



Technical Memorandum

To: Interested proposers for the 2D Pilot Model Build

From: Kailey Cermak, Minnehaha Creek Watershed District

Re: Responses to submitted RFP questions

The Minnehaha Creek Watershed District (District) issued a request for proposals (RFP) for the 2D pilot model build on Friday October 8, 2021. Interested proposers were allowed the opportunity to submit questions relating to the RFP by Monday October 18, 2021. Below is a list of all the questions and the District's response.

1. Who pays for the 2D model software licenses?

- The license fees can be paid by the consultant outside the scope of the project or included in the project costs depending on the consultant's preference. The consultant must clearly delineate modeling software license costs in the overall project budget if the consultant intends for the District to pay for the model software licenses for this project.
- The software license fees, if included in the project budget paid by the District, would be paid from the budget allocated for the modeling project (\$242,100) and not from a separate District fund.

2. Does either model use database input or do they have flat file inputs?

- Each software can receive flat files.

3. Is there an impervious cover GIS layer available?

- Yes. The best available watershed-wide dataset is 1-meter resolution from 2015, created by the University of Minnesota.

4. Can you provide more detail for the two areas on calibration data (flow gages, groundwater elevations, lake levels)?

- The Turbid-Lundsten corridor
 - 15-minute water level data from 2014 at the CSI10 marked location
 - Discrete water level, flow, and water quality results from CSI10 from 2013 to 2016
 - Discrete lake level readings for Turbid Lake spanning 2011 to 2014 through the MNDNR's volunteer program
- The Edina geography
 - Mill Pond: Continuous 15-minute water level from 2016- 2021 (except 2019) and will continue in 2022
 - W. 56th Street
 - Discrete water level, flow, and water quality concentrations from 2009 to 2019

- Continuous water level beginning in 2021 and will continue in 2022
 - Groundwater
 - Continuous level data at three shallow groundwater wells within the morningside neighborhood from June 2021 to present
 - The District, in coordination with the MNDNR, is working to install additional shallow groundwater wells within or near the Edina geography. The exact location and number of wells have yet to be finalized. The District anticipates starting continuous data collection at these wells at the start of 2022.
 - Weber Pond and Lynn/Kipling inundation area: continuous water level from April 2019 to October 2019
5. **Do you have any anecdotal datasets to help determine where flooding has been observed, and at what depth, in different storm events?**
 - City of Edina and District staff are aware of typical problem areas but there is not a comprehensive dataset documenting impacted homes/infrastructure during past events. In addition to the mentioned calibration data, the District has recorded discrete water levels along Minnehaha Creek during the 2014 flood of record.
 6. **What is the level of District staff's experience with the two models?**
 - Staff is familiar with the marketed capabilities of each software and have participated in vendor information sessions. Staff have no experience building or using either software.
 7. **What is the District's opinion on using nested models with tiered complexity and scale?**
 - The District welcomes recommendations for model build approach based on consultant expertise assuming that the project and modeling objectives are met.
 8. **Does the District envision trying to move the cities to a common database schema for drainage assets?**
 - The District does not envision asking cities to change their database schema. However, the Metro Stormwater Geodata Project aims at establishing a standard schema for stormwater infrastructure and utilizing scripts to transform municipal schemas to the standard schema. Additional project information can be found here: <https://www.metrogis.org/projects/stormsewers.aspx>
 9. **Once selected, will there be an opportunity to collaborate with the district on collection of additional sensor or monitoring data within the pilot watersheds?**
 - Yes.
 10. **Does MCWD envision developing one overall model for the entire watershed, or a series of connected models?**
 - The District is open to the final model's construction assuming that the selected approach is best suited to meet the modeling objectives. Ideally, this project should help the District understand if the watershed wide model build should be split into a series of connected models or can be built as one watershed model.
 11. **Will the district provide access to the full set of GIS stormwater infrastructure data from partner communities/agencies for review following selection?**
 - The District will provide GIS stormwater infrastructure data for the pilot geographies. If datasets are wanted for areas outside the pilot geographies, the District can work to assemble a subset from the District's 29 communities.