



Bassett Creek Watershed Management

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: January 13, 2021

RE: Update on BCWMC FEMA Floodplain Mapping and Modeling Project

In February 2018, the Commission approved a grant agreement with the Minnesota Department of Natural Resources (MnDNR) to perform updated modeling and mapping in a collaborative effort to improve flood risk identification within the watershed (FEMA maps).

The previous FEMA-approved modeling and maps for the Bassett Creek watershed were completed in 1997 using older data and software. In 2012, the BCWMC converted these older HEC-1/HEC-2 models to an XP-SWMM hydrologic and hydraulic model (Phase 1 XP-SWMM model), preserving the same resolution and scale as in the approved FEMA models.

In 2015-2017, the BCWMC funded a second effort to further refine the Phase 1 XP-SWMM model (Phase 2 XP-SWMM model). That effort incorporated more detail in the upper watershed and increased the number of subwatersheds to account for the storage in ponds, wetlands, and lakes throughout the watershed, along with storm sewer conveyance and outlet structures based on data provided by the BCWMC member cities.

The current MnDNR-funded FEMA modeling project builds on the BCWMC Phase 2 XP-SWMM model. The Commission Engineer has been working on this project over the last two years. Late last year, they submitted the final model results and maps to the MnDNR. Now, the MnDNR is performing floodway modeling and final mapping clean-up in preparation for Working Map Review Meetings scheduled for the end of February.

Commissioner Harwell happens to be the MnDNR staff person doing much of this work. She will give a brief update on the project, review the next steps in the process, and provide a timeline for map completion. One of the next steps will involve a conversation with BCWMC member cities about how and if floodplain storage areas under their jurisdictions are protected or managed. The TAC will discuss this item at their meeting on February 4th.