Logan, Lyndy (DLI)

From: Rick Wahlen <rwahlen@edenprairie.org>
Sent: Friday, October 27, 2023 4:20 PM
To: Logan, Lyndy (DLI); Bruce Pylkas; Karl Abrahamson; Richard Becker; Westemeier, Michael (DLI)
Cc: Wysokinski, Brittany (DLI); Mardaus, Hannah (She/Her/Hers) (DLI); Jensen, Brad (DLI); Jonathan Lemke; Weum, David (MDH); Kent Erickson; Mike Herman; Shane Willis; Michael Dryke; Scott Stewart; Sam Arnold; Justin Parizek
Subject: Ad Hoc Storm Drainage Surcharge Committee (Plumbing Board) -Link to Minnesota Stormwater Manual

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Hi everyone.
I haven't had much time to delve into our petitioner's guidance documents governing the construction of stormwater facilities, but I will be studying this further this weekend in preparation for our meeting on Monday.
By the way, did someone invite the MPCA to join our meeting?
In case you'd like a link to the online stormwater manual referenced many times by the engineers who've testified to our committee, I've copied it below:
https://stormwater.pca.state.mn.us/index.php?title=Main_Page

The following terms and definitions are found on the uniform sizing criteria page and may be of some value to us:

Design Storm	An engineering term for a single rainfall event with a defined intensity, duration and statistical recurrence interval commonly ranging from 0.5 to 100 years. These single event storms are based on long-term rainfall data and are used in hydrologic models to predict the peak discharges and runoff volumes associated with each type of storm. Unless otherwise indicated, all design storms discussed in the Manual has a 24-hour duration and a Type II distribution.
Extreme Storm Volume (V_{p100}	The greatest runoff storage volume is used to the peak discharges of infrequent but very large storm events to pre-development levels. The 100-year design storm, which has a statistical recurrence interval of occurring once in one hundred years, is used by most communities. Design frequently involves 100-year design storm peak discharge control. In other cases, peak discharge control is waived if development is excluded from ultimate 100-year floodplain, or an acceptable downstream hydrologic analysis indicates it is not needed. Stormwater BMPs must be designed to provide safe overflow of the 100 year-peak discharge even if extreme storm control is not required at the site. Extreme floods can cause catastrophic damage and even loss of life. The storage volume needed to store and detain them is denoted as V_{p100}. Note that storms more "extreme" than the 100-year event do occur in Minnesota. The extreme term is used relative to other volume terms for perspective.
Permanent Pool Volume (V_{pp})	The CGP requires that all wet sedimentation basins contain a permanent pool with a volume of 1,800 cubic feet of storage for each acre that drains to the basin. This equates to 1/2 inch of runoff per acre. The permanent pool must reach a minimum depth of three feet, stay below 10 feet and be configured to minimize scour and resuspension of solids.

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