

Project Category: Water Quality/Water Capacity

Project Title: Mount Olivet Stream Restoration

Total Estimated Cost: \$400,000

BCWMC Project Number: ML-20

Description:

This project in the city of Plymouth will reduce erosion, total suspended solids, and phosphorous loading to Medicine Lake, a State listed impaired water with an approved total maximum daily load plan, and a Priority 1 water body of the Bassett Creek Watershed.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BCWMC ad valorem tax levy through Hennepin County				\$400,000	

Justification:

This project meets two gatekeeper criteria including improving/protecting water quality in a priority water body and addressing an approved TMDL. In addition to gatekeeper criteria, this project also protects previous investments in Medicine Lake by the Commission, addresses erosion and sedimentation issues, and addresses multiple Commission goals of improved water quality, aesthetics, and wildlife habitat.

Scheduling and Project Status:

This project will require a feasibility study to begin in 2019.

Relationship to BCWMC Plan and Other Projects:

Medicine Lake is regarded as a Priority 1 Deep Lake and receives surface water runoff from Plymouth, Golden Valley, New Hope, Minnetonka, and Medicine Lake. Capital Improvement partnerships between Plymouth and the Commission to the benefit of Medicine Lake include:

1. East Medicine Lake Water Quality Ponds (1)
2. West Medicine Lake Water Quality Ponds (2)
3. Plymouth Creek Stream Restoration (Medicine Lake to ~26th Ave.) (3)

In addition, the City of Plymouth has completed additional capital improvements:

- A. Wood Creek Stream Restoration (A)
- B. Timber Creek Erosion Repair (Phase I & II) (B)
- C. County Roads 9/61 Stream Restoration in partnership with TRPD and BWSR. (C)

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality/Water Capacity

Project Title: Water Retention Pond in Medicine Lake’s Jevne Park

Total Estimated Cost: \$500,000

BCWMC Project Number: ML-21

Description:
 This project in the City of Medicine Lake will increase the capacity of an existing pond and wetlands located within the city’s Jevne Park to collect and store stormwater runoff during heavy rainfall to improve the water quality of Medicine Lake and reduce flooding of properties.

Source of Project Funding	2019	2020	2021	2022	2023
CIP Account –BCWMC ad valorem tax levy through Hennepin County		\$200,000	\$300,000		

Justification:

As the city of Medicine Lake is nearly surrounded by Medicine Lake, maintaining and improving the quality of the lake itself is paramount. **IMPORTANT:** When Medicine Lake levels are abnormally high, water from the lake flows back onto the peninsula. *This project does not seek to remedy backflow.* Rather, the construction of an improved water retention pond in Jevne Park will result in:

- better management of storm water runoff as the city has no municipal storm sewer system
- increased capacity for stormwater storage within the pre-existing natural pond and swale in Jevne Park
- better way to route, carry and store excess stormwater which can minimize flooding within Jevne Park and on adjacent residential properties (approximately 15)
- reduced sediment and phosphorus loading to Medicine Lake therefore *improved water quality of Medicine Lake*
- reduced city of Medicine Lake capital and maintenance expenditures associated with road and culvert repair caused by excessive volumes and rates of runoff
- sustainability of existing waterfowl and wildlife habitats

Project Specifications & Estimated Cost: \$284,250

The improved and reclaimed water retention pond envisioned for Jevne Park mirrors the three already-functioning holding ponds in Plymouth located on the West Beach, the East Beach and near the At-the-Lake Apartments. At this time, possible wetland impacts resulting from the project and groundwater levels are unknown. There are many technical aspects of a potential project that need study. A future feasibility study will determine what, if any project can be located with the park to improve water quality and reduce flooding of roads and properties.



Image 1) Medicine Lake plat map and Jevne Park delineation
Image 2) Aerial view of Medicine Lake, Jevne Park. Blue = probable wetland. Yellow = potential wetland.
 SOURCE: Hennepin County GIS Interactive Maps, Natural Resources division.

Project Category: Flood Reduction

Project Title: **Medicine Lake Road and Winnetka Avenue Long Term Flood Mitigation Plan Implementation**

Total Estimated Cost: \$2,900,000

BCWMC Project Number: BC-2, 3, 8, 10

Description:

Implementation of the Medicine Lake Road and Winnetka Avenue Long Term Flood Mitigation Plan Study prepared for the cities of Crystal, Golden Valley, and New Hope. Potential projects in this area include rate control facilities with potential water quality features, structural flood proofing and other projects as determined.

Source of Project Funding	2019	2020	2021	2022	2023
CIP Account – BCWMC ad valorem tax levy through Hennepin County	\$500,000	\$1,100,000		\$300,000	\$1,000,000

Justification:

The Medicine Lake Road and Winnetka Avenue Flood Mitigation Plan Study identified over \$22M in projects that are needed to reduce the effect of repeat flooding on the roadway and adjacent properties. Identified projects will reduce the depth of flooding on the roadways and will lower flood elevations to help protect structures from flood damage. Flood damage reduction and improving water quality in Bassett Creek are consistent with BCWMC goals.

Scheduling and Project Status:

A Feasibility Study will need to be prepared for this project.

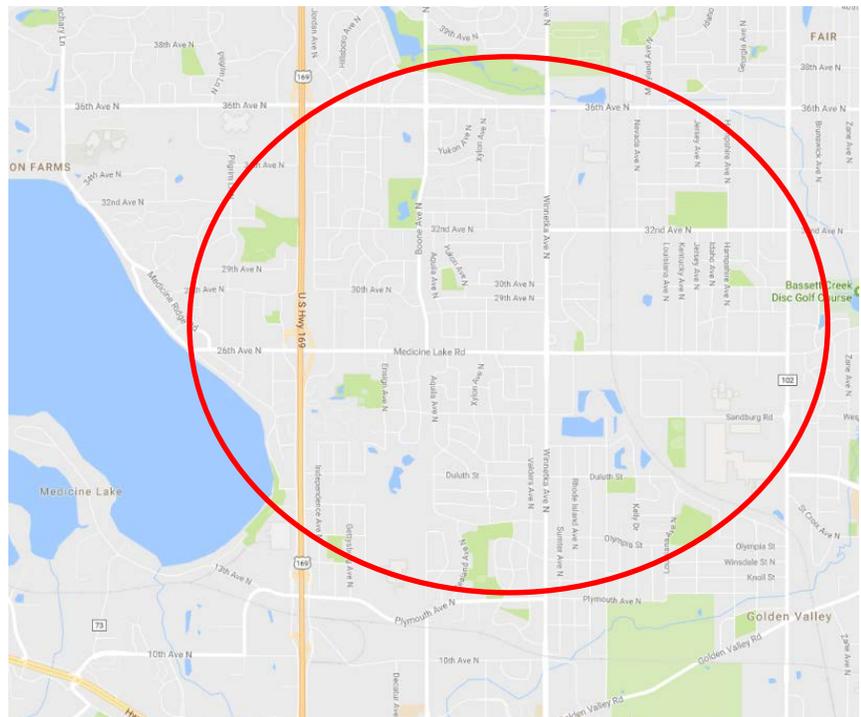
Relationship to BCWMC Plan and Other Projects:

This project is consistent with the goals and policies of the BCWMC Watershed Management Plan. It meets the “gatekeeper” criteria (policy 110) of addressing flooding concerns, and may also improve water quality in a priority waterbody (Bassett Creek). This project also meets the additional criteria (policy 110): addresses an intercommunity drainage issue, the tributary sub watershed includes more than one community, and it addresses significant infrastructure or property damage concerns. The project is one of many that have been identified in the Medicine Lake Road and Winnetka Avenue Long Term Flood Mitigation Plan.

This project is one of many that will work to reduce flooding on Medicine Lake Road and adjacent properties as well as increase water quality entering Bassett Creek.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality

Project Title: Westwood Nature Center Water Quality Improvement Project

Total Estimated Cost: \$300,000

BCWMC Project Number: 2019-WST-2

Description:
 The Westwood Hills Nature Center is in the planning phase of a complete reconstruction of its facilities in 2019. These improvements include a proposed LEED Certified building and other improvements. As part of this project, the city is proposing additional water quality improvement, which may include a pervious paver parking lot, which would eliminate runoff from the existing parking area, improvements to the existing stormwater pond, adjacent to the parking lot, or a vegetation management and stabilization project for the outlet channel. Further information will be available once the plans for the new building are developed and the budget and scope of the project are refined.

Source of Project Funding	2017	2018	2019	2020	2021
CIP Account – BWCMC ad valorem tax levy through Hennepin County			\$300,000		

Justification:

This project will improve the water quality and recreational suitability of Westwood Lake and Bassett Creek by removing sediment and pollutants from storm water runoff generated by the surrounding impervious road surfaces.

Scheduling and Project Status:

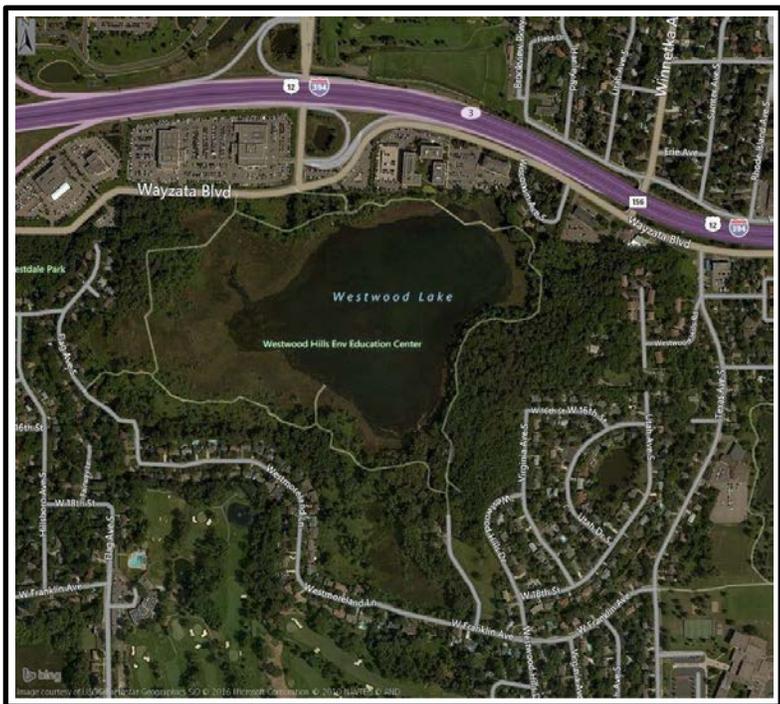
A Feasibility Study should be completed on or about April 1, 2018. This project is anticipated for construction during the summer of 2019.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWCMC Watershed Management Plan. However, this project is not included in the Plan’s Capital Improvement Program and may require a Plan Amendment.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality/Water Capacity

Project Title: Parkers Lake Drainage Improvement

Total Estimated Cost: \$400,000

BCWMC Project Number: PL-7

Description:

This project in the city of Plymouth will reduce erosion, total suspended solids, and phosphorous loading to Parkers Lake, a Priority 1 water body of the Bassett Creek Watershed.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BCWMC ad valorem tax levy through Hennepin County				\$200,000	\$200,000

Justification:

This project meets the gatekeeper criteria of improving/protecting water quality in a priority water body and will help protect water quality in Parkers Lake. In addition to gatekeeper criteria, this project also enhances previous investments intended to protect Parkers Lake by the Commission as well as addressing erosion/sedimentation issues and the Commission goals of improved water quality, aesthetics, and wildlife habitat.

Scheduling and Project Status:

This project will require a feasibility study to begin in 2019.

Relationship to BCWMC Plan and Other Projects:

Parkers Lake is the second largest lake in the Bassett Creek Watershed and is regarded as a Priority 1 Deep Lake. Parkers receives surface water runoff from Plymouth and small portion of Minnetonka and eventually drains to Medicine Lake. Previous capital improvement partnerships between Plymouth and the Commission to the benefit of Parkers Lake include:

- 1. Circle Park Pond Improvement

In addition, the City of Plymouth has completed additional capital improvements:

- A. Parkers Lake Rock Weir
- B. South Parkers Lake Tributary Stream Restoration
- C. 9th & Niagara Stream Restoration

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.

