



Bassett Creek Watershed Management

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: BCWMC Technical Advisory Committee
Date: August 9, 2021

RE: Recommendations on XP-SWMM and Four Seasons Mall

The BCWMC Technical Advisory Committee met on July 29th at Brookview to discuss several items. Discussion and recommendations included below. Attendees included:

City/Partner	Technical Advisory Committee Members and Others
Crystal	Mark Ray
Golden Valley	Eric Eckman
Medicine Lake	Susan Wiese
Minneapolis	Liz Stout
Minnetonka	Leslie Yetka, Sarah Schweiger
New Hope	Megan Hedstrom
Plymouth	Ben Scharenbroich
Robbinsdale	Marta Roser, Richard McCoy
St. Louis Park	Erick Francis (partial)
Others	Laura Jester, Administrator; Karen Chandler and Jen Koehler, Commission Engineers; Stacy Harwell, TAC Liaison (partial)

1. XPSWMM Model Update and Adoption

The TAC discussed the tasks and appropriate timing for updating and formally adopting a new BCWMC hydraulic and hydrologic (H&H) model as the official BCWMC jurisdictional floodplain.

Background:

The BCWMC adopted the (Phase 2) XPSWMM model as its jurisdictional model in 2017. It is based on data current through 2015. Starting in 2018 and ending earlier this year, Commission Engineers worked under a MnDNR grant to create a new H&H model for FEMA. For that work, Commission Engineers started with the Phase 2 XPSWMM model and updated it to include survey data and other changes through 2018. However, the new model prepared for FEMA has not yet been adopted by the BCWMC (or FEMA) and thus is not the official jurisdictional model. Therefore, the Commission is not using or providing the model with the most up-to-date data for evaluating flood impacts of potential developments and projects.

It was noted that the intent of the official BCWMC model is to be a useful tool for the BCWMC, member cities, developers, MnDOT and others. The TAC discussed the best timing and frequency of model updates moving forward including budget implications and the number and scale of changes in the landscape that would warrant an official update.

TAC Recommendations:

- A. The TAC recommends that the BCWMC direct Commission Engineers to begin the process of updating the H&H model in 2021, starting with the model recently prepared for FEMA (the “storage maintained” version), and complete the update and adopt the updated model as the Commission’s official H&H model in 2022. (Work in 2021 would be covered under the Surveys and Studies budget line; the proposed 2022 Operating Budget already includes this modeling work). The Commission Engineer would start by requesting that cities submit 2019 – 2021 data on landscape changes, developments, or projects that would impact the model.
- B. The TAC recommends that the Commission Engineers annually request that cities submit data for future model updates and that model updates be scheduled not on a regular timeline, but once every few to several years, depending on the amount of new data and changing conditions.
- C. The TAC recommends that the Commission’s Operating Budget include an annual, steady budget for model maintenance to save for years when the more time-consuming (i.e., expensive) model updates are needed and to minimize significant fluctuations in the budget.

2. Discuss Four Seasons Mall CIP and Redevelopment Future

Background:

The City of Plymouth recently purchased the Four Seasons Mall property and is exploring the idea of demolishing the mall structure and constructing some or all of the [previously approved stormwater BMPs](#) including multiple ponds (one with an iron enhanced sand filter and one with a forebay), underground filtration, and wetland restoration. All combined, the BMPs were expected to remove approximately 130 pounds of TP, which was 101 pounds “above and beyond” the required TP removal for the proposed redevelopment project. The BCWMC had approved an agreement with the previous redevelopment company to utilize CIP funds (approximately \$800,000) to capture at least 100 pounds of TP above and beyond BCWMC requirements.

The city proposes to enter an agreement with the BCWMC to construct the stormwater BMPs and complete the wetland restoration, similar to the normal BCWMC CIP process, and to use the \$800,000 in CIP funds for components that would capture at least 100 pounds of TP. City construction of the BMPs would likely begin in spring of 2022. The city would assume maintenance of all of the BMPs. The city requests permission from the BCWMC to allow future redevelopment to utilize any treatment capacity above 100 pounds of TP. It’s anticipated that a redevelopment proposal will be submitted for city review in fall 2022, but it could be several years out. However, if the BMPs are constructed now, the downstream waters (Northwood Lake and the North Branch of Bassett Creek) could start seeing benefits right away.

While this isn’t a typical situation, it may help to think about a similar situation without the CIP project component involved. BCWMC requirements do not prohibit a developer from utilizing a previously built city-owned BMP or regional treatment area to meet requirements.

Further, if the structure is demolished and vegetation is established in its place prior to construction of a redevelopment project, the city requests that the current impervious surface coverage of the site (11.93 acres) be set as the “existing condition” for purposes of applying the BCWMC water quality treatment requirements for the future redevelopment.

TAC Recommendations:

- A. The TAC recommends that the Commission enter an agreement with the city of Plymouth to construct the previously approved BMPs, provide CIP-fund reimbursement for construction of structures that capture the first 100 pounds of TP, and allow future redevelopment to utilize any TP removals above 100 pounds to meet BCWMC water quality treatment requirement.
- B. The TAC reinforced the point that no BCWMC funding should be used to create storage or water quality benefits that would be required of any proposed development.
- C. The TAC recommends that the current impervious surface area of 11.93 acres be set as the “existing condition” upon which future stormwater management requirements would be based, with a sunset clause of 20 years.

3. Other Items

The TAC discussed the idea of setting a threshold for certain types or sizes of projects that should be brought to the Commission’s attention ahead of a formal project application. It was recognized that Commission Engineer review and consideration of projects at a Commission meeting can be streamlined with early discussions about complicated or controversial projects. TAC members were reminded that the Commission’s Operating Budget includes a line item for “preliminary or non-fee reviews” for these types of situations. After discussion, there was consensus among TAC members and Commission staff that a formal policy or process wasn’t needed; that city staff can sense when projects fall into a “complicated or controversial” category and will plan to engage Commission staff earlier in the development process; and that projects that are likely to seek a variance from Commission requirements should automatically be brought to Commission attention before plan submittal.

Administrator Jester asked TAC members about their ability and willingness to host a potential BCWMC intern from Dougherty Family College on a rotating basis among cities including providing office space, assisting with mentoring, utilizing the intern’s talents and abilities on water-related projects, and explaining careers and opportunities in the water management field. Most cities were agreeable to that scenario including the cities of Plymouth, Minneapolis, Minnetonka, New Hope, and Golden Valley.