

A. Flood Control Project Maintenance and Flood-proofing Program

(Also see Table 5-1 and Figure 14 in the 2004 Watershed Management Plan at:

<http://www.bassettcreekwmo.org/2nd%20Generation%20Plan/Final%20Plan%20September%202004/TOC.htm>)

Summary of Flood Control Project Inspections:

BCWMC Resolution 86-1 (May 22, 1986) unanimously designated the City of Minneapolis as the Local sponsor to execute the Flood Control agreement with the Corps of Engineers. Following completion of the Bassett Creek Flood Control Project, the Corps of Engineers and BCWMC prepared the Operations and Maintenance (O & M) Manual (June 1997). According to the O & M Manual, the City of Minneapolis assigned the O & M responsibilities to the Chair of the BCWMC. Whereas the Bassett Creek Watershed Plan (5.2.2.1.B) states the BCWMC will “regularly” inspect the flood control project system, the O & M manual indicates the Superintendent (Mpls/BCWMC) shall perform “Semiannual” inspections and the District Engineer (Corps) or authorized representatives shall inspect the project “annually,” usually in the fall. Since 2002 the BCWMC has performed annual inspections.

What is included in Flood Control Project Inspections:

The flood control project was turned over to the local sponsor during 2002. Therefore, the inspections program was implemented during fall of 2002 and covered flood control project features designed and constructed by the Corps of Engineers and features designed and constructed by the BCWMC and member cities. The objective of the inspection is to address erosion, settlement, sedimentation, and structural issues. In accordance to the Bassett Creek Flood Control Project Operation and Maintenance Manual, except as noted, the following project features require annual inspection:

Minneapolis

- Conduit (Double Box Culvert) - inspect double box culvert every five years (2004, 2009, 2014, 2019 ...),
- Deep Tunnel - dewater and inspect tunnel every 20 years. This inspection was performed during 2008 and will next be inspected during 2028.
- Old Tunnel (not included in BCWMC inspection program)
- Open Channel

Golden Valley

- Highway 55 Control Structure & Ponding Area
- Golden Valley Country Club Embankment (Box Culvert, Overflow Weir, and downstream channel)
- Noble Avenue Crossing
- Regent Avenue Crossing
- Westbrook Road Crossing
- Wisconsin Avenue Crossing
- Minnaqua Drive Bridge Removal

Crystal

- Box Culvert and Channel Improvements (Markwood Area)
- Edgewood Embankment with Ponding
- Highway 100/Bassett Creek Park Pond
- 32nd Avenue Crossing
- Brunswick Avenue Crossing
- 34th Avenue Crossing
- Douglas Drive Crossing
- Georgia Avenue Crossing
- 36th-Hampshire Avenue Crossing
- Channel Improvements

Plymouth

- Medicine Lake Outlet Structure
- Plymouth Fish Barrier (not required by Corps of Engineers)

Current Procedures for Inspection and Maintenance:

Annual inspections are typically scheduled for the fall of each year. A few weeks prior to the inspection, the Commission engineer contacts each city regarding the inspection date and whether its staff would like to participate in the inspection. The Commission engineer typically takes three days to complete the annual inspection. Additional time is required to plan and perform the once-every-five-year inspection of the double box culvert and the once-every-20-year inspection of the deep tunnel. Following the inspection, a memorandum is prepared to the Commission presenting the results, findings and recommendations. The Commission then directs the engineer to prepare letters and provide inspection results and recommendations to each respective city. It is the city's responsibility to perform the required maintenance. In accordance to the Bassett Creek Watershed Management Plan, routine maintenance, including debris and vegetation removal and maintenance of road crossings, is the responsibility of each city. Larger structural maintenance and repairs of water level control and conveyance structures shall be funded by the BCWMC, contingent on the receipt of a plan with a time table and estimated costs for the BCWMC to review prior to the cities contracting for the repairs.

Flood-proofing Project Funds:

Funds have been expended. No funds remain to flood-proof individual homes. The Commission could start a new fund, if desired.

B. Funding of Water Quality Projects

Currently eligible for reimbursement from BCWMC CIP:	Currently ineligible for reimbursement from BCWMC CIP:
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 “betterments” (improvements)
Permitting costs and fees	Contaminated soils/GW remediation
Wetland delineation, reporting, replacement costs	City staff time and expenses (if not requested prior to levy certification)
Engineering and design costs (plans & specs)	
Construction costs	
Project bidding & advertising fees	
Construction administration & observation costs	
Warranty period monitoring costs – e.g., wetland monitoring, vegetation monitoring, 1-year 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 (50%, 90%, 100%) and reviewing reimbursement requests	
2.5% transfer to BCWMC administrative fund for CIP administrative expenses	

C. Triggers and Standards

Listed are standards currently in place for cities either through State rules (MS4 permit or construction stormwater permit), or the Commission. TP = total phosphorus, TSS = total suspended solids, volume = the volume of stormwater leaving the site.

New MS4 Permit Requirements:

	New Development	Redevelopment
Threshold	Land disturbance $\geq$ 1 acre	
TP Standard	No net increase from pre-project conditions (on average annual basis)	Net reduction from pre-project conditions (on average annual basis)
TSS Standard		
Volume Standard		

New NPDES Construction Stormwater Requirements:

	New Development	Redevelopment
Threshold	New cumulative impervious area $\geq$ 1 acre	
TP Standard	None	
TSS Standard	None	
Volume Standard	Retain 1.0 inches of runoff from new impervious area on site (where infiltration is prohibited, treatment by wet basins, filtration, or other equivalent methods is required)	

BCWMC Requirements for Improvements and Development Proposals:

	New Development	Redevelopment
Threshold	$\geq$ 0.5 acres (Commercial/Industrial) $\geq$ 2 acres and 4 units (Residential)	$\geq$ 5 acres (Commercial/Industrial) $\geq$ 10 acres and 4 units (Residential)
TP Standard	Level 1 Standards	No increase in TP loading
TSS Standard	None	None
Volume Standard	None	None

Comparison of BCWMC Standards/Trigger thresholds to New MS4 Requirements:

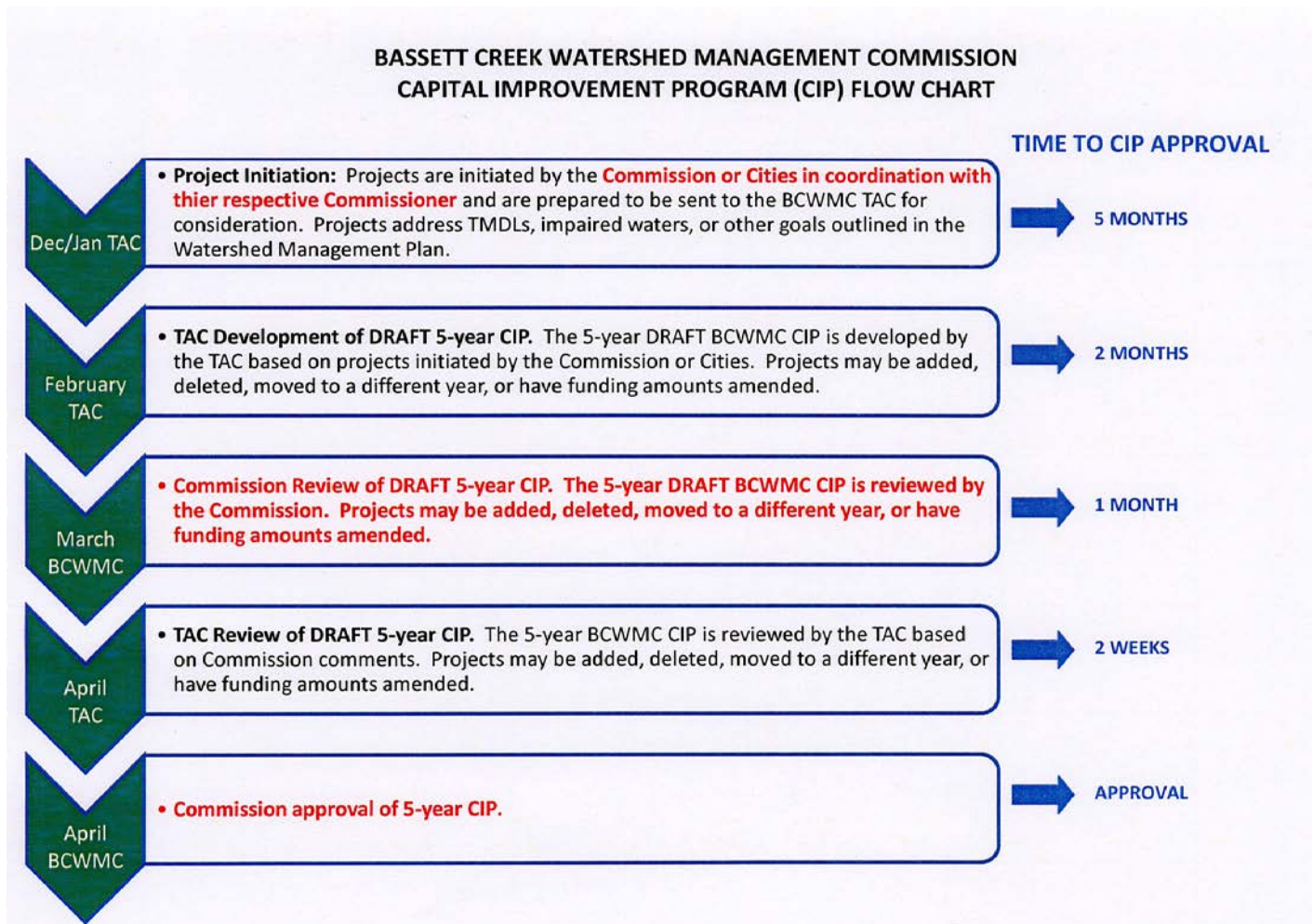
		BCWMC Water Quality Standards*		
		More Stringent	Equal	Less Stringent**
BCWMC Thresholds	Lower			Com./Ind. Development
	Equal			
	Higher			Com./Ind. Redevelopment; Res. Development; Res. Redevelopment
* Comparison is performed only for total phosphorus standards. BCWMC does not have standards for volume or total suspended solids.				
** Level 1 standards are not directly comparable to the MS4 standards (change in load). The table above reflects that				

In the above table, red shading indicates combinations of triggers/standards that are redundant to the MS4 permit (i.e., the MS4 permit would always be more restrictive). Green shading indicates combinations of triggers/standards where compliance with BCWMC standards would be more restrictive than the MS4 permit. Orange shading indicates trigger/standard combinations that are not universally more or less restrictive than the new MS4 permit.

It is worth noting that the BCWMC may choose different triggers for the application of BCWMC standards and BCWMC project review. For example, all projects greater than 0.5 acres may be subject to water quality standards, but only projects greater than 1 acre are subject to BCWMC review. The threshold for review could be set differently for redevelopment and development, or may be unique to each land use.

D. CIP Process

Current process:



E. Pursuit of Taxing Authority

The Commission could pursue taxing authority through Minnesota Statute 275.066 to become a Special Taxing District. Currently, Hennepin County levies approximately \$1,000,000 per year on behalf of the Commission to fund CIP projects. There are pros and cons to this process. The Commission should determine if there is a desire to pursue its own taxing authority.