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.

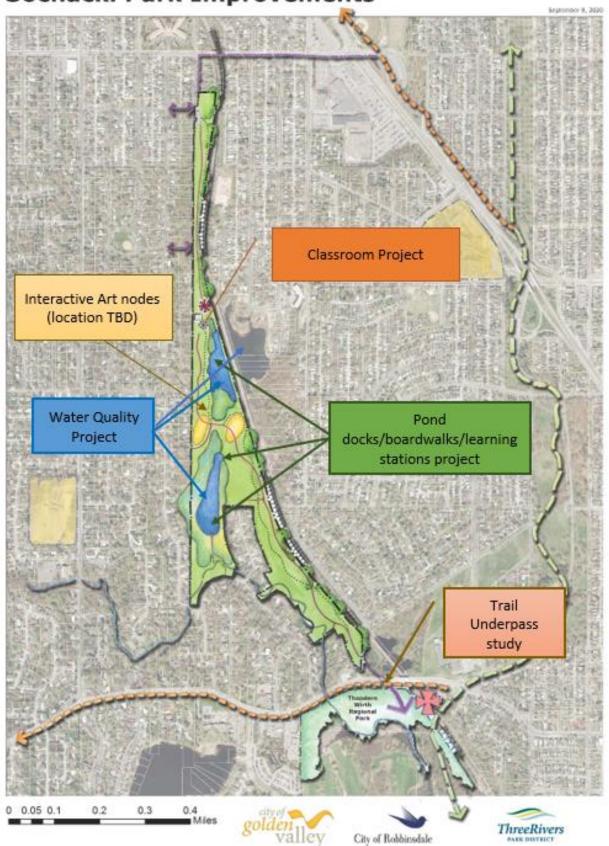
Summary and Planning Level Costs of Proposed Activities, February 17, 2023

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



Project Category: Water Quality/Water Capacity

Project Title: Wood Creek Stream Restoration

Total Estimated Cost: \$750,000

BCWMC Project Number: [Staff will assign number]

Description:

This project in the city of Plymouth will repair erosion and sedimentation that is occurring in Wood Creek from Armstrong High School, Saratoga Ln and Pilgrim Lane. Various methods of repairing erosion will be investigated including installing of storm sewer pipe, bioengineering techniques and rip rap and gabion installation. Vegetation removal is expected with this project.

Source of Project Funding	2023	2024	2025	2026	2027
CIP Account – BCWMC ad valorem tax levy through Hennepin County	Sta	aff will assign fur	nding year.		

Justification:

This stream restoration project will remove/minimize sediment from storm water runoff in the residential areas on the NE corner of Medicine Lake

As a part of the stream restoration project, educational outreach will be made with Armstrong High School in an attempt to engage the students and staff which is directly adjacent to this proposed project.

Scheduling and Project Status:

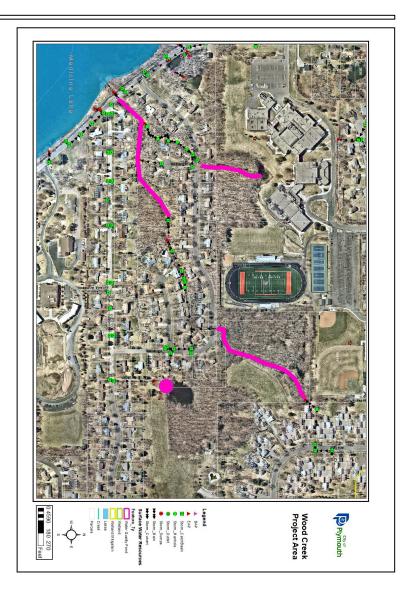
[Staff will provide this information.]

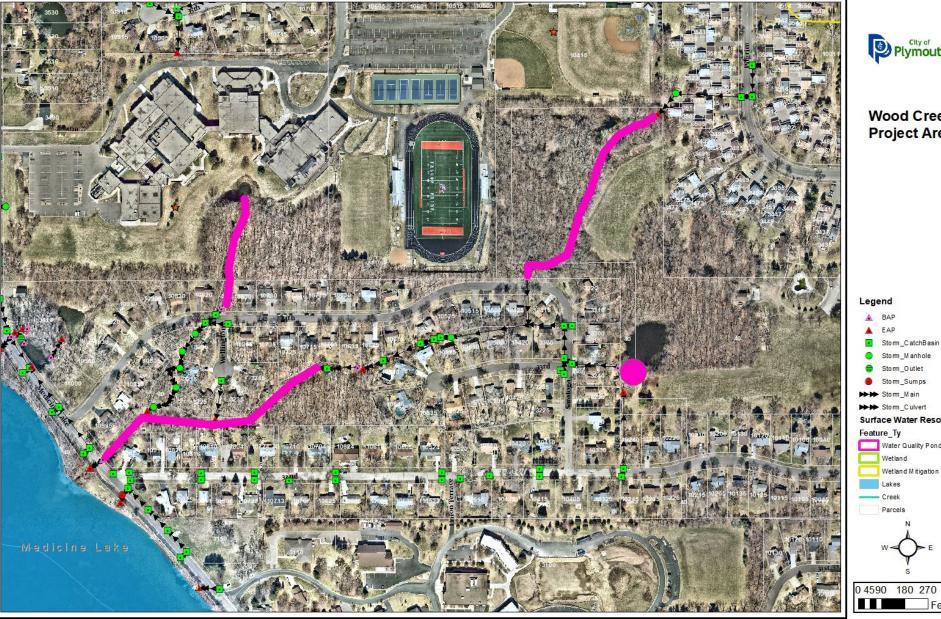
Relationship to BCWMC Plan and Other Projects:

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 Total Maximum Daily Load project.

Effect on Annual Operations Costs:

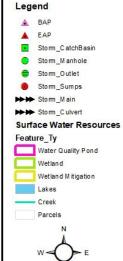
This project has no effect on BCWMC Annual Operations Costs.







Wood Creek Project Area



Project Category: Water Quality/Water Capacity

Project Title: Plymouth Creek Stream
Restoration – Dunkirk to PIC

Total Estimated Cost: \$2,000,000

Add western section;

see page 3

BCWMC Project Number: 2026CR-P

Description:

This project in the city of Plymouth will repair erosion and sedimentation that is occurring in Plymouth Creek from Dunkirk Lane to 37th Avenue North behind the Plymouth Ice Center (PIC). The project will likely include various erosion repair and buffer restoration techniques, removal of accumulated sediment, reduction of flood potential, and enhancement of riparian wetlands.

Source of Project Funding	2023	2024	2025	2026	2027
CIP Account – BCWMC ad valorem tax levy through Hennepin County				<u>\$1,000,000</u>	<u>\$1,000,000</u>

Justification:

This stream restoration project along <u>6,500</u> feet of Plymouth Creek will remove accumulated sediment from the stream channel and adjacent wetlands. Removing accumulated sediment in this area will result in lowering the flood potential for homes and stormwater infrastructure. Additionally, private landowners along this stretch will be contacted with the goal of expanding buffers along backyards.

Erosion along the stream channel would be repaired, reducing pollutants like total phosphorus and total suspended solids, and possibly improving riparian and in-steam habitats. Various methods of repairing erosion will be investigated including storm sewer pipe, bio engineering techniques, and rip rap. Natural restoration techniques will be followed as much as possible, however the need for hard armoring and rip rap is expected to be necessary in some locations.

As a part of the stream restoration project, educational efforts including outreach and signage along the trail will be included. Additional outreach will be done with students and staff at Plymouth Creek Elementary School, which is within the project area.

Scheduling and Project Status:

[Staff will provide this information.]

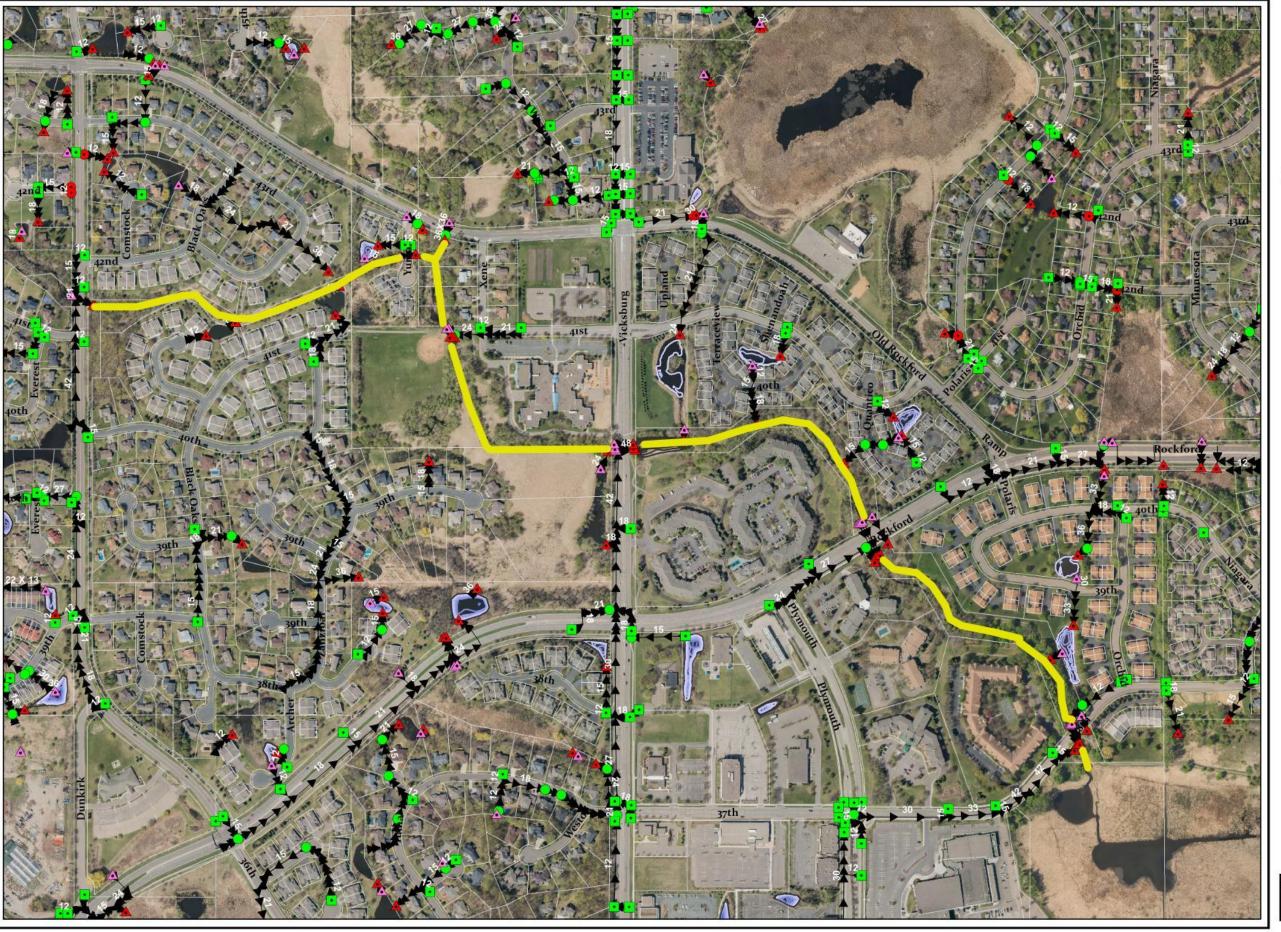
Relationship to BCWMC Plan and Other Projects:

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 Total Maximum Daily Load study.

Effect on Annual Operations Costs: This project has no effect on BCWMC Annual Operations Costs.







Plymouth Creek Stream Restoration

~6,500 If





A EAF

Storm_CatchBasinStorm_Manhole

Storm_Marino
 Storm_Outlet

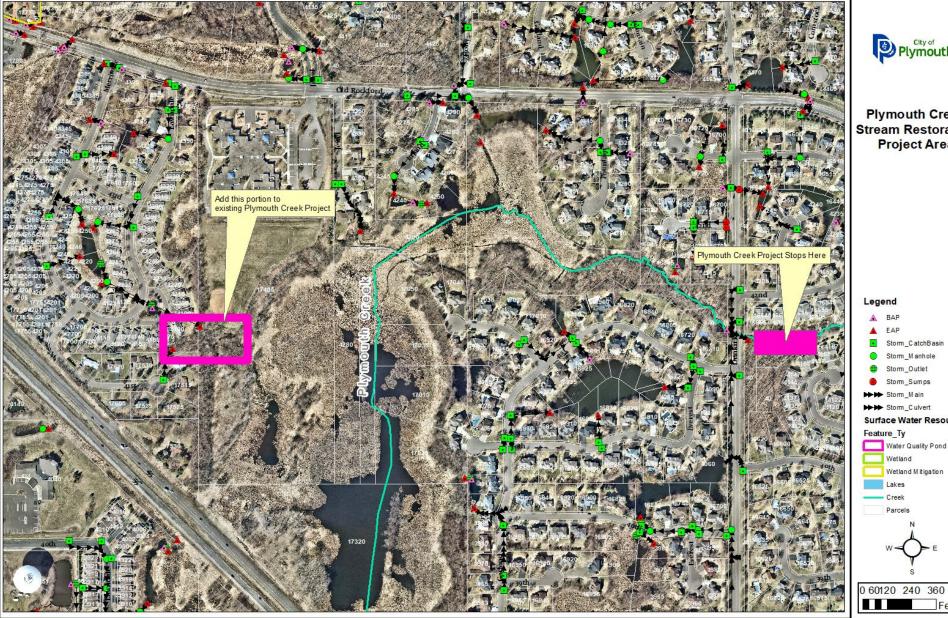
Storm_Sumps

Storm_Main
Storm_Culvert

Lakes



0 105210 420 630 Feet





Plymouth Creek **Stream Restoration Project Area**

