Cheryl Drive Stormwater Study

Response to Questions that were not Answered Live during

Public Information Meeting #2 on August 26, 2021; 6:00pm

Background: We received several questions during the second Public Information Meeting for the Cheryl Drive Stormwater Study, and unfortunately were not able to address all of them due to time constraints. This document serves to answer any questions which were not answered live during the meeting. The document below is from the Zoom chat feature. **Questions** are marked in bold, blue text, and **answers** are in bold, green text. Please see below for responses.

18:05:49 From Patrick Haack to Everyone:

I don't think my microphone is working. Are participants muted?

This questions was answered live during the meeting.

18:06:26 From Patrick Haack to Everyone:

ok. thank you.

18:19:19 From Brian and Dana Jacobs to Everyone:

This was not at the highest point - it had receded a bit at this point.

18:25:25 From Brian and Dana Jacobs to Everyone:

We took more videos but they were too large to send.

18:25:46 From Brian and Dana Jacobs to Everyone:

The water was 15 or more inches into our yard at the highest point.

18:26:06 From BARBARA EIKENBERRY to Everyone:

Can we get access to the original stormwater design you just mentioned?

The document, "1992 McKee Farms Record Drawings," has been made available for download at this link: http://www.fitchburgwi.gov/2704/Cheryl-Drive-Stormwater-Project.

18:27:17 From Patrick Haack to Everyone:

Great Question, Barbara. I would like to see it as well.

18:38:27 From BARBARA EIKENBERRY to Everyone:

Thank you.

18:38:42 From Patrick Haack to Everyone:

How long did it take for these flooded streets to cede?

This questions was answered live during the meeting.

18:38:45 From Dan Miller to Everyone:

How much rain is there in a 10%/ 10 year event?

This questions was answered live during the meeting.

18:39:36 From Gabriella Gerhardt to Everyone:

For those that don't have it, you can reach Claudia at Claudia.Guy@fitchburgwi.gov

18:39:54 From Brian and Dana Jacobs to Everyone:

It recedes fairly quickly - usually 15-20 minutes will allow driving, but the side areas longer.

18:41:44 From Patrick Haack to Everyone:

Is that the brux of the problem, streets being flooded or are properties, basements being flooded/property damage?

This questions was answered live during the meeting.

18:49:23 From Karen Felder to Everyone:

I believe you mentioned removing a stand of willow trees. Would this be the trees in the northeast part of McKee Farms Park, near the tennis courts, or is it near the southeast corner of the park?

This questions was answered live during the meeting.

18:53:05 From Patrick Haack to Everyone:

So basically, not only do we need to make pipes bigger - leading to McKee farms retention ponds, but we need to make the retention ponds in the park deeper/bigger to account for these flash surges?

This questions was answered live during the meeting.

18:53:14 From Brian and Dana Jacobs to Everyone:

Please realize that the flooding does not impact our physical home, but has ruined our driveway, trees, grass, etc. We also continuously replace mulch in our beds that washes into our yard and storm drains during these events - multiple times a year.

18:53:50 From Patrick Haack to Everyone:

So basically, not only do we need to make pipes bigger - leading to McKee farms retention ponds, but we need to make the retention ponds in the park deeper/bigger to account for these flash surges?

This questions was answered live during the meeting.

19:10:44 From Patrick Haack to Everyone:

I didn't know the ponds had overflow. I am confused as to how digging them deeper wouldn't help.

Response from Emmons & Olivier Resources, Inc. (EOR): The McKee Farms Park ponds function as a "wet detention pond." They have a "permanent pool" of water designed to trap sediment. The level of this permanent pool is set by the pond "outlets" – in this case, three culverts in the north end that drain to the greenway to the north. The water (or mix of water and sediment) in the permanent pool is not discharged during a storm. The area above the outlets that is filled during a storm is the "active storage" volume. This active storage reduces downstream flow by temporarily storing water, releasing it slowly through the outlet pipes.

A simpler way to conceptualize a wet detention pond is to compare it to a bucket with a hole in the side, with a hose into the bucket that gets turned on occasionally. When the hose is turned on, the bucket temporarily fills and water flows out of the hole. When the hose is turned off, water drops to the level of the hole but does not drain all the way to the bottom. If there were rocks in the bottom of the bucket below the level of the hole, removing them would not change how the bucket works – the starting level of water in the bucket, and therefore the available space in the bucket, is still controlled by the hole.

Like removing rocks from the bucket's bottom, dredging sediment from the bottom of the McKee Farms Park ponds does not increase the amount of "active storage" that can be used during a storm. The starting water level in the ponds is still a function of the outlet pipes. Wet pond dredging is typically done for water quality purposes (to provide more sediment settling space) – not for flood control purposes. The only exception would be if there was so much sediment built up that it was higher than the outlets and permanent pool, i.e. you would see islands in the ponds during normal conditions. In that case sediment would actually be taking up some of the "active storage" area, and should be removed.

19:14:42 From Brian and Dana Jacobs to Everyone:

How soon is "soon as feasible"?

This questions was answered live during the meeting.

19:16:06 From Norm Wood to Everyone:

Is there potential that improving infiltration in the drainage area (reducing impermeable surfaces for example) could have substantial benefits by reducing the inflow into the storm sewer system?

This questions was answered live during the meeting.

19:18:14 From Patrick Haack to Everyone:

I am glad this discussion is taking place. I feel as if there is a much bigger issue - especially with climate changes. These studies don't take into account the un-predictability of climate change. This could be catastrophic!! What are your professional opinions?

This questions was answered live during the meeting.

19:20:18 From Brian and Dana Jacobs to Everyone:

I am confused - we were told our resurfacing was postponed to wait for this project. 2022 was scheduled for improvements to the stormwater structures. Now earliest in 2023. This seems to continue to slip.

19:26:45 From BARBARA EIKENBERRY to Everyone:

I have to leave but we are also interested in Task 2 as we are on the N corner of Florann and Jacquelyn. Can we please get on the email list for information?

Barbara, unfortunately I am not able to sign you up for the email list. You will need to go in and sign up. The Notify Me signup webpage can be found here: http://www.fitchburgwi.gov/list.aspx. There are instructions at the top of the webpage, and the email list you want to sign up for is the "Cheryl Drive Stormwater Project." Please contact me if you are having trouble: Claudia.guy@fitchburgwi.gov, 608-270-4262.

19:28:19 From Gabriella Gerhardt to Everyone:

https://www.fitchburgwi.gov/2704/Cheryl-Drive-Stormwater-Project

19:29:20 From FACTv Feed to Everyone:

can you send me your emails to add you in my list? Julia.arata-fratta@fitchburgwi.gov

I think this may have been a question from Alder Julia to participants during the meeting (through FACTv's account). If you are interested in signing up for Alder Julia's email list, please contact her directly.

19:29:34 From FACTv Feed to Everyone:

Thanks for your participation today

19:29:42 From Brian and Dana Jacobs to Everyone:

Did you see any mention of a spring in this area in the documents you reviewed. Our neighbor (one of the original owners) was told there was one in our area.

No, I didn't see documents regarding a spring in this neighborhood. I wouldn't be surprised if there were one, given the high groundwater, but it's not something that I saw documentation about.

19:33:48 From Brian and Dana Jacobs to Everyone:

Rain gardens are not realistic for those of us at the bottom of the hill. Our sump pumps run continuously already - and we don't need any additional water in yards.

19:34:56 From Patrick Haack to Everyone:

Rain barrels and rain gardens are really only good for surges. Ground permeability is an issue. And I think we may have a much bigger issue based on our elevation.

19:34:59 From FACTv Feed to Claudia Guy(Direct Message):

Yes we'll save that!

19:35:03 From Norm Wood to Everyone:

Thank you Claudia, Nick!

19:35:10 From Patrick Haack to Everyone:

Thank you both!