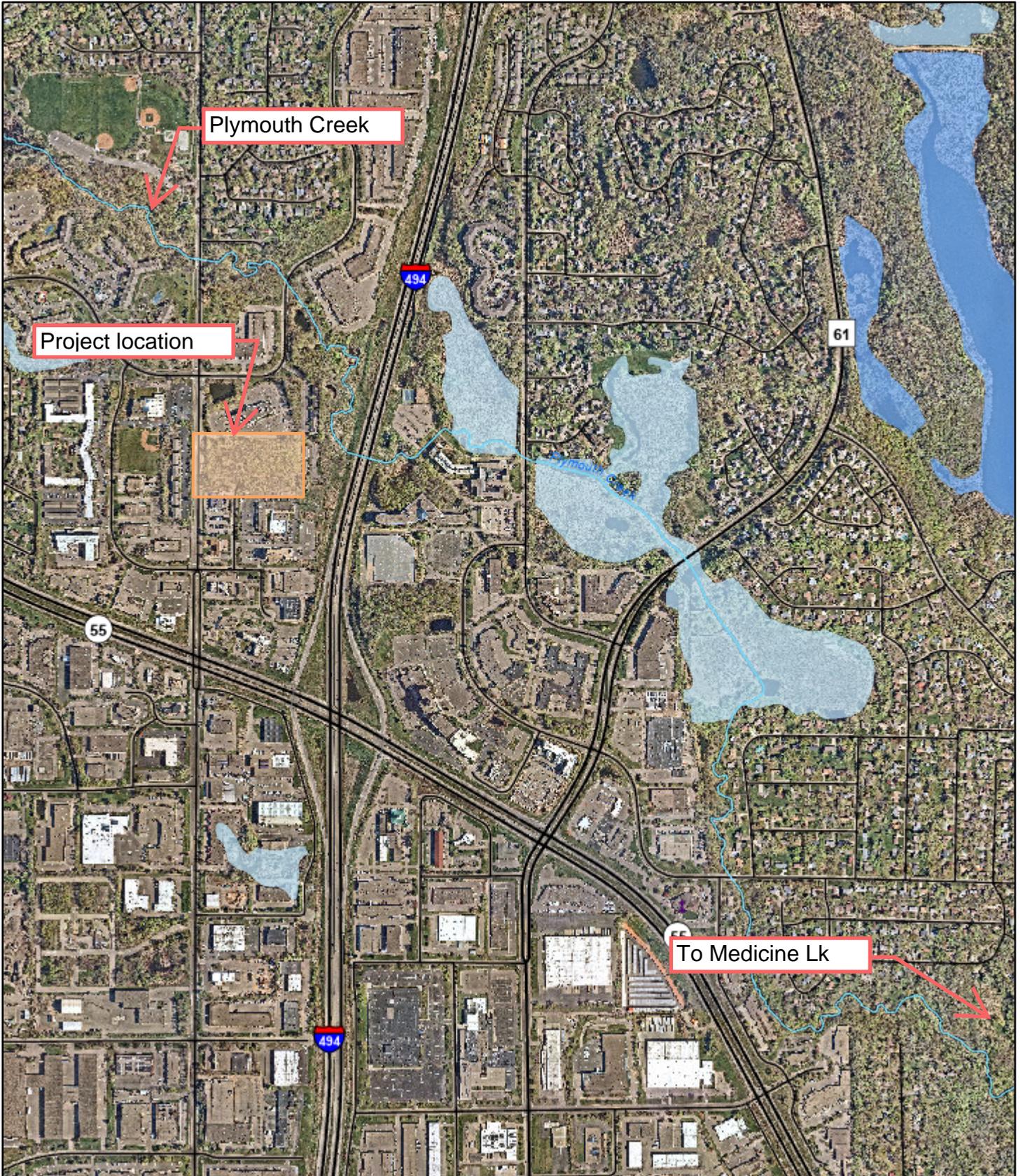
This project is consistent with the goals and policies of the BCWMC Watershed Management Plan. This project would assist in meeting the goals of the Medicine Lake TMDL and would reduce flood risk to adjacent properties.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



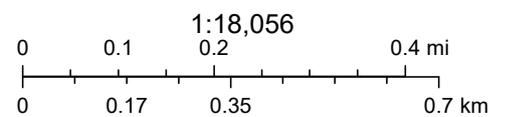
Fernbrook Project Location



4/9/2025, 10:25:40 AM

Aerial2024_6

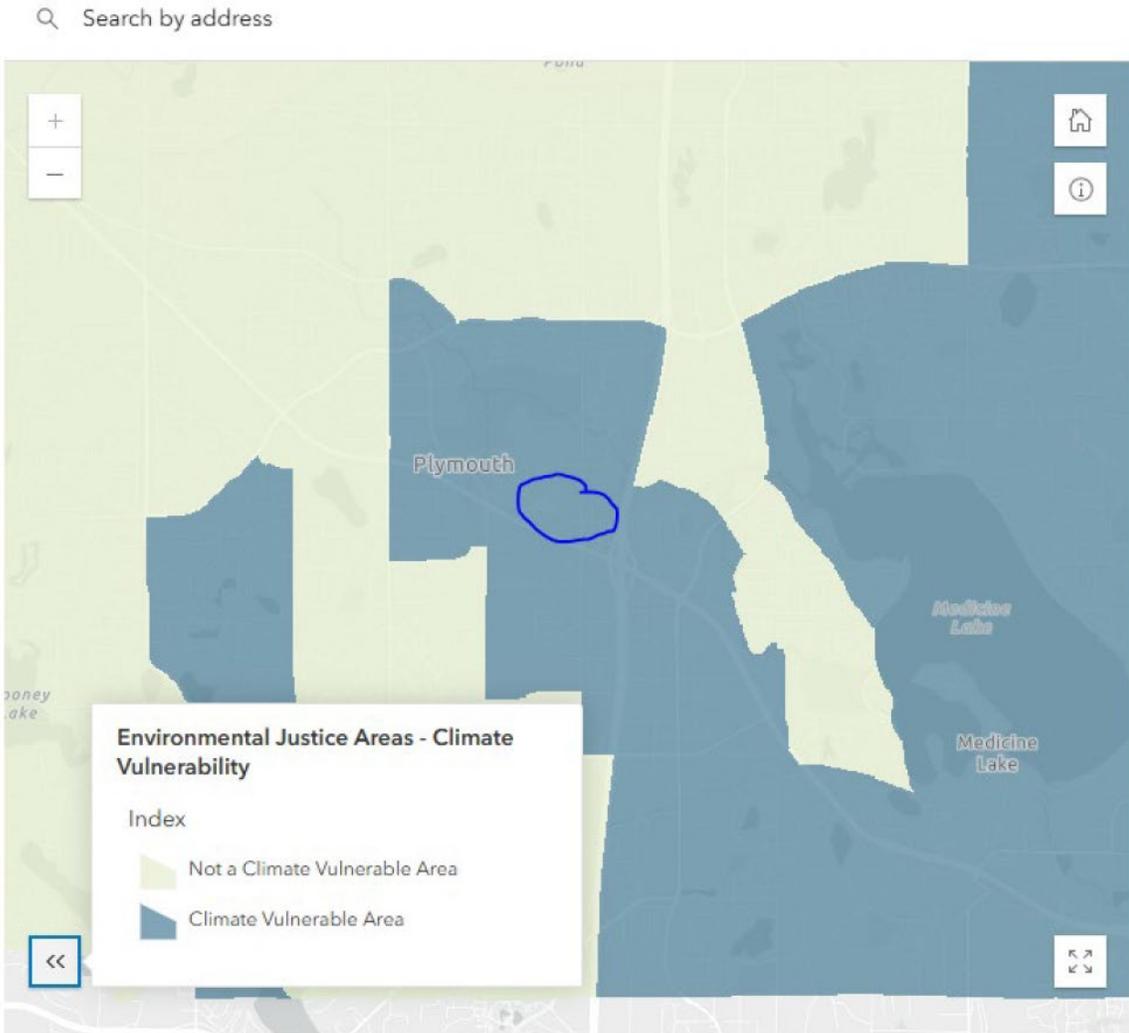
- Red: Band_1
- Green: Band_2
- Blue: Band_3



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Fernbrook Regional Stormwater Improvement Project location on Climate Vulnerability map

Here's a screenshot from our Climate Vulnerability map showing the project area is in the CV zone



BCWMC Project Prioritization Scoring Matrix																	
		Primary Benefit Factors					"Jurisdiction" Factors			Opportunity Factors		Secondary Benefit Factors					
Project Name		Protects/improves water quality of priority waterbody (reduces phosphorus loading)	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 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	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	Reduce runoff volume	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	2	0-4	2	2	1-4	1	1	1	1	1	0.5	0.5	0.5	0.5	0.5	
DeCola Pond F flood storage and diversion	2025 & 2026 Portions of BC-2, 3, 8, 10	2	2	2	0	3	0	0	1	1	0	0.5	0	0	0	0	11.5
SEA School flood storage		2	1	1	0	3	0	0	1	1	1	0.5	0	0	0.5	0	11
Medley Park Stormwater Treatment Facility	ML-12	2	4	0	2	1	0	0	1	0	1	0.5	0.5	0	0.5	0	12.5
Mt. Olivet Stream Restoration Project	ML-20	2	0	0	2	0	0	0	1	0	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	BC-7	2	0	0	0	1	1	1	1	0	0	0	0	0	0.5	0	7.5
Parkers Lake Drainage Improvement Project	PL-7	2	4	0	0	0	0	0	1	0	0	0.5	0	0	0.5	0	8
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	2021-CR_M	2	3	0	0	0	1	1	1	0	0	0.5	0	0	0.5	0	10
Bassett Creek Park Water Quality Improvement Project	BC-11	2	0	0	0	0	0	0	1	1	0.5	0.5	0	0.5	0	0	5.5
Ponderosa Woods Stream Restoration	ML-22	2	3	0	2	0	0	1	0	0	0.5	0.5	0	0.5	0	0	9.5
Sweeney Lake Alum/Carp Mgmt	SL- 8	2	0	0	2	0	1	1	1	0	0	0	0	0	0	0.5	8.5
Crane Lake Improvement Project	CL-3	2	0	0	0	0	0	0	1	1	0.5	0	0.5	0.5	0	0	5.5
Jevne Park Stormwater Improvement Project	ML-21	2	0	0	2	1	0	0	0	0	0.5	0.5	0	0.5	0	0	6.5
Bryn Mawr Meadows Water Quality Improvement Project	BC-5	2	4	0	0	0	0	0	1	1	0	0	0	0.5	0	0	8.5
Plymouth Enhanced Street Sweeper		2	4	0	2	0	1	1	0	0	0	0.5	0	0.5	0	0	11
Crane Lake Chloride Study		2	0	3	2	0	1	1	0	0	0.5	0.5	0	0.5	0.5	0	11
Plymouth Creek Restoration - Dunkirk Ln to Yuma	Plymouth	2	0	0	2	2	1	1	0	0	0.5	0.5	0	0.5	0	0	9.5
Plymouth Creek Restoration - Vicksburg Ln to CR9	Plymouth	2	0	0	2	2	1	1	0	1	0.5	0.5	0	0.5	0	0	10.5
Minnaqua Pond/Toledo Ave Stormwater Improvement	Golden Valley	2	3	1	0	3	1	0	1	1	0.5	0.5	0.5	0	0	0	13.5
Golden Valley Enhanced Street Sweeper	Golden Valley	2	4	1	2	0	1	1	1	0	0	0.5	0	0.5	0	0	13
Regional Stormwater Treatment	Plymouth	2	2	0	2	2	0	1	0	1	1	0.5	0.5	0.5	0.5	0	13

BCWMC 5-year Capital Improvement Program: TAC Recommended 2025 – 2029 CIP List (with proposed changes from 2024 – 2028 list shown with underline/strikeout)

Project Name	City	#	2022	2023	2024	2025	2026	2027	2028	2029	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	\$300,000	2,548,000 ⁵	\$252,000 (SEA School)		\$100,000	\$1,000,000	<u>\$1,000,000</u>		
WQ improvements in Bryn Mawr Meadows, Main Stem Watershed ²	MPLS	BC-5		\$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
Dredging accumulated sediment in Main Stem Bassett Creek Lagoons, Wirth Park ³	GV/MPLS	BC-7	\$1,425,000 ³	\$334,000				\$200,000	\$600,000		\$3,159,000 (inc. \$600,000 from 2021)
Parkers Lake Drainage Improvement Project	Plymouth	PL-7									\$485,000
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	Golden Valley	2024-CR-M			\$634,000	\$953,500 ⁷	\$653,500				\$2,241,000
Ponderosa Woods Stream Restoration	Plymouth	ML-22			\$352,000						\$352,000
Sweeney Lake Water Quality Improvement Project (alum + carp management) ¹	Golden Valley	SL-8									\$568,080
Cost share purchase of high efficiency street sweeper	Plymouth	ML-23									\$81,600
Crane Lk Chloride Reduction Demonstration Project at Ridgedale Mall	MTKA	CL-4					\$300,000	<u>\$300,000</u>			\$300,000
Plymouth Creek Restoration Project Dunkirk Lane to 38 th Ave. North ⁸	Plymouth	2025CR-P				\$1,300,000	\$1,300,000				\$2,600,000
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 \$400,000	<u>\$500,000</u>	\$900,000
Flood Control Project Double Box Culvert Repairs	MPLS	FCP-1					<u>\$850,000</u>	\$350,000	\$950,000		\$1,200,000
Sochacki Water Quality Improvement Project	GV/Robbs	BC-14			\$2,000,000 ⁶	\$300,000					\$2,300,000
<u>Fernbrook Regional Stormwater Improvements</u>	<u>Plymouth</u>	<u>PC-1</u>						<u>\$500,000</u>	<u>\$500,000</u>	<u>\$2,000,000</u>	
Estimated Total Project Cost			\$2,125,000	\$5,007,000	\$4,138,000	\$2,603,500	2,803,500	\$2,350,000	\$2,500,000	\$2,500,000	
Estimated Use of BCWMC Closed Project Account Funds			\$100,000	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$0	
City and Grant Funding			\$325,000 ³	\$800,000 ⁴ \$1,800,000 ⁵	\$1,700,000 ⁶	\$300,000 ⁷	\$400,000 ⁸	\$0	\$0	\$0	
Total Levy			\$1,700,000	\$2,207,000	\$2,238,000	\$2,303,500	\$2,403,500	\$2,350,000	\$2,500,000	\$2,500,000	

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 partners = Robbinsdale, Golden Valley, TRPD, possible grants for BC-14

⁷ Golden Valley funding of \$300,000 for 2024CR-M

⁸ Clean Water Fund Grant = \$400,000