



Bassett Creek Watershed Management Commission

MEMO

To: Bassett Creek Watershed Management Commissioners
From: BCWMC Technical Advisory Committee
Date: January 11 2017

RE: TAC Recommendations – 11/28/16 TAC Meeting

The BCWMC Technical Advisory Committee met on November 28th and discussed a variety of topics. They forward the following recommendations for the Commission's consideration.

TAC Members and Others at 11/28/16 TAC Meeting:

Liz Stout, Minneapolis	Mark Ray, Crystal
Jeff Oliver, Golden Valley	Susan Wiese, Medicine Lake
Erick Francis, St. Louis Park	Tom Dietrich, Minnetonka
Richard McCoy, Robbinsdale	Rachael Crabb, MPRB
Megan Albert, New Hope	Laura Jester, Administrator
Chris Long, New Hope	Karen Chandler, Engineer
Bob Paschke, New Hope	

1. MIDS in Linear Projects

Background:

In 2015, the BCWMC adopted the MPCA's Minimal Impact Design Standards (MIDS) for development and redevelopment projects. These standards require storm water infiltration and/or other pollution reduction requirements for development/redevelopment projects and linear projects, (see below for BCWMC MIDS requirements). Since adoption of MIDS, member cities with local street reconstruction projects have indicated that poor draining soils, high groundwater, limited right-of-way, utilities, contamination, and other issues make meeting MIDS linear project requirements very difficult.

Current BCWMC Requirement:

Linear projects on sites without restrictions that create more than one acre of new and/or fully reconstructed impervious surface must meet the MIDS performance goal for linear projects. Mill and overlay and other resurfacing activities are not considered fully reconstructed impervious surfaces. Sites with restrictions may follow the flexible treatment options approach. Site restrictions include those factors listed in the MIDS flexible treatment options, which include but are not limited to: shallow depth to bedrock, contaminated soils, shallow groundwater, tight clay soils, existing site constraints or zoning requirements

MIDS performance goal:

Linear projects on sites without restrictions that create one acre or greater of new and/or fully reconstructed impervious surfaces, shall capture and retain the larger of the following:

- 0.55 inches of runoff from the new and fully reconstructed impervious surfaces
- 1.1 inches of runoff from the net increase in impervious area

Mill and overlay and other resurfacing activities are not considered fully reconstructed impervious surfaces. [Section 6.3 of the 2015 Requirements for Improvements and Development Proposals document outlines the flexible treatment options approach.]

Alternatives Considered by TAC – May and November 2016:

At their meeting in May, the TAC heard about MIDS implementation in linear projects from Paige Ahlborg, Watershed Project Manager with Ramsey-Washington Metro Watershed District and Steve Love, Assistant City Engineer with the City of Maplewood. Presenters described how the watershed district uses credits, deferred treatments, and cost caps to help project proposers meet requirements and presented examples of ways Maplewood meets requirements. (You can view their presentations [here.](#))

In November, the TAC continued its discussion and reviewed how other organizations implement storm water management requirements in linear projects including:

1. Shingle Creek WMO Rule D(2)(b)

Linear projects that create one acre or more of new impervious surface must meet all Commission requirements (rate, quality, volume) for the net new impervious surface. [Shingle Creek WMO’s abstraction standard is one inch. Other details can be found on page 12 of their requirements document [here.](#)]

2. Public Linear Reconstruction – Revisions Adopted December 2016 by Rice Creek Watershed District

The District recently revised subsection C.6 so that public road authorities and other public permittees no longer must provide water quality treatment for surface area of existing hard surface that is reconstructed as a part of a Public Linear Project. Only runoff from new impervious areas must meet water quality treatment requirements.

Background: Under the previous rule, the area that required treatment for water quality (by infiltrating 0.75 inches) included both new linear hard surface and the area of existing hard surface that is reconstructed (“Reconstruction” is defined as “removal of an impervious surface such that the underlying structural aggregate base is effectively removed and the underlying native soil exposed.”) Historically, water quality practices to meet the requirement for public linear reconstruction projects have been challenging to construct principally because unlike for new roadway construction, road reconstruction works within existing right-of-way that rarely affords sufficient space, grades or soil conditions for effective new water quality practices. The process to identify and design practices, and District engineering oversight and review of this process, tended to be expensive and resulted in compromised water quality outcomes. The rule change reflects a pragmatic judgment by the District that water quality outcomes from treating reconstructed hard surface in aggregate are quite limited, and that the public funds spent to generate these outcomes can be used for more effective water resource outcomes if directed differently.

3. Contributions to storm water impact fund - Ramsey-Washington Metro WD
As a last alternative, for any remaining volume reduction that cannot be met through alternate sequencing (similar to MIDS' flexible treatment options), the applicant shall pay into the District's Stormwater Impact Fund to cover the cost of implementing equivalent volume reduction elsewhere in the watershed. The required amount to contribute to the Stormwater Impact Fund shall be set by the Board annually.
4. Banking excess volume reductions from other projects – Ramsey-Washington Metro WD
Volume reduction provided in excess of the 1.1-inch requirement may be banked for use on another project.
5. Cost caps – Ramsey-Washington Metro WD
For linear projects, costs specific to satisfying the volume reduction and water quality standards shall not exceed a cost cap which will be set by the Board annually (2015 & 2016 = \$30,000/impervious acre). The cap shall apply to costs directly associated with the design, testing, land acquisition, and construction of the volume reduction and water quality stormwater BMPs only. [Note, the RWMWD requires 1.1 inches of infiltration from impervious surfaces, including in linear projects, which is twice the MIDS requirements for linear projects.]

TAC Discussion and Recommendation – November 2016:

In discussing the options above, the following points were made by the TAC –

- Road reconstruction is different from redevelopment; redevelopment is a genuine opportunity to improve conditions while road reconstruction is maintenance of existing public infrastructure with limited space and often with existing underground utilities.
- 2004 – 2014 BCWMC storm water management requirements required that a “good faith effort” be made to improve conditions during road projects (see excerpt from previous rules below). Cities often did improve conditions during road projects.

4.6 Road Projects

BMPs must be considered to improve the quality of stormwater runoff from *road construction and reconstruction* projects. The most desirable BMP reduces pollutants to the maximum extent practicable and reduces runoff. The BCWMC realizes that existing development and right-of-way constraints will limit the type of BMPs that can be implemented. At a minimum, temporary measures will be required to address erosion and sediment control during construction. The BCWMC will work with the project applicant to assist with determining the appropriate temporary and permanent BMPs to implement for the project. The project applicant must submit a description of the evaluation process used to identify feasible BMPs to be implemented on the project.

- Golden Valley has long history of reducing impervious surfaces and adding best management practices where possible.
- Increased street sweeping in priority areas should be considered as implementation of a best management practice with credit given.
- A credit banking system (such as in #4 above) is not desirable because developers may argue for the same system or to use credits.
- Golden Valley spent millions to address sanitary sewer inflow and infiltration issues in the city and cannot support infiltration in the right-of-way of linear projects due to the nearby presence of sanitary sewer pipes.

TAC Recommendation: The TAC recommends that the Commission revise their storm water management requirements for linear projects to:

- a) revise the BCWMC requirement for reconstruction of existing linear impervious surfaces; and
- b) replace with language similar to the previous BCWMC requirements indicating that road authorities must demonstrate a “good faith effort” to improve conditions during linear construction/reconstruction projects.

The TAC further recommends that MIDS requirements remain for linear projects that create more than one acre of NEW impervious surfaces.

2. Shoreland and Habitat Monitoring

The 2015 BCWMC Watershed Plan includes policy 78 regarding consideration of a shoreland habitat monitoring program (see below).

78. The BCWMC will consider developing and implementing a shoreland habitat monitoring program for its Priority 1 lakes to monitor biological and physical indicators and to recommend management actions (to cities or for the Commission’s consideration) based upon monitoring results. If implemented, monitoring may include assessment of upland and aquatic vegetation, buffer zones, erosion, sedimentation, and the presence of non-native invasive species.

Staff noted that a habitat monitoring program would provide baseline and ongoing information regarding the habitat quality of the water bodies and a method for detecting change. It would also be used to assess progress towards achieving the BCWMC goal to “protect and enhance fish and wildlife habitat in the BCWMC.” Staff presented the TAC with information on a similar monitoring program in the Black Dog watershed, and reviewed excerpts from a [report](#) generated by that program.

Staff with two cities in the Black Dog WMO (Burnsville and Lakeville) provided their insights on the program (via email to the BCWMC Administrator). Daryl Jacobson with the City of Burnsville noted he uses the data to identify projects that can be done around the lakes. He also noted the program provides data that can be tracked over time to see if conditions are improving, getting worse or staying the same. Ann Messerschmidt with the City of Lakeville indicated the data are useful for monitoring trends and for positioning the city to be proactive in responding to adverse conditions and problems.

The TAC briefly discussed the potential for a shoreland and habitat monitoring program but noted that in most instances, city staff or park district staff already monitor or can easily monitor these

parameters and keep track of conditions along shorelines. It was also noted that data on aquatic plants (useful in determining shoreline habitats) are already collected through the current BCWMC lake monitoring program. BCWMC staff also noted that recommendations from the BCWMC Aquatic Plant Management/Aquatic Invasive Species Committee may include expanded habitat or plant monitoring.

Recommendation: The TAC recommends that the BCWMC not develop and implement a shoreland and habitat monitoring program at this time.

3. Formalizing Activity to Help Cities Meet Public Education Requirements in Stormwater Permit

Staff noted that the MPCA has indicated that a formal agreement/arrangement between a city and a watershed organization is needed for the city to officially take credit in their MS4 permit report for educational activities performed by the watershed. The TAC briefly reviewed and discussed a draft letter of understanding.

Recommendation: The TAC recommends that the Administrator annually provide a list of educational activities and a letter of understanding (attached on page 6) such that cities can formally take credit for these activities in their MS4 permit reports.

4. Proposed Cost Sharing Policy for Regulatory Credit

At their meeting on November 16, 2016 the Commission considered a [draft policy](#) regarding cost sharing of CIP projects and asked for TAC review. The TAC considered the draft policy presented by staff and indicated that no such policy is needed as the scenario that precipitated an apparent need for a policy is not likely to be presented in the future.

Recommendation: The TAC recommends that the Commission not adopt a CIP cost sharing policy.

[NOTE: The BCWMC Administrative Services Committee considered this TAC recommendation at their meeting on December 5, 2016. Despite the TAC recommendation, the Committee (and staff) recommended adoption of a revised CIP cost share policy to be incorporated into the overall BCWMC Policy Document. The Commission approved the [revised policy](#) (3.2.2 Subd. 11) at their meeting on December 15, 2016.]



Bassett Creek Watershed Management Commission

City Staff
Address
City State Zip

Dear XXX,

This letter is to serve as an official arrangement between the Bassett Creek Watershed Management Commission (BCWMC) and the City of XXX. The City of XXX provides financial contributions to the BCWMC through an annual assessment based on area within the watershed and tax valuation of property in the watershed. In 2017 this assessment will be XXX. Further, watershed commissioners representing XXX and city staff participate in, guide, and help implement the programs of the BCWMC, including a robust public education program.

The specific activities of the BCWMC public outreach and education program are set annually by the Commission after recommendations are forwarded by the BCWMC Education and Outreach Committee. The 2016 BCWMC Education and Outreach Plan is attached to this letter. It includes specific actions the Commission will take to provide water resource education, as well as a list of specific education organizations to which the BCWMC will contribute financially.

Education-related activities of the BCWMC are guided by its 2015 Watershed Management Plan, specifically its education and outreach policies (Section 4.2.9), and its overall Education and Outreach Plan found in Appendix B. <http://www.bassettcreekwmo.org/document/wmp-plans>

Due to the City of XXX's financial contributions and close involvement and participation with the BCWMC's activities, the BCWMC's education activities can and should be considered part of the city's implementation of Minimal Control Measures (MCM) 1 and 2 in the MS4 stormwater permit.

Sincerely,

Jim de Lambert
Chair, BCWMC