



Bassett Creek Watershed Management Commission

Technical Advisory Committee Meeting

Thursday May 4, 2017

1:30 – 3:30 p.m.

Council Conference Room, Golden Valley City Hall

1. CALL TO ORDER

2. COMMUNICATIONS

3. BUSINESS

A. XP-SWMM Phase II – See attached memo from Barr Engineering on final model revisions

The TAC reviewed and discussed the XP-SWMM Phase II model results at their February and March 2017 meetings, including technical aspects of the model and policy implications. After meetings with individual cities some minor changes were made to the model. In the attached memo, the Commission Engineer presents the final 100-year inundation areas and a comparison of the existing and proposed new flood elevations and peak discharges for areas along the BCWMC Trunk System.

The TAC should consider the following possible recommendations and next steps:

1. Does the TAC agree that the model is complete and should be approved by the Commission?
2. Does the TAC recommend that the Commission adopt the new flood elevations and begin reviewing development/redevelopment projects along the BCWMC Trunk System against these new elevations?
3. Are there other long term implications of the adoption of new floodplain levels that should be considered? Items listed in March TAC meeting materials:
 - a. Development/redevelopment projects
 - b. Building improvements and additions
 - c. Public construction projects
 - d. Impacts on property owners – home investments, property sales, disclosures, flood insurance, market values, floodproofing
 - e. Ordinances/code – non-conforming existing structures
 - f. Comprehensive plans and local water management plans
 - g. Confusion between FEMA maps and new BCWMC flood elevations
 - h. FEMA standards for mapping
 - i. FEMA's next planned revision
4. Does the TAC recommend or not recommend that the Commission approach FEMA about officially changing flood elevations?
5. Assuming the TAC recommends and the Commission agrees to adopt and start using the new floodplain levels, what level and type of communication (if any) should the Commission provide to cities or others? What should be the timing of the communication? What are the key messages and audiences of the communication? Below are some options and ideas discussed at the March TAC meeting:
 - a. The Commission develop communication materials for the cities to implement. Possible methods of communication: presentation, fact sheets, FAQs, webpage

- b. The Commission develop materials and disseminate information to various audiences.
 - c. Cities develop their own communication method and materials for use within their own communities.
 - d. Planning commissions, city councils, and landowners are key audiences of the communication plan.
 - e. Communication plan should be implemented at the same time as model implementation begins.
6. Are there legal/liability issues that need to be addressed by the Commission Legal Counsel?
7. Does the TAC agree that only member cities can request the model on behalf of themselves and other entities working in their city? (This is current practice.) Should the Commission develop its own user agreement for entities that wish to use the XP-SWMM model? (Currently those that request the model through a city are asked to sign Barr’s conditional use agreement.)

B. MIDS in Linear Projects – See attached Linear Project Options Table

At the January Commission meeting, the Commission heard [recommendations from the TAC](#) regarding proposed revisions to the water quality performance standards (MIDS) in linear projects. At that meeting, the Commission Engineer was directed to further evaluate the issue and come to the Commission with their own recommendations.

At the March Commission meeting, the Commission Engineer presented her [analyses and recommendations](#) for a cost cap (in dollars/pound of total phosphorus removed) above which treatment in accordance with the MIDS performance goals for linear projects would not be required. At that meeting, the Commission Engineer noted that the Commission is the only organization that adopted MIDS in full and reported that many organizations only require treatment from new impervious surfaces, rather than from all reconstructed impervious surfaces. ([Background materials](#) showing other organizations’ standards.) There was discussion of a considering a tiered approach, such as requiring the Commission’s 2004 standard (“good faith effort” or replaced with “reasonable technology”) for projects that add less than 5,000 ft² of impervious, then requiring MIDS for projects that create more than 5,000 ft². The Commission Engineer was directed to prepare examples of tiered approaches to MIDS in linear projects for review by the Technical Advisory Committee at their May 4th meeting.

The Commission Engineer prepared the attached table, which shows and analyzes different alternatives for modifying the MIDS criteria for linear projects. The table shows the existing BCWMC requirements and a number of alternative options for the criteria triggering treatment and the level of treatment that would be required. The table includes and analyzes the BCWMC’s project review data for linear projects from September 2015 through March 2017. The table also shows the alternatives that are similar to the requirements of other watershed management organizations in the area.

The table is organized as follows:

1. Existing requirements (green shading):
 - a. Criteria for triggering treatment is 1.0 acre of new/fully reconstructed impervious surface (Note: linear projects that disturb more than 1.0 acre of land must be submitted to BCWMC for review)
 - b. Level of treatment is MIDS—capture & retain larger of 1.1 inches off the net increase in impervious or 0.55 inches off the new/fully reconstructed impervious.
2. Alternatives 1 – 4 (blue shading):
 - a. Criteria for triggering treatment is either 0.5 acre or 1.0 acre of new/fully reconstructed impervious surface

- b. Level of treatment is capture & retain either 0.55 inches or 1.1 inches off the net new impervious surface.
3. Alternatives 5 – 10 (peach shading):
- a. Criteria for triggering treatment is 1.0 acre of new/fully reconstructed impervious surface AND 0 acre, 0.5 acre, or 1.0 acre of net new impervious
 - b. Level of treatment is capture & retain either 0.55 inches or 1.1 inches off the net new impervious surface.
(Note: projects that create 1.0 acre of new/fully reconstructed impervious surface but do not meet the second criteria would be required to put forth a “good faith effort” or implement “reasonable technology” to provide water quality treatment)
4. Alternatives 11 – 19 (purple shading):
- a. Criteria for triggering treatment is either 1.0 acre or 0.5 acre of new/fully reconstructed impervious surface and -5,000 sf, 0 acre, 5,000 sf, 0.5 acre, or 1.0 acre of net new impervious
 - b. Level of treatment is MIDS—capture & retain larger of 1.1 inches off the net increase in impervious or 0.55 inches off the new/fully reconstructed impervious.
(Note: projects that create 1.0 acre or 0.5 acre of new/fully reconstructed impervious surface but do not meet the second criteria would be required to put forth a “good faith effort” or implement “reasonable technology” to provide water quality treatment)
5. Alternative 20 (red shading):
- a. Criteria for triggering treatment varies according to the existing impervious surface (<5 acres, 5 – 20 acres, >20 acres) and the amount of new/fully reconstructed impervious surface (>1 acre, >4 acres, >8 acres)
 - b. Level of treatment is MIDS—capture & retain larger of 1.1 inches off the net increase in impervious or 0.55 inches off the new/fully reconstructed impervious.
(Note: projects that create 1.0 acre of new/fully reconstructed impervious surface but do not meet the other criteria would be required to put forth a “good faith effort” or implement “reasonable technology” to provide water quality treatment)

For each alternative, the table shows the treatment that would be required for the linear projects reviewed by the BCWMC.

The Commission Engineer recommends Alternative 11, 12 or 13 for TAC recommendation to the BCWMC. These options encourage either a small reduction, no change or small increase in net new impervious. This should be more workable for the member cities and give the Commission the reassurance that the projects cause “no additional harm” with respect to water quality. The Commission Engineer finds Alternative 11 particularly compelling as it would provide a large reward (not treating to MIDS) for a small reduction in impervious surface.

4. ADJOURNMENT

Future TAC Meeting Agenda items:

1. Revised BCWMC Development Review Fee Structure
2. Prioritization method for choosing CIP projects for 5-year CIP
3. Stream identification signs at road crossings
4. Consider adding maintenance of CIP projects to BCWMC responsibilities – e.g. Wirth Lake outlet, water quality ponds