



Item 5A.
BCWMC 5-19-16

Memorandum

To: Bassett Creek Watershed Management Commission
From: Technical Advisory Committee
Subject: Responsibilities and Funding Mechanisms for Rehabilitation and Replacement of Flood Control Project Features
Date: May 11, 2016

The BCWMC Engineer's March 12, 2014 memo "Flood Control Project Long Term Maintenance and Replacement Evaluation" included estimated costs for replacing, maintaining and repairing the BCWMC Flood Control Project (FCP) components and information regarding historic documents and agreements pertaining to the project. The BCWMC Counsel's January 13, 2014 memo "Commission Participation in Surface Water Management Facilities Maintenance Expenses" included discussion of maintenance responsibilities, and allocating maintenance responsibilities for the FCP.

The TAC discussed the two referenced memos in May of 2014 with the intent to include pertinent policies in the new Watershed Management Plan (Plan) being developed at the time. Most of the discussion focused on who should be responsible for completing replacement, maintenance and repair of the FCP and how such work should be funded. Although the BCWMC Engineer's memo noted that no immediate replacement of any of the FCP components is warranted, the TAC was concerned about how to raise funds for future needs that are decades away, but costly. Due to the complexity of the issues, the TAC could not reach a consensus on addressing these issues in time for inclusion in the Plan. Based on recommendations from the TAC, the Commission included a policy in the Plan (Policy #22) to address these issues:

"During the first five years of Plan implementation, the BCWMC will work with the member cities to determine responsibilities for major rehabilitation and replacement of the Flood Control Project features and establish the associated funding mechanisms."

At their May 21, 2015 meeting, the Commission authorized staff to perform the study, including holding discussions with the TAC, to address the above policy.

At their September and November 2015; and January, February, and March 2016 meetings, the TAC discussed various aspects of the responsibilities and possible funding mechanisms pertaining to the long term maintenance, repair, rehabilitation and replacement of the BCWMC Flood Control Project (FCP). Those discussions culminated in a number of recommendations that the Technical Advisory Committee (TAC) offers in this memo for consideration by the Commission.

Recommendations

1. Recommend the Commission continue an inspection and maintenance program for the FCP features. The current inspection and maintenance program includes an annual inspection of all of the FCP features, except the double box culvert and the deep tunnel, an inspection at least every 5 years of the double box culvert and an inspection at least every 20 years of the deep tunnel. The TAC recommends that the Commission conduct more-frequent inspections

of the deep tunnel – every 10 years or every 5 years, depending on the tunnel segment (e.g., 3rd Avenue tunnel could be inspected every 5 years if Minneapolis inspects the I-94 tunnel because access to the I-94 tunnel requires passing through the 3rd Avenue tunnel).

2. Recommend that the cities formally notify the Commission Engineer regarding their completed maintenance and repair actions on any of the FCP project features. The Commission Engineer will include this information in the following year's inspection reports to the Commission and the letters sent to the cities (with copies sent to the US Army Corps of Engineers). The letters sent to the cities must note that the cities are required to report on their maintenance and repair actions. The inspection and reporting are essential to ensure the Commission maintains its eligibility to receive federal funds to repair or replace flood control project features in the event of a catastrophe.
3. Recommend the Commission rely on the FCP inspection and maintenance program to identify when major repairs, rehabilitation or replacement of features will be needed.
4. Recommend the Commission add the identified FCP major repairs, rehabilitation and replacement projects to the BCWMC CIP and fund the projects using the BCWMC's ad valorem levy (via Hennepin County). The Commission would need to amend the BCWMC plan to add these projects to the CIP and to change (or add to) the funding mechanisms for project implementation.
5. Recommend the Commission maintain the existing Flood Control Emergency Repair Fund and the Long-Term Maintenance Fund as two separate funds.
6. Recommend that the Commission require the member cities to perform the initial response to an emergency, as the BCWMC is not set up to perform these emergency management and response services, and that the Commission assist the cities in obtaining reimbursement for the emergency response, either through BCWMC funds or grants (e.g., FEMA funding).
7. Recommend the Commission require that the cities (or other road authority) where the FCP structures are located be responsible for maintenance, repair and replacement of road crossings, and their corresponding conveyance structures, that were installed as part of the FCP. If the BCWMC directs replacement or significant alteration of crossings as part of a project, then the BCWMC would be responsible for funding the replacement.

This recommendation clarifies BCWMC policy (#23) in the Plan, which states that these crossings will be "maintained" by the city where the structure is located. However, policy #23 does not address significant rehabilitation or replacement. This clarification also aligns with the intent of the original FCP—that the cities would be responsible for significant rehabilitation or replacement of road crossings that were installed as part of the FCP because they are primarily transportation-related.

8. The TAC offers the following recommendations regarding *routine versus major maintenance/repair* of the FCP features. The recommendations are intended to clarify BCWMC Plan policy #24, which states that routine maintenance and repair is the responsibility of the city where the FCP feature is located, and Plan policy #20, which states that funding of major repair and maintenance is a BCWMC responsibility. The TAC discussed whether the routine maintenance and repair activities listed in policy #24 are sufficient to demarcate between routine and major maintenance/repair.

- Recommend the Commission continue to require that cities be responsible for routine maintenance and repair of the FCP features (per Policy #24). Table 1 shows the routine maintenance and repairs, as decided by the TAC.
- Recommend the Commission reimburse cities (if requested) for maintenance and repairs (either routine or major) that are over \$25,000, using funds from the Long-Term Maintenance Fund. The TAC also recommends that before receiving funding from the Long-Term Maintenance Fund, the cities must perform regular, routine maintenance (reporting of completed maintenance and repair actions would be required as part of Recommendation #1). This will help prevent the situation wherein the Commission pays for maintenance work over \$25,000 because the cities neglected routine maintenance for several years.
- Recommend the Commission consider adding maintenance and repair projects that are more than \$100,000 to the BCWMC CIP. Table 1 provides examples of maintenance and repairs that are major or could be major.

Table1 Routine vs. Major Maintenance and Repair Items

Item # Routine vs. Major Maintenance and Repairs –as Recommended by TAC¹	
Routine Maintenance and Repairs	
1	Vegetation: removal of trees, removal of brush, chemical treatment of stumps, control of noxious weeds, establish vegetation on bare areas.
2	Removal of debris: woody debris, riprap, trash from channel, inlets, culverts
3	Repair erosion: channels, inlet and outlet structures, culvert ends
4	Repair/replace riprap: on inlet and outlet ends of culverts, channels, banks
6	Remove sediment from channels, structures, culverts, etc.
8	Repair scouring/undercutting at structures and culvert outlets
9	Repair concrete structures: cracking, spalling, breakage
10	Repair/maintain guard rails, hand rails and fencing: remove rust, prime and paint, repair damaged rails and posts, replace rusted-out sections, repair cables, replace posts, repair chain link fence
11	Culverts/arch sections: joints, settlement, separation, concrete spalling, wing walls – movement and breakage
12	Repair concrete pipe: repair joints, tie-bolts, spalling, connection to culverts, breakage
13	Repair/replace catch basins, manholes, casting assemblies, grates
14	Repair/maintain debris barrier: removal of debris, repair cables, replace poles
15	Repair/maintain tunnel inlet trash rack: repair/replace trash rack rods, loose or broken, vandalized, bent
Major Maintenance and Repairs	
5	Repair/replace gabion baskets
7	Remove sediment/dredge ponds, basins, remove sediment from tunnel, etc.
16	Tunnel repairs: concrete and other repairs to the new Bassett Creek tunnel

¹ Based on needed repairs identified during 2015 FCP inspection