

Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Plan Steering Committee

From: Administrator Jester Date: February 26, 2025

RE: BCWMC Capital Improvement Program

The PSC should discuss specific pieces of CIP implementation for the new plan. Below are staff recommendations and questions to consider.

Implementation Process

The timeline and process for the CIP is shown in the graphic below. Staff recommends continuing with this framework to maintain a robust process for analyzing, selecting, and funding capital projects.

January/February/March each year:

prioritization matrix

- Commission approves 5-year CIP with input and recommendations from Technical Advisory
 Committee and review of project scoring on the CIP
- An amendment to the Watershed Management Plan is proposed, if needed to keep the Plan's 10-year CIP up to date.
 This process includes a public hearing, typically held in May.

For projects officially on the CIP (either already on the existing CIP or added through the plan amendment process):



Two years before levy/implementation year:

- Summer: Commission approves scope of work and budget from the Commission Engineer for completing a feasibility study (see sidebar for feasibility study components)
- Fall: Feasibility study gets underway including outreach to local residents, businesses, and other stakeholders
- Fall: A project webpage is published with complete and updated information, documents, and announcements

One year before levy/implementation year:

- Spring: Commission reviews feasibility study and decides on best alternative to implement
- May or June: Commission sets maximum levy for following year. The final levy amount can be lower than the maximum levy, but cannot be higher.
- September: Commission holds a public hearing, and considers
 officially ordering the project including certifying costs to
 Hennepin County (i.e., setting the final levy) and entering
 agreements with the entities responsible for design and
 construction of the projects. (The implementing entity is
 typically the city where the project is located.)
- Fall: Implementing entity begins project design.

Year of levy/implementation:

- Spring: 60% Project Design Plans are reviewed by Commission Engineer who then makes recommendation to Commission for approval or changes. Implementing entities typically seek feedback from local residents on the draft designs.
- Summer: 90% Project Design Plans are reviewed by Commission Engineer who then makes recommendation to Commission for approval or changes
- · Fall/Winter: Construction begins

Required Elements of a Feasibility Study

- Clearly analyzed alternatives for the desired outcome with enough specificity for the Commission to judge the merits of each alternative
- Identified Commission goals and objectives (from Watershed Management Plan) that are addressed by each alternative
- Clearly analyzed pros and cons of each alternative
- Estimated annualized costs per pound pollutant removal or cost per acre-foot additional flood storage for each alternative
- Identified permitting requirements for alternatives
- Estimated costs for each alternative that are appropriate for the level of detail in the study
- Estimated life span of the alternatives
- A "30-year cost" for each alternative
- Evaluation of new and/or innovative approaches or technologies, as appropriate.

"Gatekeeper" Criteria

Currently, only projects that meet certain criteria are eligible to be BCWMC CIP projects. These criteria are included as Policy 110 in the current Plan (see below). These criteria have been working well over the past 10 years. Staff recommends a minor addition to #3. The PSC should review and recommend updates, if needed.

Policy 110: The BCWMC will consider including projects in the CIP that meet one or more of the following "gatekeeper" criteria.

- 1. Project is part of the BCWMC trunk system (see Section 2.8.1, Figure 2-14 and Figure 2-15)
- 2. Project improves or protects water quality in a priority waterbody
- 3. Project addresses an approved TMDL-or watershed restoration and protection strategy (WRAPS), or subwatershed analysis
- 4. Project addresses flooding concern

Policy 110 goes on to describe criteria that are used to help prioritize projects (see below). Reference to the prioritization matrix may eliminate the need for this policy language:

The BCWMC will use the following criteria, in addition to those listed above, to aid in the prioritization of projects:

- 1. Project protects or restores previous Commission investments in infrastructure
- 2. Project addresses intercommunity drainage issues
- 3. Project addresses erosion and sedimentation issues
- 4. Project will address multiple Commission goals (e.g., water quality, runoff volume, aesthetics, wildlife habitat, recreation, etc.)
- 5. Subwatershed draining to project includes more than one community
- 6. Addresses significant infrastructure or property damage concerns

The BCWMC will place a higher priority on projects that incorporate multiple benefits, and will seek opportunities to incorporate multiple benefits into BCWMC projects, as opportunities allow.

Prioritization Metrics – see table with meeting materials

The TAC and Commission have used the prioritization matrix table (same as included with February 5th PSC meeting materials) for several years to help prioritize projects that have the highest impact and multiple benefits. Potential revisions to the current matrix are shown in red. The PSC should review and consider recommendations for the prioritization of projects. Although staff does not recommend including the matrix in the Plan (so that it can be more easily updated over time), the Plan should include a list of metrics used to prioritize CIP projects.

Feasibility Studies

In 2013, the Commission developed requirements for feasibility studies (see below). These requirements have been working well since 2013. Staff recommends a few revisions, tracked below. The PSC should review and recommend updates, as needed.

The following criteria or components should be included in all feasibility studies funded by the Bassett Creek Watershed Management Commission

Commission-funded feasibility studies will:

- 1. be performed by a qualified engineering firm or by city staff;
- 2. include permitting requirements of alternatives;

- 2.3. include input gathered from the public, technical agencies, and partners
- 3.4. clearly analyze multiple alternatives for the desired outcome with enough specificity for the Commission to judge the merits of each alternative;
- 4.5. clearly analyze and report pros and cons of each alternative;
- 5.6. include estimates for annualized costs per pound pollutant removal <u>or cost per acre-foot flood storage</u>, <u>when applicable</u>;
- 6.7. identify which Commission objectives (from Watershed Management Plan) are being addressed by various options, including multiple objectives (e.g. flood control, water quality, aesthetics, habitat, recreation, education);
- 7.8. address estimates of costs for each alternative that are appropriate for the level of detail in the study;
- <u>8.9.</u> include the estimated life span of the alternatives;
- 9.10. include a "30-year cost" for alternatives (for consistency among projects and alternatives) no matter the estimated life span of the project; and
- 11. evaluate new and/or innovative approaches or technologies, as appropriate.
- 10.12. consider incorporating educational signage and/or public art

Implementation Roles

Staff recommends continuing CIP implementation with the current flexibility. There are different phases of implementation including design, bidding, construction, and on-going maintenance. Although cities or other partners (such as TRPD and MPRB) have typically performed all these functions through an agreement with the BCWMC, the Commission itself has also taken on these tasks in recent years including design of the Bryn Mawr Meadows Water Quality Improvement Project; design, bidding, and construction of the Lagoon Dredging Project; and design, bidding, and implementation of the Sweeney Lake Water Quality Improvement Project. Projects that don't result in permanent infrastructure that needs on-going maintenance are easier for the Commission to fully implement. However, long term maintenance could be handled differently in the future (see "Project Maintenance" section below).

The PSC should discuss and determine if changes to implementation roles are needed.

Project Maintenance

Long term (on-going) maintenance of BCWMC-funded CIP projects (such as stormwater ponds, streambank stabilization, underground storage, pipes, culverts, etc.) has always been the responsibility of the city where the project is located. This is due, in part, to the fact that the BCWMC is not allowed to own property per its JPA. There's potential for some CIP maintenance to be funded by a Maintenance Levy through Hennepin County; the BCWMC is likely to pursue this starting with the 2026 levy. Some - related project maintenance performed by cities can also be funded through the Commission's Channel Maintenance Fund. Once a project has come to the end of its expected life, a new CIP project to reconstruct the project could be added to the CIP list. The PSC should discuss and determine if updates to current practices or new policies regarding project maintenance are needed.

Eligible Project Costs

Currently, the CIP includes two categories of eligible project costs (those costs that can be reimbursed to project implementers) (see below). The PSC should review and recommend updates, as needed.

Project costs eligible for reimbursement from BCWMC:	Other project costs that will be considered for whole or partial reimbursement on a project by project basis*:
Feasibility study costs	Easement acquisition
Pre-project planning, monitoring (e.g., fish surveys, feasibility study review/follow-up)	Property acquisition
Plan amendment costs	Utility relocation
Grant application & administration costs	City improvements associated with the project but not directly tied to the goals of the BCWMC (e.g. trails, pedestrian bridges, signage)
Permitting costs and fees	Contaminated soils/groundwater remediation
Engineering and design costs (plans & specs)	City staff time and expenses (if not requested prior to levy certification)
Construction costs	Wetland mitigation or replacement
Project bidding & advertising fees	Art/aesthetic improvements directly associated with the project
Construction administration & observation costs	
Warranty period monitoring costs – e.g., wetland monitoring, vegetation monitoring, post-construction inspection	
City staff time and expenses (if requested prior to levy certification)	
Other BCWMC administration and engineering time, including tracking CIP project budget, engineering plan review and reviewing reimbursement requests	
Transfer to BCWMC administrative fund for CIP administrative expenses, as designated by the Commission	

^{*}The BCWMC will consider the cost effectiveness of the project including the cost per pound of pollutant removal relative to guidance to be established by the BCWMC (for water quality projects), along with partnerships, grant opportunities, and other factors in determining reimbursement of other project costs.

Public - Private Partnerships for Above and Beyond Requirements

In 2018 the "CIP Prioritization Committee" developed the CIP prioritization matrix. The group also received a presentation from Minnehaha Creek WD which outlined the District's process for concentrating its work in a few subwatersheds, building relationships and partnerships, and working with private landowners to improve stormwater management and overall ecological function of the creek by partnering on large-scale projects. The committee met several times, working to develop ways to target CIP projects where they are needed most, and "get ahead" of redevelopment projects such that partnerships for improved stormwater management could be built. (All committee meeting materials can be found on this page: https://www.bassettcreekwmo.org/document/meeting-materials-minu.)

At the February 2019 meeting, the Commission approved the use of the prioritization matrix along with the committee and TAC's recommendations for more Commission-TAC collaboration on project identification: www.bassettcreekwmo.org/application/files/1915/5009/6058/Item 6E CIP and TAC recommendations.pdf. These recommendations have only been partially implemented, mostly due to a lack of Commission staff capacity. While the matrix has been used each year, potential CIP projects still come primarily from TAC members.

Along those same lines, the TAC has twice requested that the BCWMC include a line item in its CIP levy for a cost share program for private developers/redevelopers to install BMPs that go above and beyond stormwater management requirements.

While there are BCWMC staff capacity limitations and likely not enough time in this planning process to develop a public-private partnership framework or cost share program, this Plan could acknowledge that the Commission's CIP program could evolve into these areas.

Potential Projects

The following pages include a list of potential projects to include on the 10-year CIP in the Plan.

List of Potential Projects for 10-year CIP Schedule

	Project Title (status, if applicable)	Plan issue/goal addresses	Project description/need
1	Projects resulting from Medicine Lake TMDL Assessment	Impaired Waters: Medicine Lake delisting for nutrients	Projects and BMPs will vary depending on assessment results.
2	Projects resulting from Northwood Lake TMDL and Subwatershed Analysis (SWA)	Impaired Waters: Northwood Lake water quality improvements	Projects and BMPs will vary depending on assessment results.
3	Projects resulting from Lost Lake TMDL and Subwatershed Analysis (SWA)	Impaired Waters: Lost Lake water quality improvements	Projects and BMPs will vary depending on assessment results.
4	Culvert Repair/Replacement: Sweeney Lake to Sweeney Branch Bassett Creek, Golden Valley	Flooding/Climate Change Impacts: Reduce flood risk to structures and infrastructures	This project in Golden Valley will repair or replace aging infrastructure that facilitates the flow of the Sweeney Lake Branch of Bassett Creek, helps to protect critical regional watermain infrastructure, and prevents flooding of nearby buildings and property.
5	Bassett Creek Park Pond Dredging and Upstream Channel Improvements, Crystal	Impaired Waters: Maintain or improve water quality in priority streams	This project was originally studied in 2017 in conjunction with a study of Winnetka Pond dredging. The final project resulted only in dredging of Winnetka Pond with an understanding the Bassett Creek Park Pond dredging would be completed in the future.
6	Shoreline improvement projects on priority lakes	Lakeshore Erosion: Increase percentage of properties with native buffers on nutrient impaired lakes.	As identified by assessments or as cost share program.
7	Streambank restoration and channel/habitat improvements on priority streams; various segments	Impaired Waters: Achieve stable streambanks along all priority streams; Maintain or improve macroinvertebrate indices of biological integrity (MIBI) in priority streams; Maintain or improve water quality in priority streams	Based on surveys of streambanks and riparian areas; projects to restore streams, introduce in-channel habitat, overhanging vegetation, and woody debris.

	Project Title (status, if applicable)	Plan issue/goal addresses	Project description/need
8	Medicine Lake Road and Winnetka Avenue Long Term Flood Mitigation Plan Implementation	Flooding/Climate Change Impacts: Reduce flood risk to structures and infrastructures	Based on projects identified in the Medicine Lake Rd. and Winnetka Ave. Long Term Flood Mitigation Plan. Two projects already constructed (DeCola Ponds B&C and SEA School & Wildwood Park Projects); third proposed project is DeCola Pond F Flood Storage & Diversion Project.
9	Bassett Creek Valley floodplain reduction and stormwater management projects	Bassett Creek Valley: Collaborate on evaluation, sequencing, and implementation of multi-beneficial projects within the Bassett Creek Valley to create regional flood storage, reduce floodplain by at least 8 acres, improve regional stormwater management, and improve creek access.	
10	Restoration and stabilization of historic Bassett Creek channel north of Hwy 55, Minneapolis (included in 2015 watershed plan but not implemented)	Impaired Waters: Maintain or improve water quality in priority streams	Will reduce phosphorus and sediment loading to downstream resources including Bassett Creek and Mississippi River. Removed from CIP list due to low priority.
11	Bassett Creek Park water quality improvements or wetland restoration, Minneapolis (included in 2018 version of CIP list but later removed due to low priority)	Wetland Health & Restoration: Restore or enhance priority wetlands as opportunities arise or adjacent CIP projects are planned	Construction of BMPs benefitting Bassett Creek, potentially in conjunction with MPRB park renovations. May be an opportunity for a wetland restoration on the south side of Bassett Creek. Provides a better neighborhood connection to the creek.

	Project Title (status, if applicable)	Plan issue/goal addresses	Project description/need
12	Curly-leaf pondweed control for water quality improvement	Impaired Waters: Improve lake water quality	Per AIS management policies.
		AIS: Mitigate the impact of existing AIS infestations	
13	Cost-share for equipment purchases	Impaired Waters: Improve lake and stream water quality; reduce chloride loading to lakes and streams; reduce chloride concentrations in Bassett Creek by 10%	Examples: regenerative air street sweepers or chloride management equipment through equipment purchase policy
14	Private Developer Cost-share for Project Performance Beyond Minimum Standards (water quality and/or flood control)	Multiple goals including water quality improvements and flood reduction	Requested on multiple occasions by TAC. Fewer and fewer opportunities for projects on public land. Cooperation with private property owners is needed.
15	Chloride Reduction Projects or cost-share program	Impaired Waters: Reduce chloride loading to lakes and streams	Prioritization given to areas tributary to chloride-impaired waters. Cost share program could be developed for city and private entities. Examples include equipment upgrades, brining equipment, porous pavement, heated surfaces, reconfiguring sites for less ice build-up, etc.
16	Flood risk reduction cost share program (for habitable structures)	Flooding/Climate Change Impacts: Reduce flood risk to structures and infrastructures	Floodproofing or flood risk reduction projects for homes
17	Medicine Lake Shoreland Restoration (ML-14) (included in 2015 watershed plan but not implemented)	Lakeshore Erosion: Increase percentage of properties with native buffers on nutrient impaired lakes.	(This project may be redundant to #6 above and/or may be captured in Medicine Lake TMDL assessment recommendations from #1 above.)

	Project Title (status, if applicable)	Plan issue/goal addresses	Project description/need
18	Retention of impervious area drainage at Ridgedale area (CL-3) (included in 2015 watershed plan but not implemented) Implementation of water quality improvement projects resulting from the Upper Mississippi	Impaired Waters: Impaired Waters: Maintain or improve water quality in priority lakes and streams Impaired Waters: Reduce sources of bacteria to priority streams	Crane Lake outlets to Medicine Lake. Examples of projects include bioswales, tree trenches, rain gardens Goose management, pet waste management projects, reduction of
	River Bacteria TMDL (WS-1) (included in 2015 watershed plan but not implemented)		bacteria loading from ponds and pipes
20	CIP Project Maintenance	Multiple goals across all areas	Maintenance of past CIP projects
21	Deep Tunnel (Double Box Culvert) Repair and Sediment Removal (FCP-1) (slated for 2026/2027)	Flooding/Climate Change Impacts: Reduce flood risk to structures and infrastructures	Maintenance of Flood Control Project
22	Toledo Ave/Minnaqua Pond Stormwater Improvements & Flood Reduction (BC-13) – (slated for 2028/2029)	Impaired Waters: Maintain or improve water quality in priority lakes and streams; Flooding/Climate Change Impacts: Reduce flood risk to structures and infrastructures	
23	Bassett Creek Lagoon Dredging in Theodore Wirth Park (BC-7) (slated for 2027/2028)	Impaired Waters: Maintain or improve water quality in priority streams; improve habitats for macroinvertebrates and fish	Original project was not completed to specifications. This project will finish the project and/or complete a project with similar outcomes in upstream areas.

Find current on-going and completed projects here: www.bassettcreekwmo.org/application/files/5017/3948/7759/CIP Project Status Table.pdf.