



Pheasant Branch Watershed Study Public Information Meeting No. 2

by City of Madison Engineering Division
June 18, 2020

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Evening Overview

- ▶ Welcome (Hannah Mohelnitzky, City of Madison)
- ▶ Presentation (Caroline Burger, City of Madison)
- ▶ Q&A (facilitated by Hannah Mohelnitzky, City of Madison)
 - Submit questions through Zoom Q&A
 - *To find the Zoom Q&A Box, hover over the edge of your screen. A toolbar will appear and you can click on “Q&A”*
 - Questions answered at the end of the Presentation
- ▶ Wrap Up (Hannah Mohelnitzky, City of Madison)
- ▶ Breakout to Focus Groups (City of Madison staff)
 - A link for the Focus Groups will be posted in the Zoom Group Chat box.

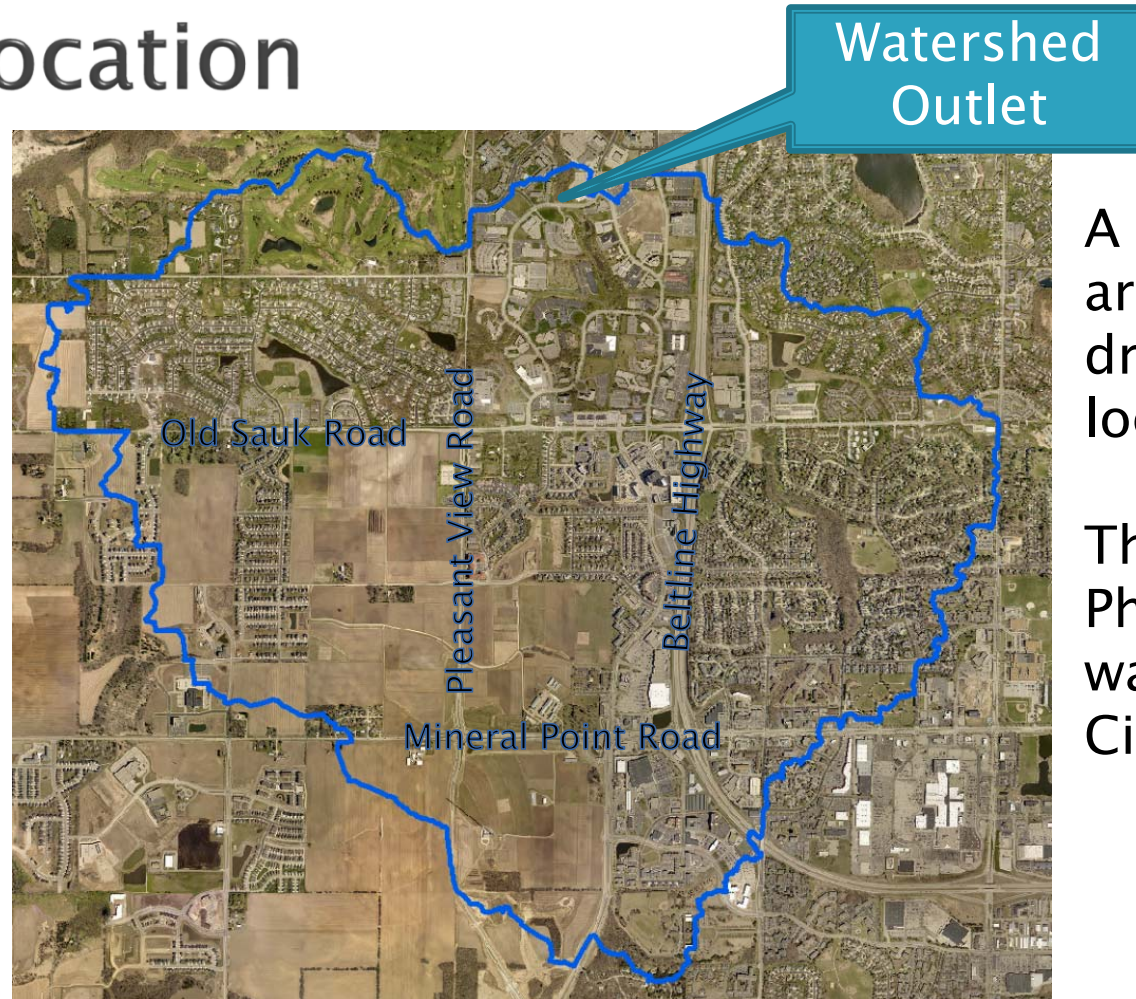
Presentation Overview

- ▶ Definitions of commonly used terms
- ▶ Project location
- ▶ Watershed characteristics
- ▶ Progress to date
- ▶ Tonight's meeting
 - Present Progress to date
 - Receive feedback from participants
 - Will not present proposed solutions
- ▶ Next steps
- ▶ Watershed study limitations

Definitions of commonly used terms

- ▶ **Stormwater:** rainwater produced from a rain event
- ▶ **Stormwater runoff:** the portion of the rainwater that does not soak into the ground
- ▶ **Stormwater inlets:** grates in the ground that take in stormwater runoff; connected to the stormwater conveyance system
- ▶ **Detention ponds:** ponds designed to hold stormwater runoff to improve water quality and/or help prevent flooding
- ▶ **Subcatchments:** smaller sub-areas of a watershed
- ▶ **Level loggers:** monitoring equipment used to measure the level in a pond, channel, storm sewer, etc
- ▶ **Rain gauges:** monitoring equipment used to measure the depth of rain that fall in a rain event
- ▶ **Model:** computer software that is used to evaluate the stormwater conveyance system

Project Location



A watershed is an area of land that drains to a single location.

This is the Pheasant Branch watershed in the City of Madison.

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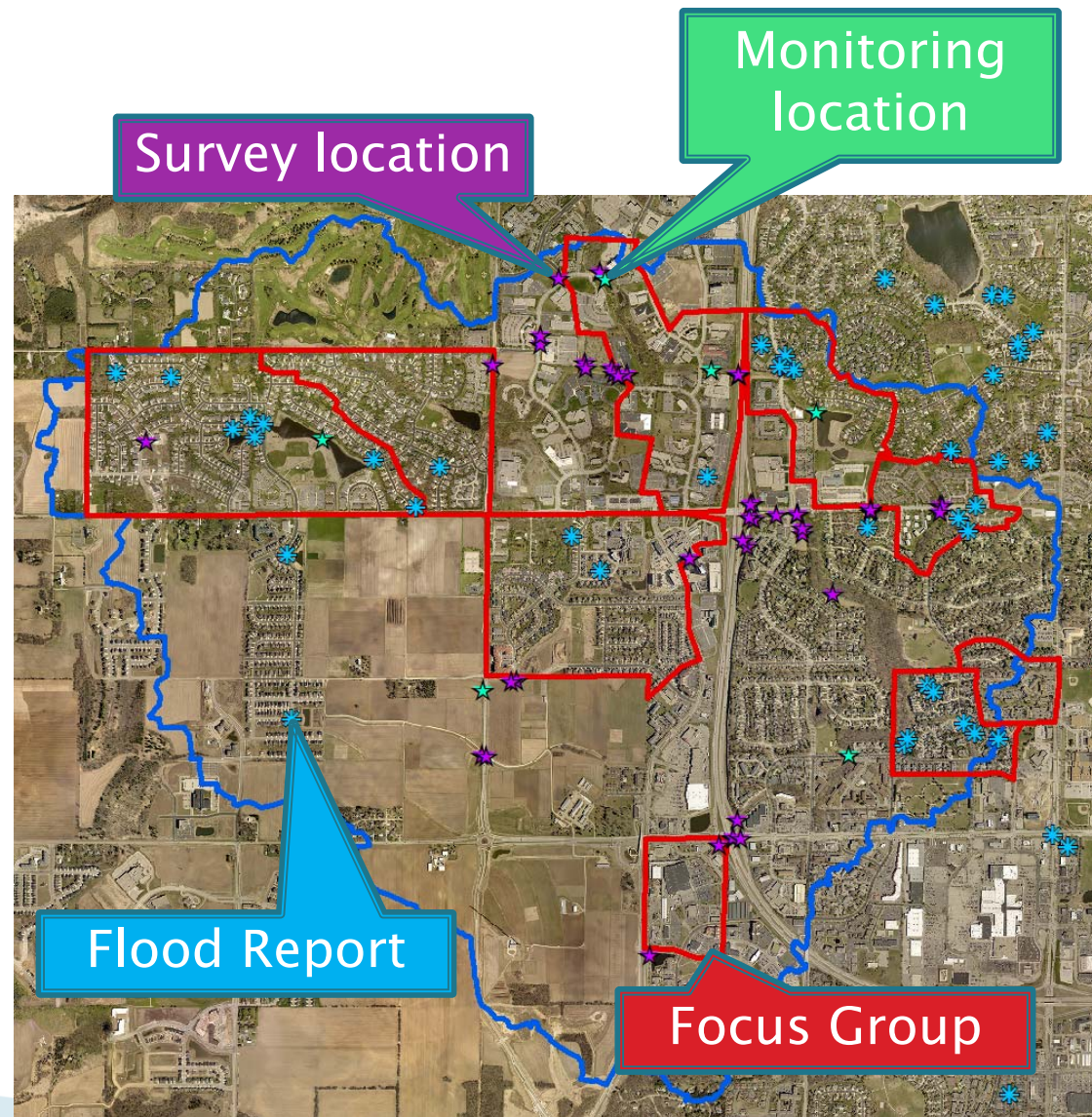


Watershed Characteristics

Item	Quantity
Watershed Area (acres)	3,300
Number of Subcatchments (#)	451
Public Stormwater Inlets and Access Structures in Watershed (#)	2,500
Total storm sewer pipes in Watershed (#)	2,200 segments; 31.4 miles
Storm sewer pipes in Model (#; length)	1,452 segments; 27.4 miles
Open channels in Model (#; length)	90 segments; 6.7 miles
Detention Ponds in Model (#)	44

Progress To Date

- Data collection
 - Ground/storm sewer survey
 - Monitoring – rain depth, pond and storm sewer water levels, storm sewer flow
 - Flood reports
 - Focus groups – flooding experiences



Progress To Date

- Public Information
 - Public Input Meeting #1 – May 4, 2019
 - Focus Groups – 9 Focus Groups in September 2019
 - Project website creation and updates –
www.cityofmadison.com/PheasantBranchWatershed



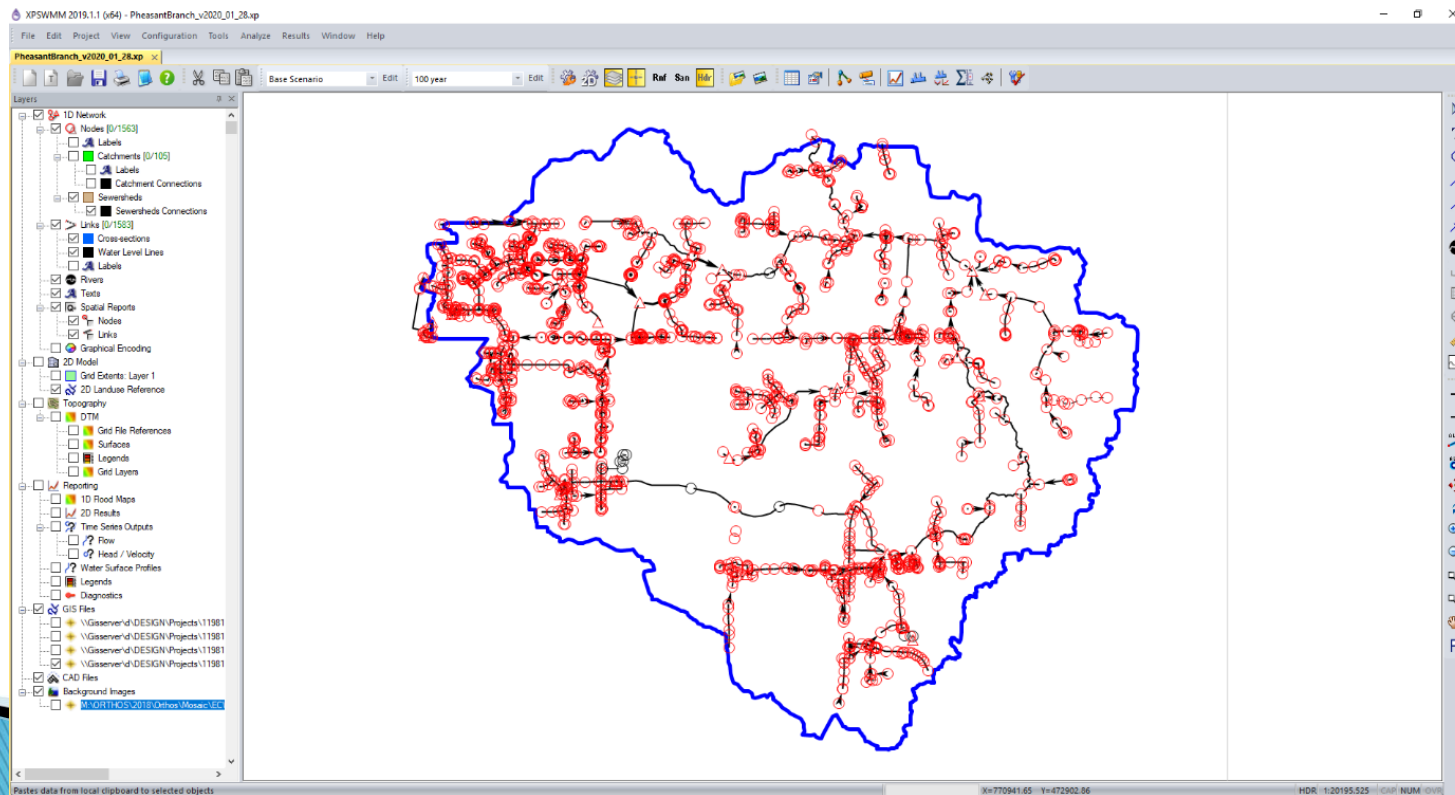
Progress To Date

- Media – television, radio, Facebook, Twitter, Podcast
 - Coverage about Watershed studies as a whole on Channels 3, 27, 15, State Journal, Cap Times
 - Flooding awareness, education posts, photos and videos from focus groups on social media
 - Two podcast episodes on Everyday Engineering: Historic Flooding, Watershed studies



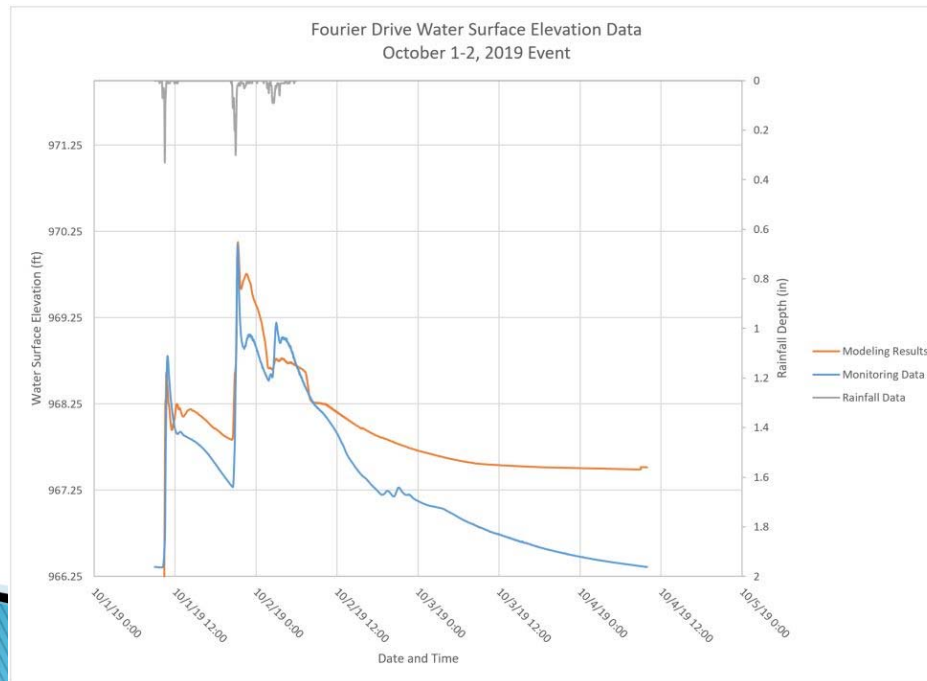
Progress To Date

► Existing Conditions Model Construction



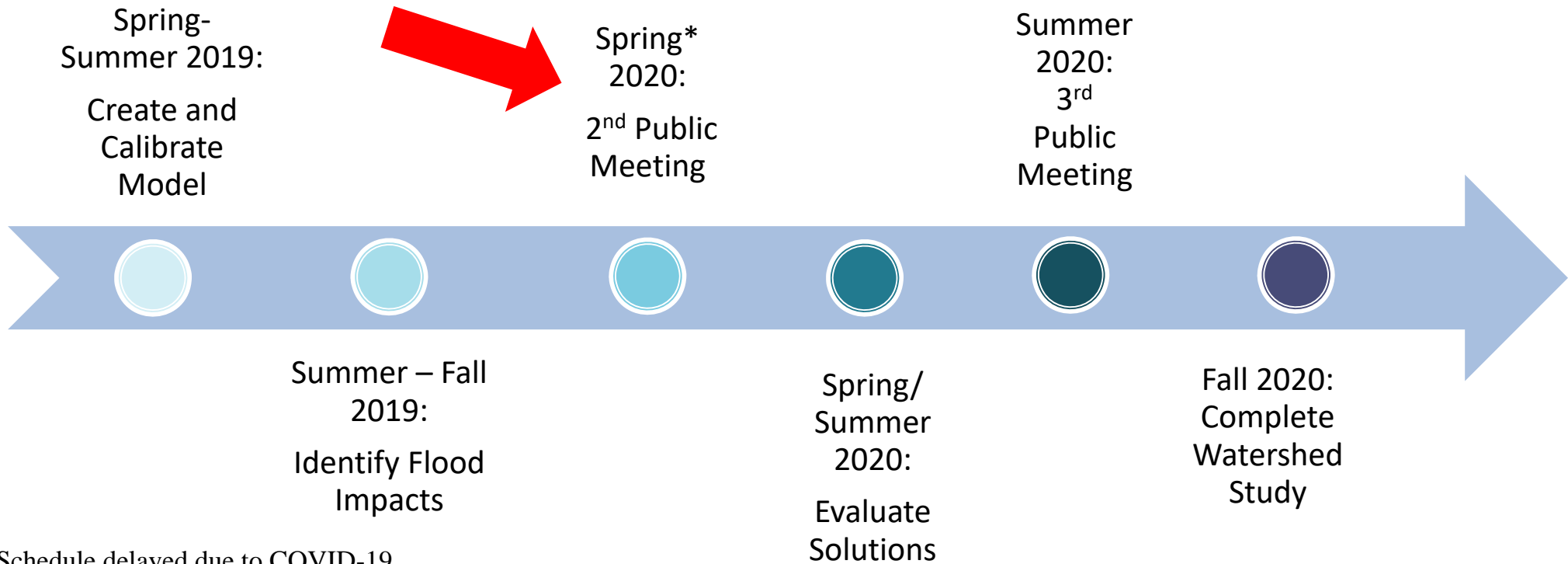
Progress To Date

- ▶ Existing Conditions Model Calibration
 - City-installed monitoring equipment
 - Recorded highwater marks from August 2018 event



Calibration is comparing the model results to the monitored results and making changes so the model matches more closely

Where we are in study process



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Tonight's Meeting

- ▶ Show our progress to date
- ▶ Review maps in Focus Groups (Zoom Breakout Rooms) following presentation Q&A

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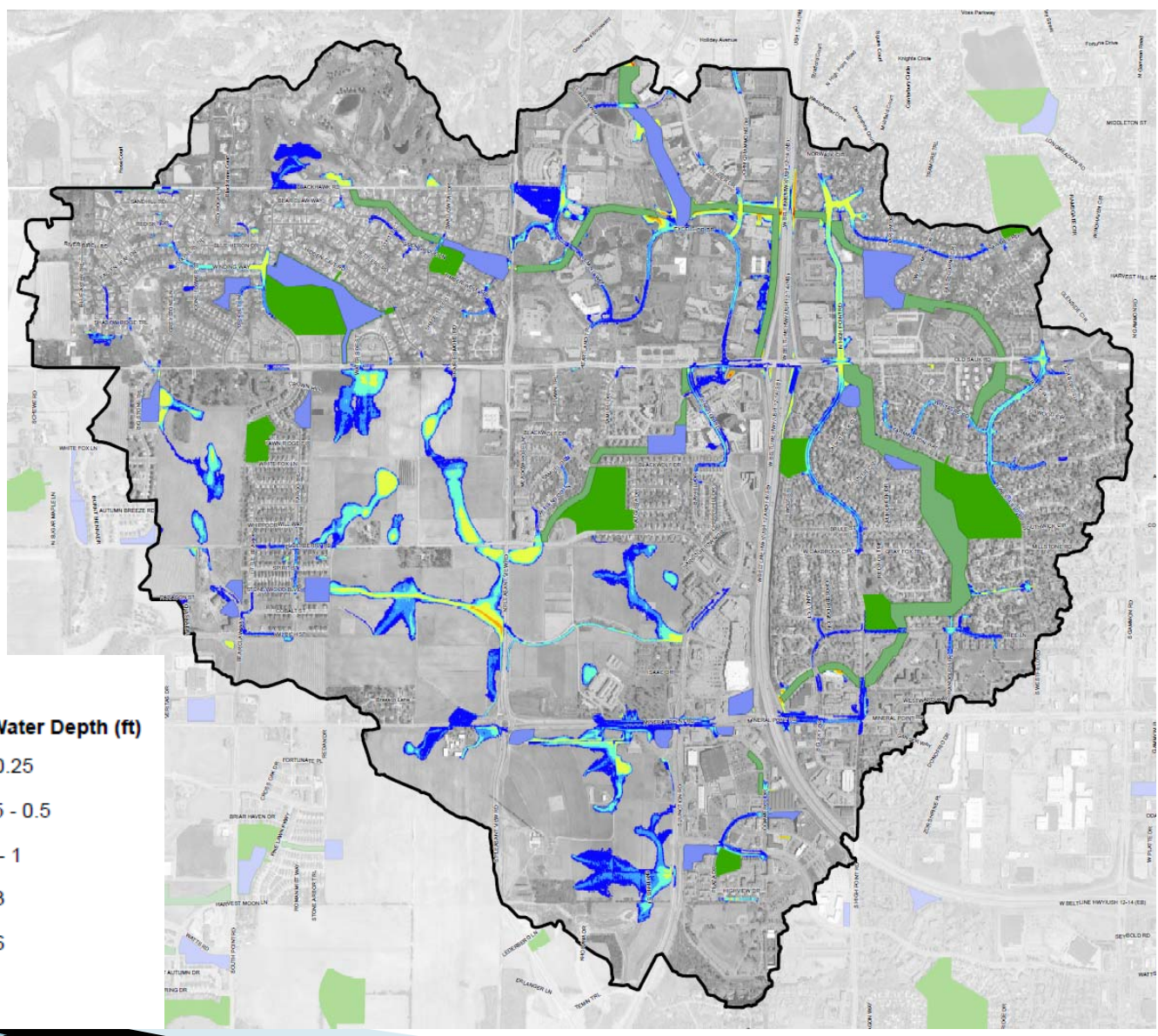
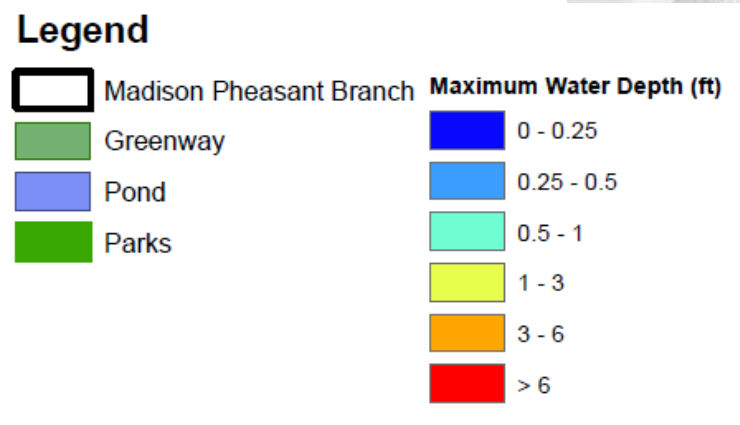
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Draft Flood Inundation Mapping

- ▶ The following slide shows the map from a model simulation of a rain event that has a 10% chance of happening each year
- ▶ The 10% chance storm can be:
 - 1.5 inches in 30 minutes
 - 1.7 inches in 1 hour
 - 3.1 inches in 12 hours
 - 4.1 inches in 24 hours
- ▶ A storm like this occurred in October 2019

**Pheasant Branch Watershed
Existing Conditions
10% Chance Storm Event
Maximum Water Depth**



Next Steps

- Evaluate Proposed Solutions
 - Green Infrastructure
 - Grey Infrastructure
 - Combination
- PIM #3
- Final Report
- Begin Implementing Solutions



Watershed Study Limitations

- ▶ Utilizing computer models for analysis (computer models have inherent limitations, require assumptions, and are for one specific set of circumstances)
- ▶ Retrofitting infrastructure takes a lot of time and money
- ▶ Not all problems can be solved
- ▶ Repairs are not always easy, popular, or inexpensive
- ▶ Best engineering solution may not be the one chosen
- ▶ Property owners will need to create solutions too
- ▶ Solutions will need broad community cooperation
- ▶ Groundwater problems not easily addressed by infrastructure

Odana Area Plan

- ▶ 2018 Comprehensive Plan: “redevelopment that includes substantial residential components should be preceded by adoption of a detailed City plan that addresses connectivity improvements, more parks and open space, and other amenities and infrastructure necessary to support residential development
- ▶ Facilitate redevelopment; prepare for BRT; integrate infrastructure improvements
- ▶ For more information and to sign up for email updates visit:
www.cityofmadison.com/odanaplan



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Contact Information & Resources

- Project Manager: Caroline Burger, cburger@cityofmadison.com
- Public Information Officer: Hannah Mohelnitzky, hmohelnitzky@cityofmadison.com
- Project Webpage: <https://www.cityofmadison.com/engineering/projects/madison-pheasant-branch-watershed-study>
 - StoryMap can be found on the Webpage – *Must use Google or Firefox for browser, Explorer not supported*
 - Sign-up for project email updates on the website
 - Report flooding, past or current on the Report Flooding form
- New Flooding Website: www.cityofmadison.com/flooding
- Everyday Engineering Podcast
- Facebook – City of Madison Engineering
- Twitter – @MadisonEngr



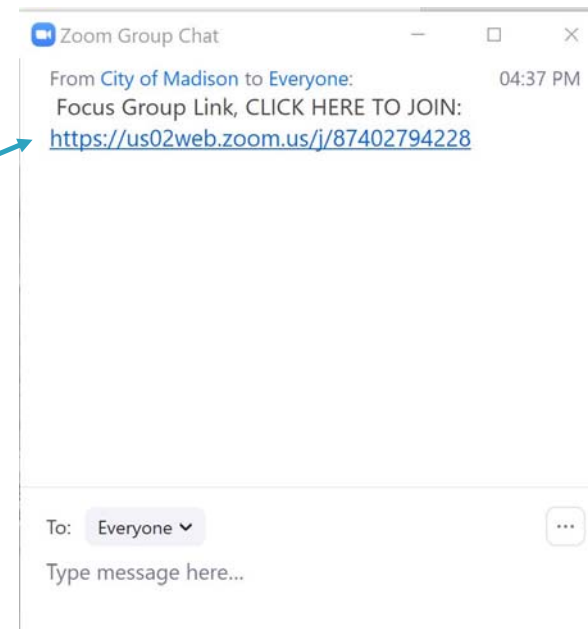
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Focus Groups – Zoom Breakout Rooms

▶ Join the Zoom Breakout Room Session

- Open the Zoom Chat box (if not already open)
- Click on Link provided in the Zoom Group Chat box
- A message will pop-up that says “Do you want to leave this meeting?”
- Click “Yes”
- Join Meeting
- City staff will meet you in the new virtual meeting room



Small Groups/Focus Groups

1. Junction Ridge/Attic Angel
2. Menards Area
3. North Blackhawk Pond/
Southwest Blackhawk Pond
4. Old Sauk and Westfield
5. Old Sauk Trails Business Park
6. Tamarack Trails/Wexford Ridge
7. Wexford Village
8. Overall Watershed

