

Proposed BCWMC Capital Improvement Program 2018 – 2022

Item 5E.
BCWMC 3-17-16

Project Name	City	Number	2016	2017	2018	2019	2020	2021	2022	2023	Totals
Honeywell Pond Expansion, Main Stem Watershed	GV	BC-4	\$1,202,000								\$1,202,000
Northwood Lake Improvement Project: Construct pond upstream of lake & install underground stormwater treatment and reuse system and bioinfiltration cells ^a	NH	NL-1	\$676,000	\$964,000							\$1,640,000
Main Stem Channel Restoration, Cedar Lake Road to Irving Ave	MPLS	2017CR-M		\$400,000	\$400,000						\$800,000
Plymouth Creek Restoration, from Annapolis Lane to 2,500 feet upstream (west) of Annapolis Lane ^a	PLYM	2017CR-P		\$710,000	\$150,000						\$860,000
Water Quality Improvement Site, Main Stem Watershed	GV	BC-3				\$300,000	\$800,000				\$1,100,000
Sandburg Rd and Louisiana Ave. Water Quality Improvement and Flood Reduction Project, Main Stem Watershed	GV	BC-2/BC-8				\$201,000	\$300,000				\$501,000
Water quality improvements in Bryn Mawr Meadows, Main Stem Watershed	MPLS	BC-5				\$500,000					\$500,000
Medley Park Stormwater Treatment Facility	GV	ML-12					\$100,000	\$400,000			\$500,000
Restoration and stabilization of historic Bassett Cr channel, Main Stem Watershed	MPLS	BC-9							\$500,000		\$500,000
Main Stem Channel Restoration, Bassett Creek Dr. to Golden Valley Rd.	GV	2021CR-M						\$100,000	\$400,000		\$500,000
Stormwater treatment system for dissolved phosphorus removal, Sweeney Lake watershed	GV	SL-11						\$400,000			\$400,000
Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park	GV	BC-7						\$400,000			\$400,000
DeCola Ponds & Medicine Lk Rd Subwatershed Flood Reduction Project (see fact sheet)	Crystal, GV, or New Hope	BC-10							\$300,000	\$1,000,000	\$1,300,000
Bassett Creek Park Pond Dredging	Crystal	BCP-2			\$800,000						\$800,000
Westwood Lake Water Quality Improvement Project	St. Louis Park	WST-2				\$250,000					\$250,000
TOTAL Estimated Project Cost			\$1,878,000	\$2,074,000	\$1,350,000	\$1,251,000	\$1,200,000	\$1,300,000	\$1,200,000	\$1,000,000	\$11,253,000
City Contributions (\$450,000 for BC-4 + \$276,400 for			-\$450,000	-\$276,400	-\$0	-\$0	-\$0	-\$0	-\$0	-\$0	-\$726,400
Grants Received ^b			-\$206,000	-\$494,000							-\$700,000
Estimated Levy ^c			\$1,222,000	\$1,303,600	\$1,350,000	\$1,251,000	\$1,200,000	\$1,300,000	\$1,200,000	\$1,000,000	\$9,826,600

All project costs are estimates and are presented in 2015 dollars
^a NL-1 costs increased due to higher construction bids and reflects 2/18/16 action by Commission; 2017CR-P estimated costs increased to reflect final feasibility study estimates
^b \$300,000 MPCA Clean Water Partnership grant + \$400,000 BWSR Clean Water Fund grant
^c \$1,222,000 levy amount already submitted to Hennepin County for 2016

Project Category: Water Quality

Project Title: Main Stem Water Quality Improvement Sites – Wirth Park (north of Plymouth Ave, east of Wirth Pkwy)

Total Estimated Cost: \$1,100,000

BCWMC Project Number: BC-3

Description:

This project will include construction of a water quality pond or similar storm water treatment facility benefitting the main stem of Bassett Creek.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BWCMC ad valorem tax levy through Hennepin County		\$300,000	\$800,000		

Justification:

This water quality improvement project will remove sediment and pollutants from storm water runoff in the residential and park areas generally located north of Plymouth Ave and east of Theodore Wirth Pkwy. Improving water quality in Bassett Creek is consistent with BCWMC goals.

Scheduling and Project Status:

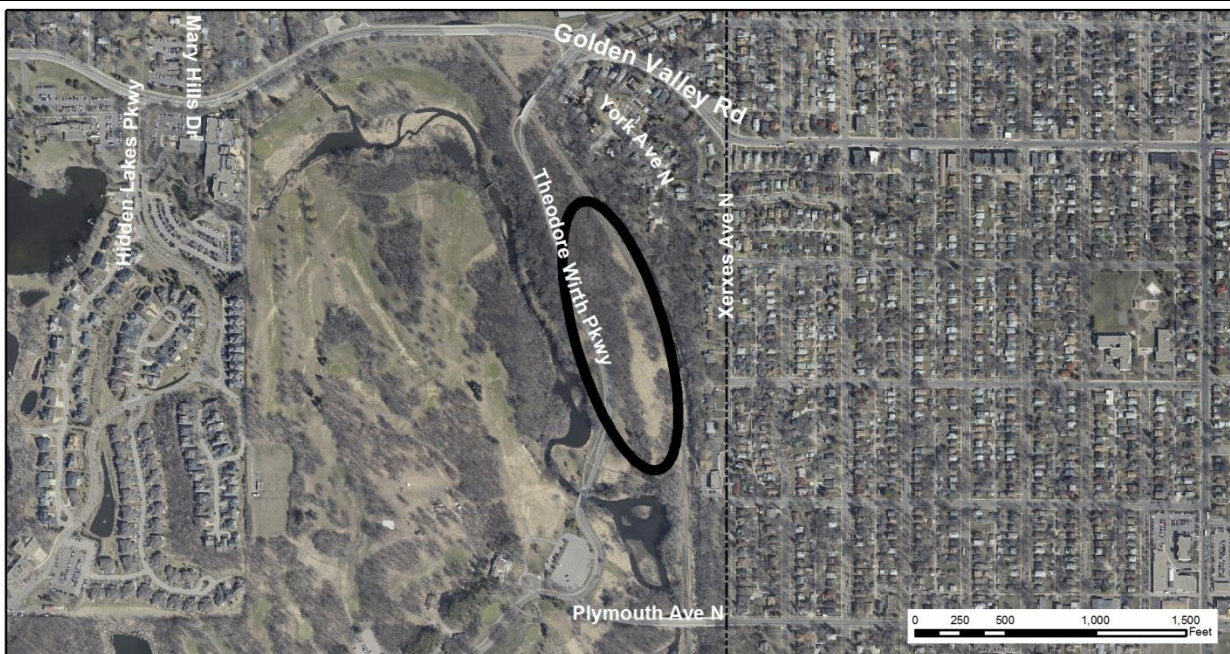
A feasibility study will need to be prepared for this project.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWCMC Watershed Management Plan and is included in Table 5-3 of the Plan. This project would treat the storm water runoff from a 115-acre area and remove an estimated 131 pounds of phosphorus per year. The project is included in the BCWMC Resource Management Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality & Flood Control

Project Title: Sandburg & Louisiana Water Quality Improvement and Flood Reduction Project

Total Estimated Cost: \$501,000

BCWMC Project Number: BC-2 / BC-8

Description:

This project will include construction of improvements to improve water quality and reduce flooding in the DeCola Ponds area. The improvements will be made in the area south of the intersection of Sandburg Rd and Louisiana Ave.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BWC MC ad valorem tax levy through Hennepin County		\$201,000	\$300,000		

Justification:

This flood reduction and water quality improvement project in the area south of the intersection of Sandburg Rd and Louisiana Ave will help protect nearby residences from flooding and remove sediment and pollutants from storm water runoff generated by the surrounding industrial area. Reducing flooding impacts and improving water quality in Bassett Creek is consistent with BCWMC goals.

Scheduling and Project Status:

A feasibility study should be completed in 2018.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWC MC Watershed Management Plan and is included in the 10-year CIP list (Table 5-3) of the Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality

Project Title: Bryn Mawr Meadows Water Quality Improvement Site, Minneapolis

Total Estimated Cost: \$500,000

Project Number: BC-5

Description:

This project was described as Option 7 in the Bassett Creek Main Stem Watershed Management Plan (June 2000). The project consists of the construction of a new stormwater Best Management Practice (BMP) in a park near the intersection of Morgan Ave and Laurel Ave, in the City of Minneapolis.

Source of Project Funding	2017	2018	2019	2020	2021
CIP account – BCWMC ad valorem levy through Hennepin County			\$500,000		

Justification:

As described in 2000, the BMP would treat runoff from 209 acres of land and would remove an estimated 22 lbs. of phosphorus per year, on average.

Scheduling and Project Status:

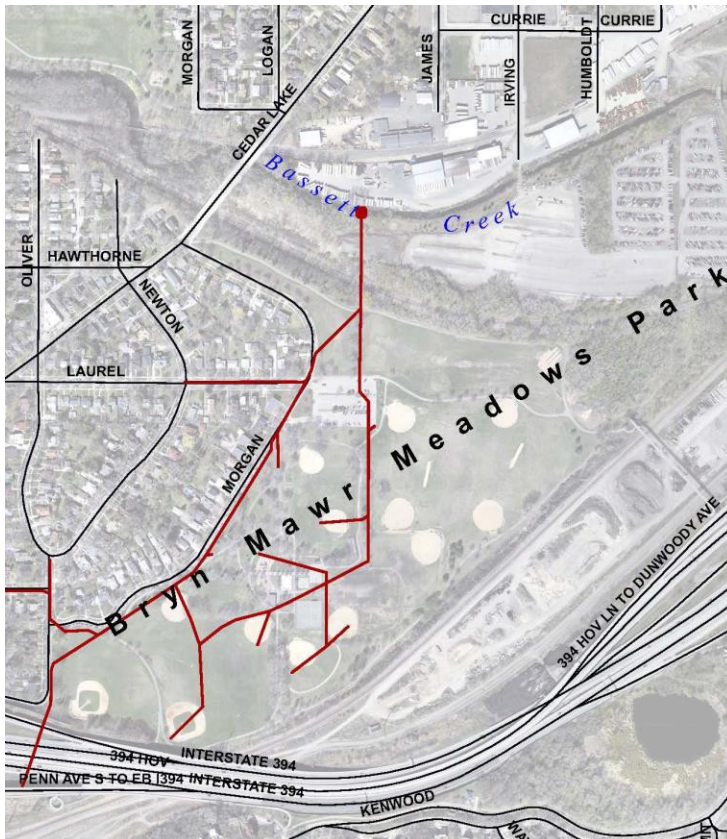
A feasibility study will need to be prepared for this project. As the project progresses, additional information will be provided.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the BCWMC Watershed Management Plan and is included in the BCWMC's Resource Management Plan.

Effect on Annual Operations Costs:

Not known at this time. This will be identified in the Feasibility Study.



Project Category: Water Quality

Project Title: Medley Park Stormwater Quality Treatment Facility – Medicine Lake Watershed

Total Estimated Cost: \$500,000

BCWMC Project Number: ML-12

Description:

This project in the City of Golden Valley will include construction of a storm water treatment pond or similar treatment facility. Built in the City's Medley Park, the facility will treat stormwater by removing phosphorous and sediment from runoff. The park currently has poor soils which are not conducive to recreational programming.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BWCMC ad valorem tax levy through Hennepin County			\$100,000	\$400,000	

Justification:

Stormwater runoff from the roughly 100 acre watershed in the northwest section of the City of Golden Valley currently flows into ponds on the western side of Medley Park. The proposed stormwater quality treatment facility would add storage and treatment capabilities to the existing ponds and would remove solids and phosphorous upstream of Medicine Lake. The proposed facility would help achieve the goals of the Medicine Lake TMDL.

Scheduling and Project Status:

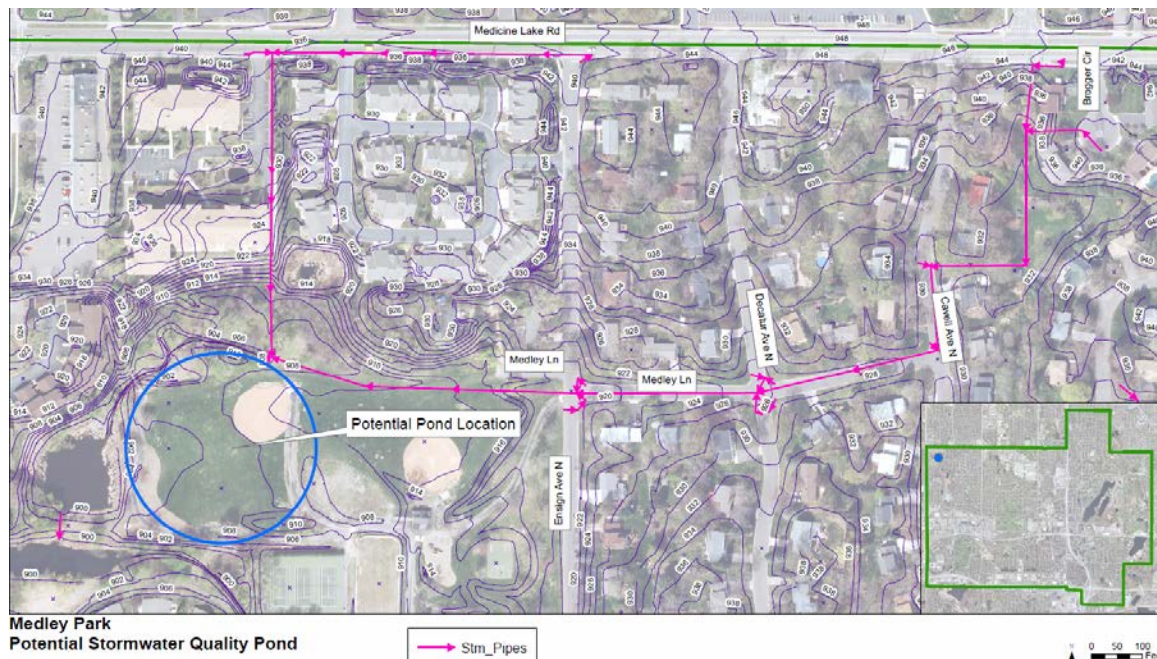
The project is currently in the very early stages. Design and construction has not yet been scheduled.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the BCWMC Watershed Management Plan and will be included in the City of Golden Valley CIP.

Effect on Annual Operations Costs:

This project will have no effect on BCWMC Annual Operations Costs.



Project Category: Channel Restoration

Project Title: Restoration & Stabilization of Historic Bassett Creek Channel

Total Estimated Cost: \$500,000

BCWMC Project Number: BC-9

Description:

This project in the City of Minneapolis will include bank stabilization and erosion repair methods and will remove obstructions as necessary. The project aims to mitigate impacts from flooding. It's believed that work associated with the Bottineau Light Rail Line will make most of the necessary repairs, however this work proposed for 2020-2021 may also be needed.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BWCMC ad valorem tax levy through Hennepin County					\$500,000

Justification:

This portion of the Main Stem of Bassett Creek was cut off from the current main channel in the 1940s-50s when Highway 55 was constructed but remains part of the BCWMC Trunk System. Flows from the current main stem channel sometimes overflow into this area causing localized flooding and extreme sedimentation, along with trash and debris. There is damage to retaining walls and storm outlet structures. The City of Minneapolis cleaned up the area in 2015. Changes for the LRT project are likely to address the structural damage. This project is a placeholder in anticipation of remaining remediation after the LRT project has been constructed.

Scheduling and Project Status:

A Feasibility Study should be completed in 2021. This project is anticipated for construction during the winter of 2022 - 2023.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWCMC Watershed Management Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality

Project Title: Bassett Creek Main Stem Stream Restoration – Bassett Creek Drive to Golden Valley Road

Total Estimated Cost: \$500,000

BCWMC Project Number: 2021CR-M

Description:

This project in the city of Golden Valley will include bank stabilization and erosion repair methods and will remove obstructions as necessary. Consideration should be given to a variety of best management practices including coir logs, erosion control blanket, live staking, cross veins, riffles, rip-rap, and buffers. Per BCWMC policy, the Commission will strive to utilize soft armoring techniques as much as possible and wherever feasible.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BWCMC ad valorem tax levy through Hennepin County				\$100,000	\$400,000

Justification:

The City of Golden Valley inventoried streambank conditions and areas of erosion along the main stem of Bassett Creek. This area is adjacent to Rice Lake Nature Area and Mary Hills Nature Area. The creek will be accessible for repairs and stabilization through public property. Rehabilitation and repair of Bassett Creek in this area is consistent with BCWMC goals regarding water quality.

Scheduling and Project Status:

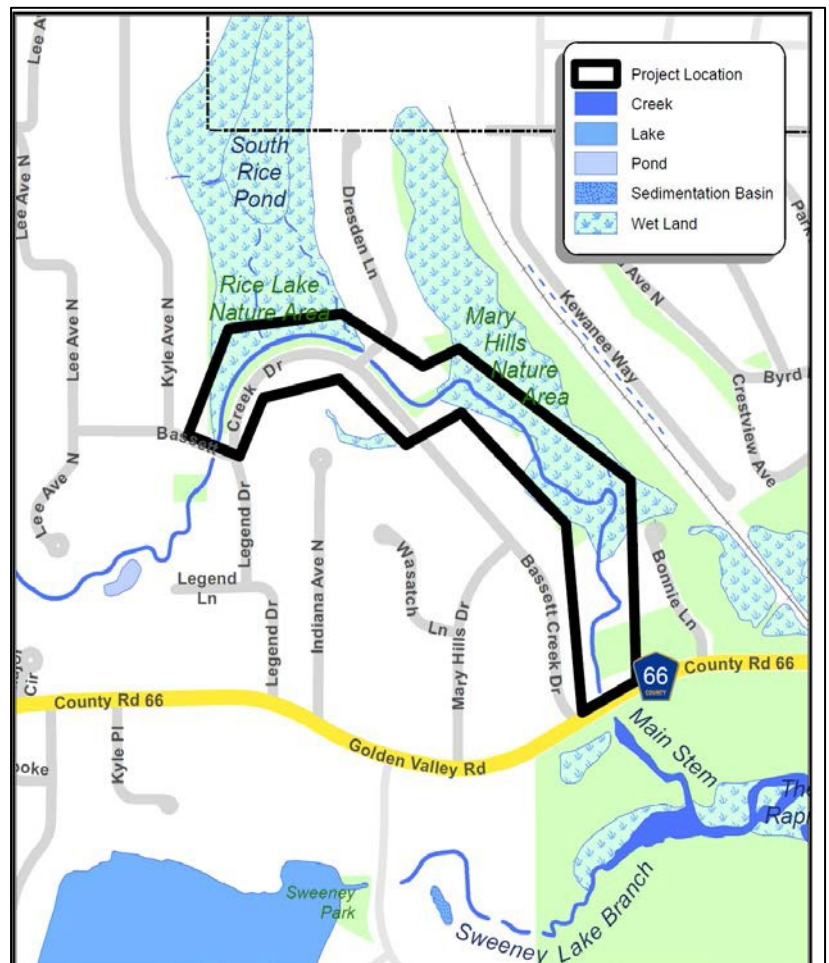
A Feasibility Study should be completed in 2020. This project is anticipated for construction during the winter of 2021 - 2022.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWCMC Watershed Management Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality

Project Title: Stormwater Treatment for Dissolved Phosphorus Removal, Sweeney Lake Watershed

Total Estimated Cost: \$400,000

BCWMC Project Number: SL-11

Description:

This project in the city of Golden Valley will use an emerging technology to treat water in the Sweeney Lake Branch of Bassett Creek with spent lime or a similar product to reduce dissolved phosphorus concentrations. A portion of flow in the creek would be diverted for treatment; more than one treatment location may be used. The “cleaned” creek water would be returned to the natural channel to flow on through Schaper Pond and into Sweeney Lake.

Source of Project Funding	2017	2018	2019	2020	2021
CIP Account – BCWMC ad valorem tax levy through Hennepin County					\$400,000

Justification:

Sweeney Lake is on the State’s Impaired Waters List for nutrients. While the Schaper Pond Project is projected to greatly improve water quality in Sweeney Lake, it’s likely that dissolved phosphorus levels will still need to be reduced in the lake. This project was identified in the Sweeney Lake TMDL as a possible chemical treatment option.

Scheduling and Project Status:

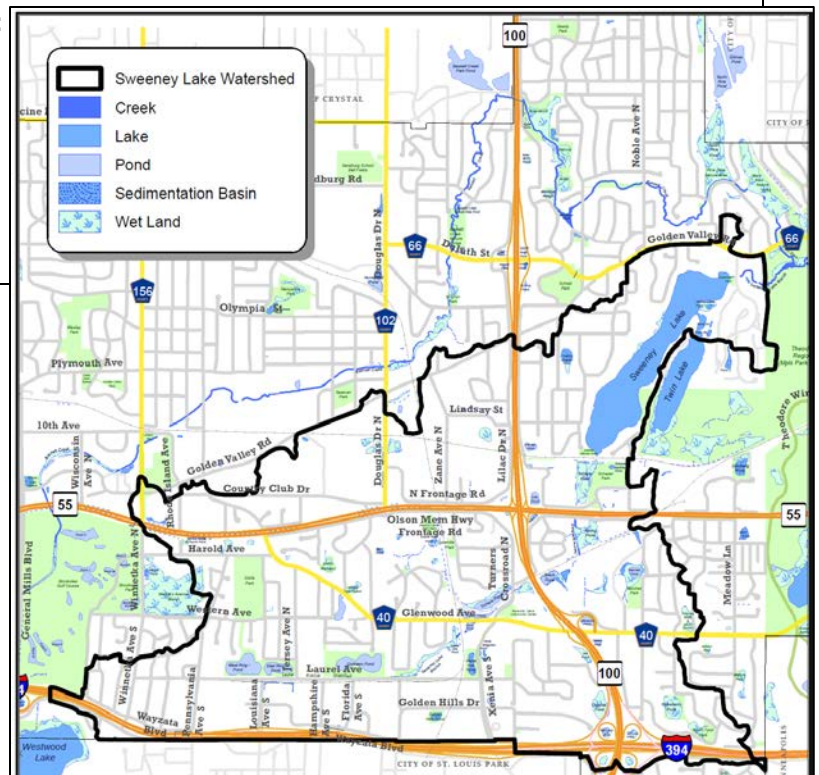
A Feasibility Study should begin on or about April 1, 2020. This project is anticipated for construction 2021.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BCWMC Watershed Management Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality

Project Title: Dredging Accumulated Sediment In Main Stem Bassett Creek, Wirth Park

Total Estimated Cost: \$400,000

BCWMC Project Number: BC-7

Description:

This project in Theodore Wirth Park in the city of Golden Valley consists of dredging sediment that has accumulated over decades within the Main Stem of Bassett Creek just north of Hwy 55. During the winter (on frozen ground), equipment such as backhoes will be used to remove sediment within the channel. The removal of sediment improves stream flow and habitat, will reduce in-stream erosion and will improve stream water quality.

Source of Project Funding	2017	2018	2019	2020	2021
CIP Account – BWCMC ad valorem tax levy through Hennepin County					\$400,000

Justification:

The removal of accumulated sediment will improve stream flow and reduce in-stream erosion, ultimately improving stream water quality. Additionally, habitat for fish and macroinvertebrates in the stream should improve as layers of sediment are removed, possibly exposing rock or cobble for spawning beds and interstitial micro-habitats.

Scheduling and Project Status:

A Feasibility Study should begin on or about April 1, 2020. Project implementation is anticipated during the winter 2021 - 2022.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the 2015 BWCMC Watershed Management Plan.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.

Project Category:

Flood Reduction

Project Title:

**Decola Pond Medicine
Lake Road Sub
Watershed Flood
Reduction**

Total Estimated Cost:

\$1,300,000

BCWMC Project Number:

BC-10

Description:

Implementation of the Medicine Lake Road and Winnetka Avenue Area Flood Reduction Study prepared for Crystal, Golden Valley and New Hope. Potential projects include rate control facilities with potential water quality features, structural flood proofing and other projects to be determined.

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

Justification:

Medicine Lake Road east of Winnetka Avenue is subject to repeat flooding that inundates the roadway and adjacent property, and there is repeat property damage from flooding around DeCola Ponds due to lack of runoff rate control in the approximately one square mile sub-watershed. Project may include construction of rate control features, with water quality benefits and/or structural flood proofing of homes. Flood damage reduction and improving water quality in Bassett Creek are consistent with BCWMC goals.

Scheduling and Project Status:

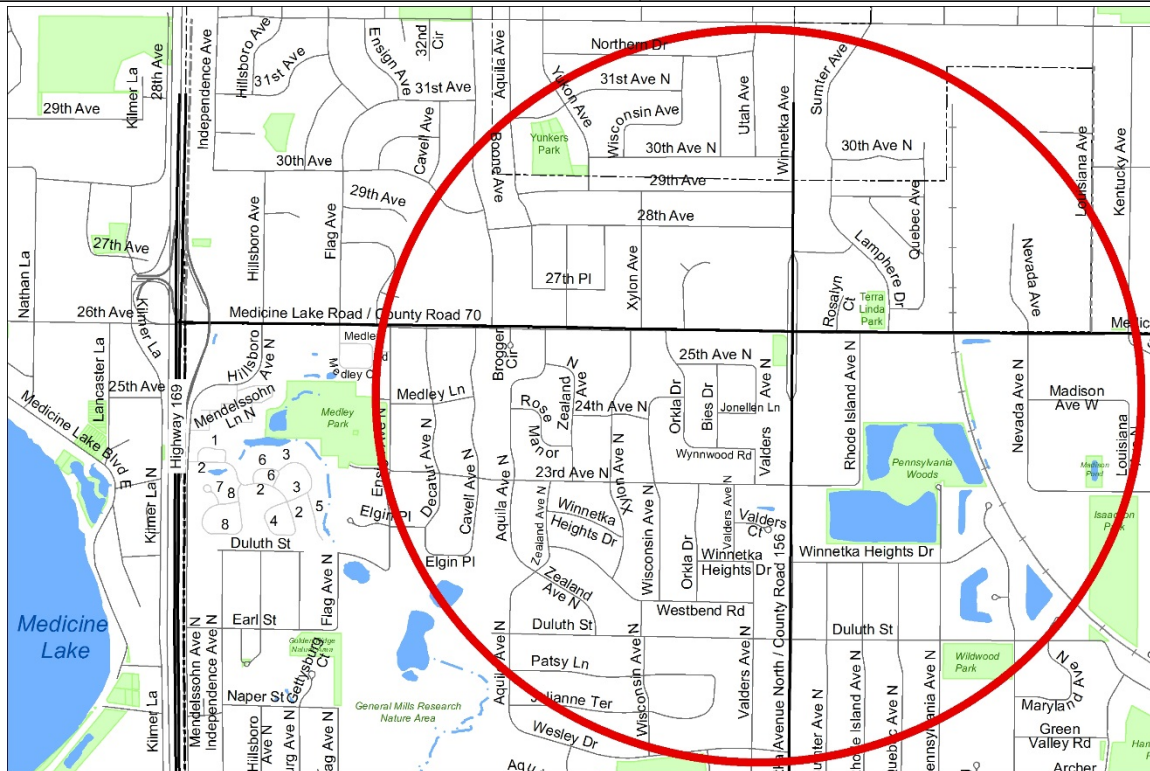
A feasibility study will need to be prepared for this project. A plan amendment will also be required. Construction of the project is anticipated for 2022.

Relationship to General Plan and Other Projects:

This project is consistent with the goals and policies of the BWCMC Watershed Management Plan. It would meet the “gatekeeper” criteria (policy 111) of addressing flooding concerns, and may also improve water quality in a priority waterbody (Bassett Creek). This project would also meet the following additional criteria (policy 111): addresses an intercommunity drainage issue, tributary subwatershed includes more than one community, and addresses significant infrastructure or property damage concerns. The project is one of many that are being considered to reduce flooding on Medicine Lake Rd. and DeCola Ponds.

Effect on Annual Operations Costs:

This project has no effect on BCWMC Annual Operations Costs.



Project Category: Water Quality/Water Capacity

Project Title: Bassett Creek Park Pond Dredging

Total Estimated Cost: \$800,000

BCWMC Project Number: 2018 BCP-2

Description:

This project in the city of Crystal will removed sediment that has collected in the main channel of the North Branch of Bassett Creek within Bassett Creek Park Pond. The dredging of sediment will improve water quality of the creek downstream.

Source of Project Funding	2018	2019	2020	2021	2022
CIP Account – BCWMC ad valorem tax levy through Hennepin County	\$800,000				

Justification:

The City of Crystal has been monitoring the pond for a number of years and it is in need of dredging. The project will improve water quality downstream by trapping sediment in the pond, thus minimizing sediment passing downstream to Bassett Creek.

Scheduling and Project Status:

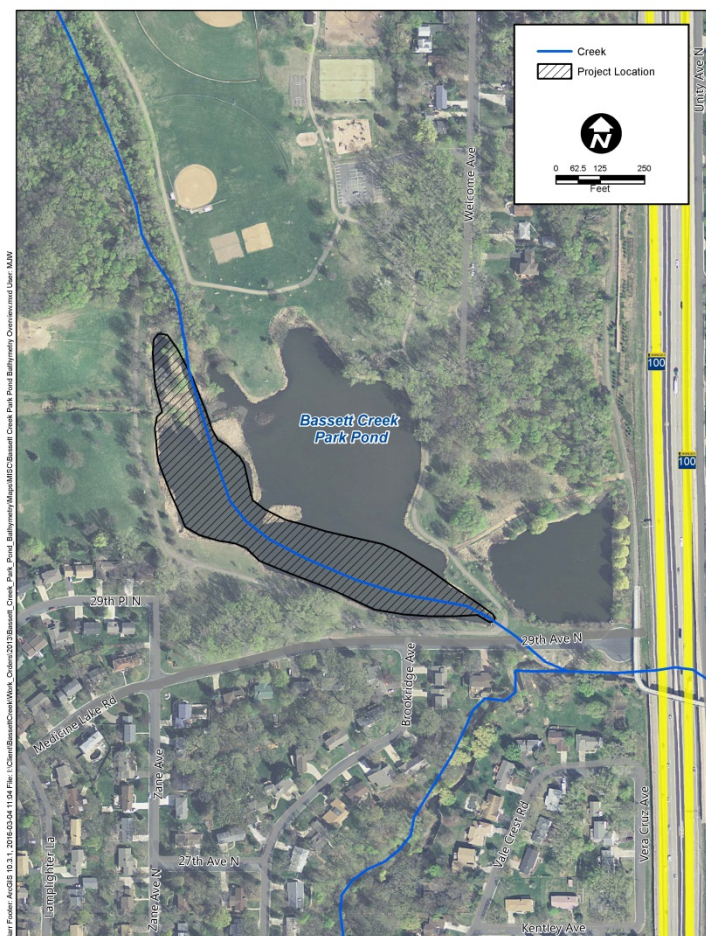
A Feasibility Study should begin in the fall of 2016. This project is anticipated for construction during 2018.

Relationship to General Plan and Other Projects:

Dredging was previously performed during 1995 by the Corps of Engineers as part of the Bassett Creek Flood Control Project. Although the dredging was constructed as a betterment, and is not part of the Federal Project, the BCWMC and City included the dredging to improve water quality of Bassett Creek Park Pond and Bassett Creek. This project is consistent with the goals and policies of the BCWMC 2015-2025 Watershed Management Plan and is included in the 10-year CIP (Table 5-3).

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:	\$250,000
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			\$ 250,000		

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.

