

# Rock River Flood Management

Presentation to the Dodge County Land & Water  
Conservation Committee  
October 21, 2024

1. Issue
2. Progress
3. Action Plan
4. Funding

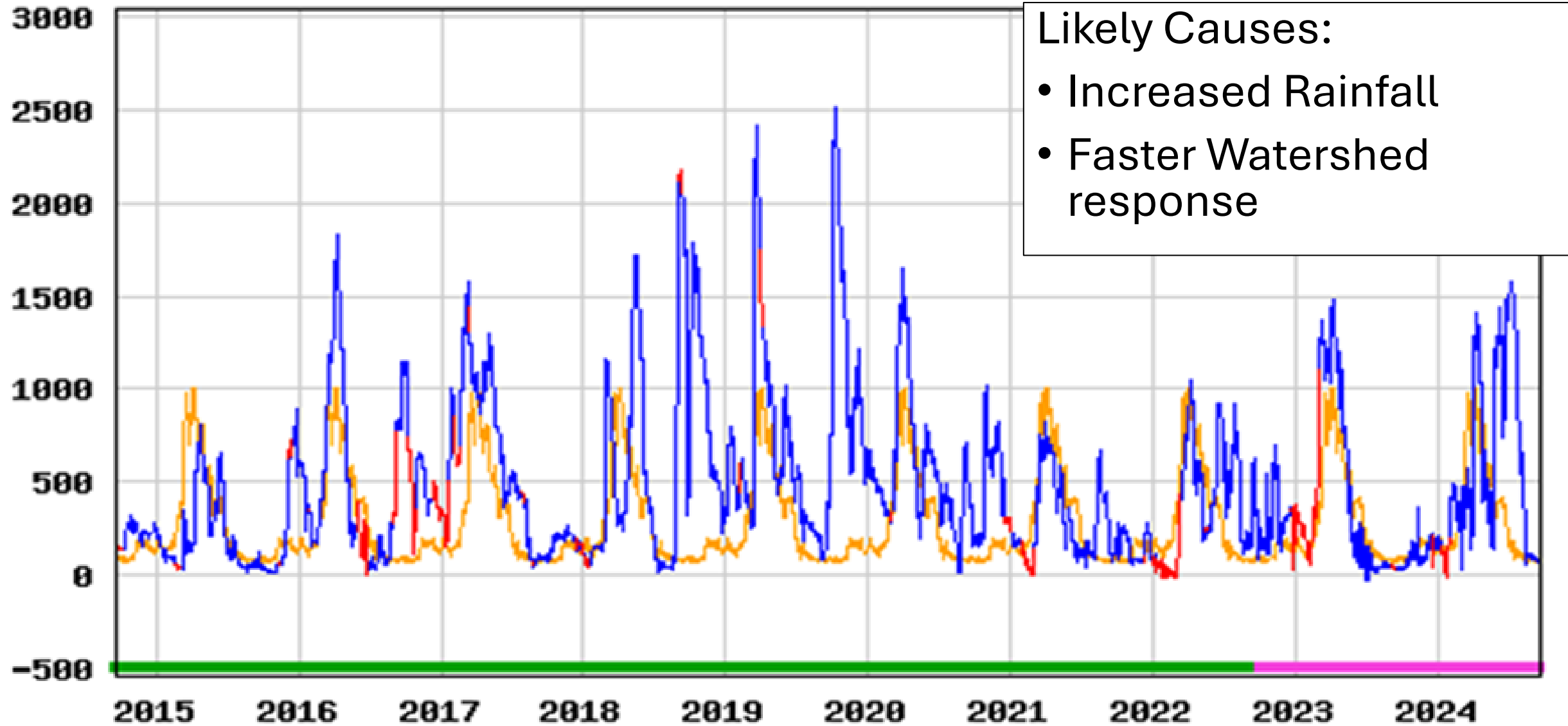
# 1. Issue: What is the flooding problem?

- Many floods at higher discharge and much longer duration in recent years
- Particularly impacts Towns of Lebanon, Ashippun, Hustisford and Ixonia
- Flooding impacts to agricultural land, roads and woodlands



## USGS 05424057 ROCK RIVER AT HORICON, WI

DAILY Discharge, cubic feet per second







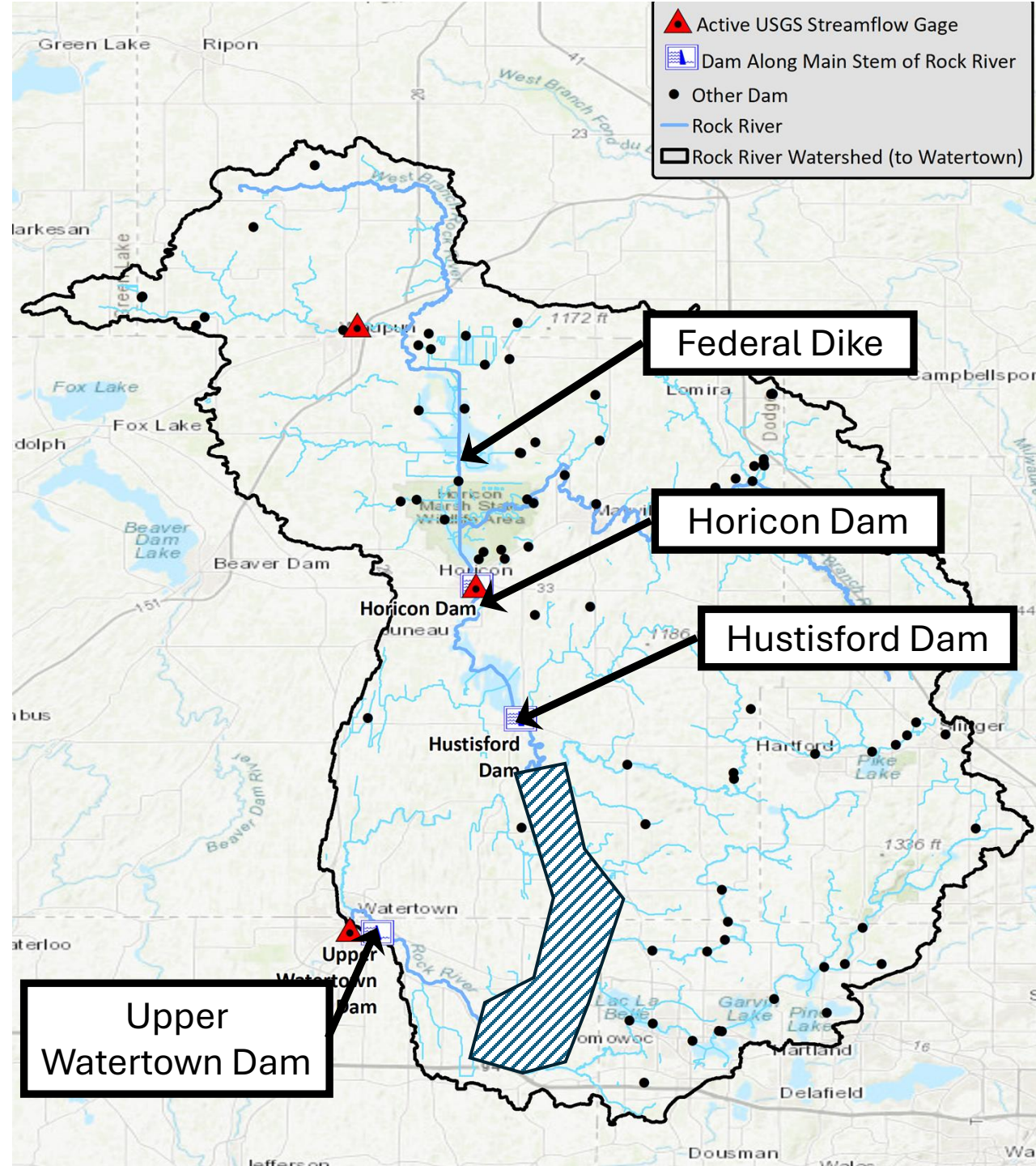
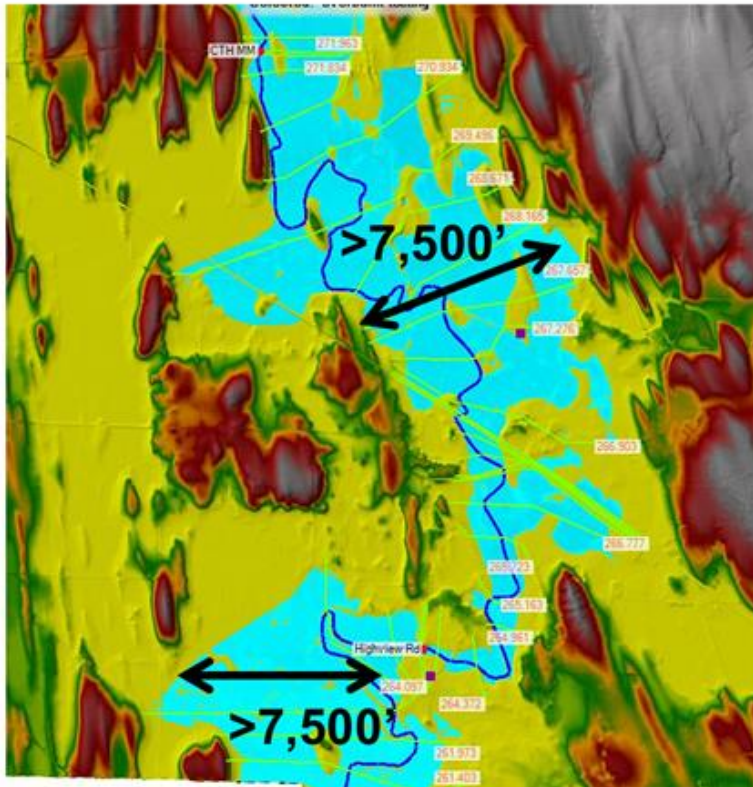




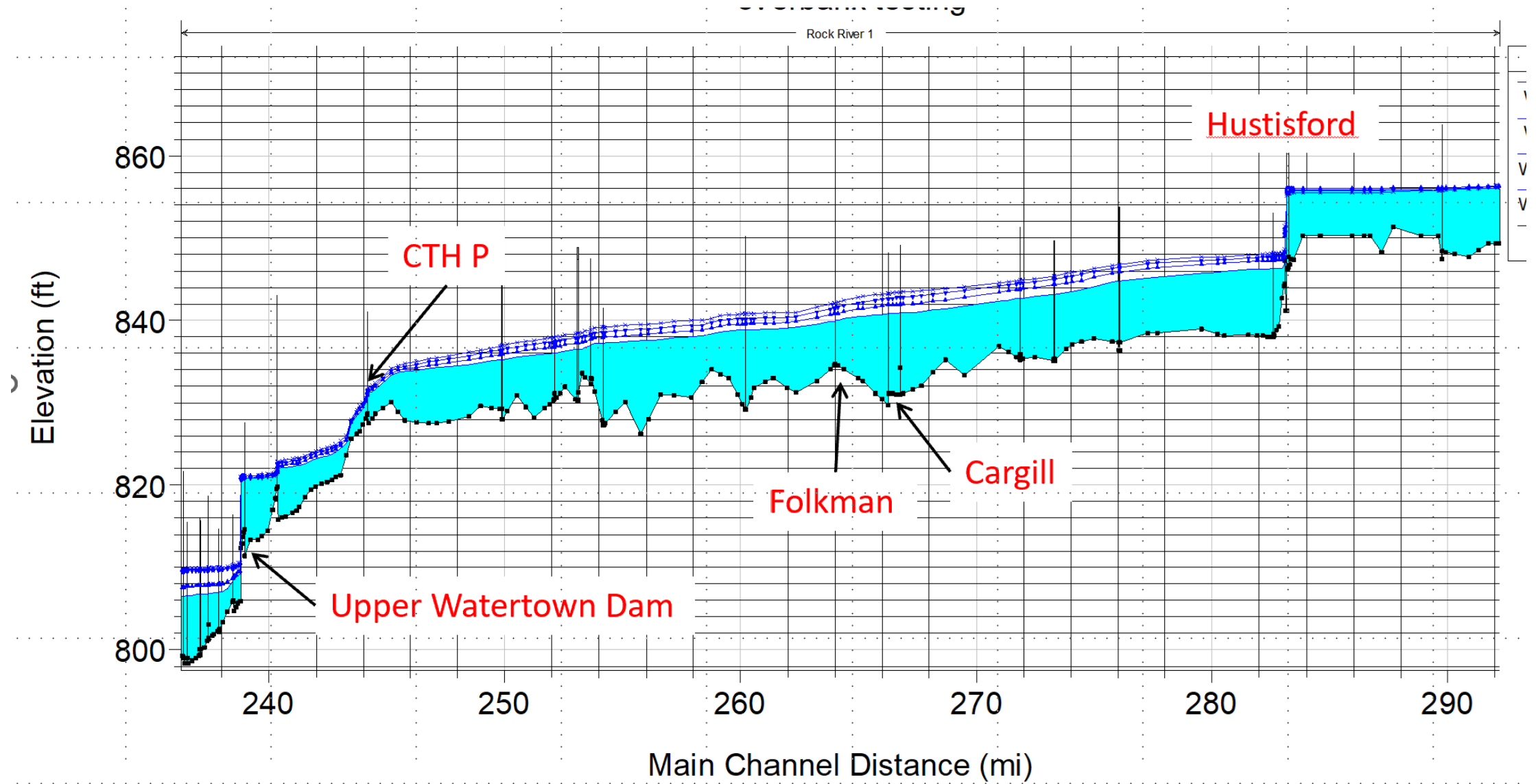


# Reach with increased flooding impact

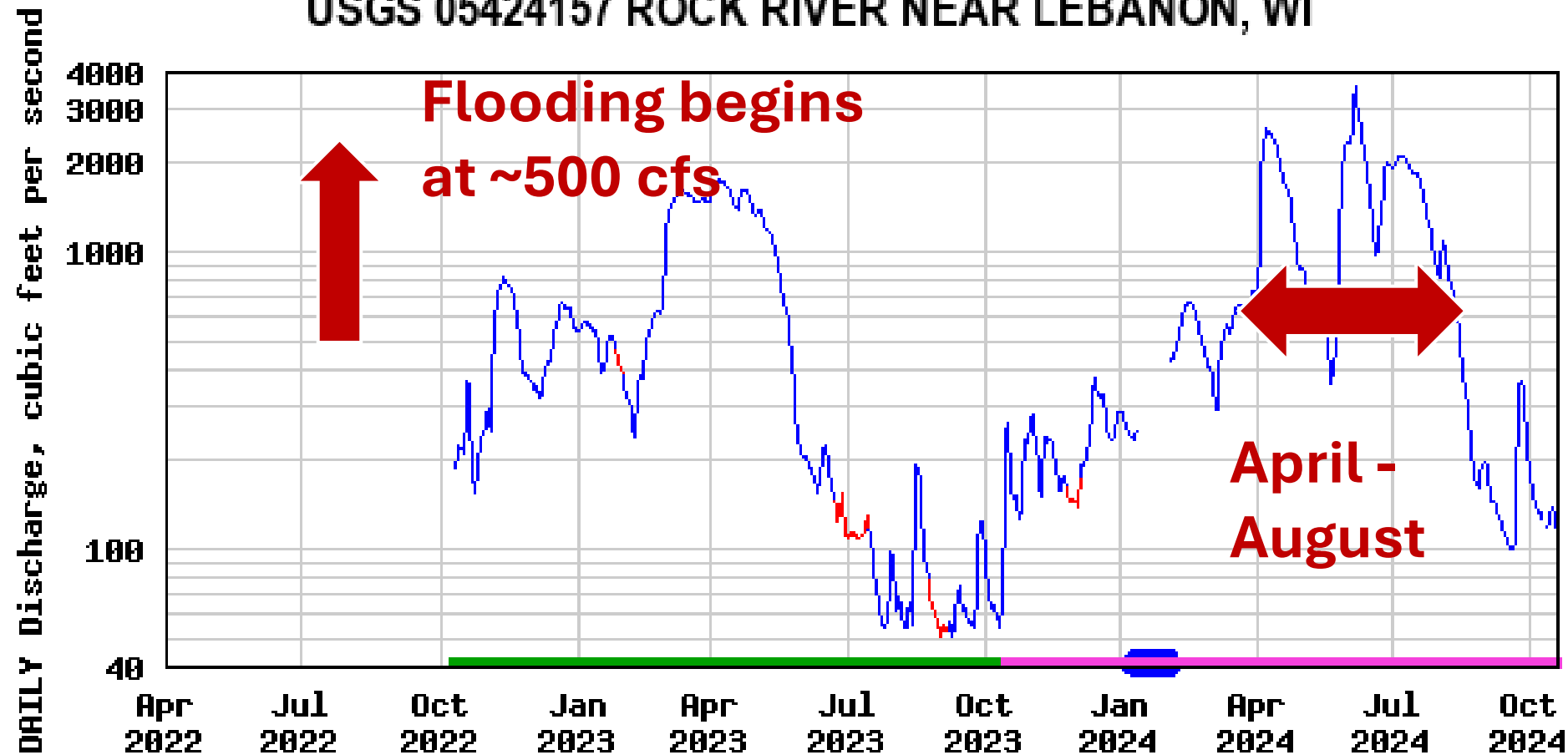
- Flooding begins in Lebanon and Ixonia for flows above 500 cfs
- Extensive out-of-bank flooding at 1250 cfs



# Why this reach? Low gradient



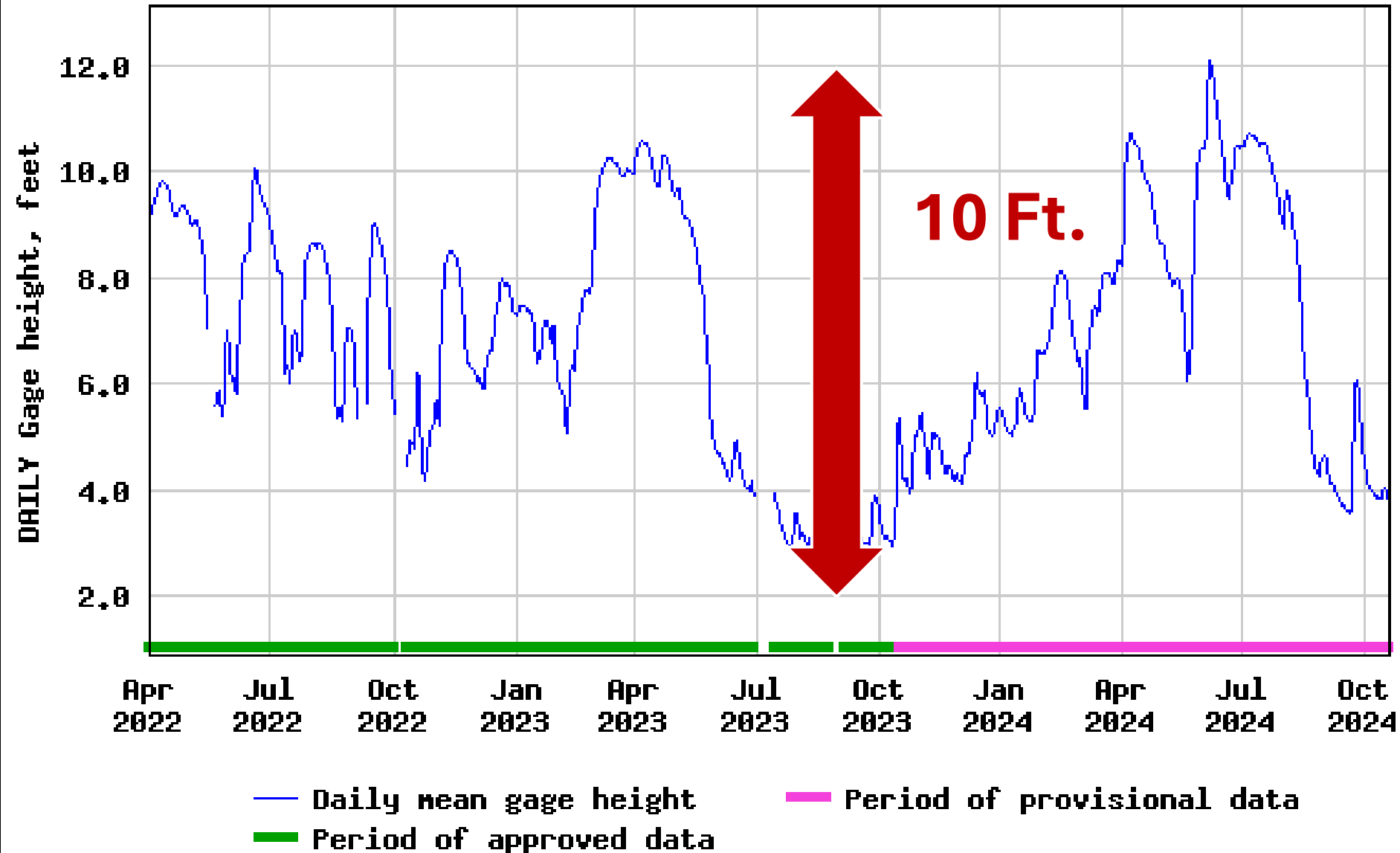
## USGS 05424157 ROCK RIVER NEAR LEBANON, WI



- Daily mean discharge
- Estimated daily mean discharge
- Period of approved data
- Value is affected by ice at the measurement site.
- Period of provisional data



# USGS 05424157 ROCK RIVER NEAR LEBANON, WI



## 2. Progress: Last 5 years

1. Extensive data collection and hydraulic, hydrologic and GIS analyses
2. Many meetings with towns, dam operators, DNR
3. Created group to fund a new USGS stream gage on the Rock River at CTH MM in the Town of Lebanon, online from April 2022
4. 2024: Created Rock River flooding contact group, completed an:

T. of Ixonia

Jefferson County

DNR

T of Lebanon

Residents

US F&W

Dodge County

V. of Hustisford

State Reps

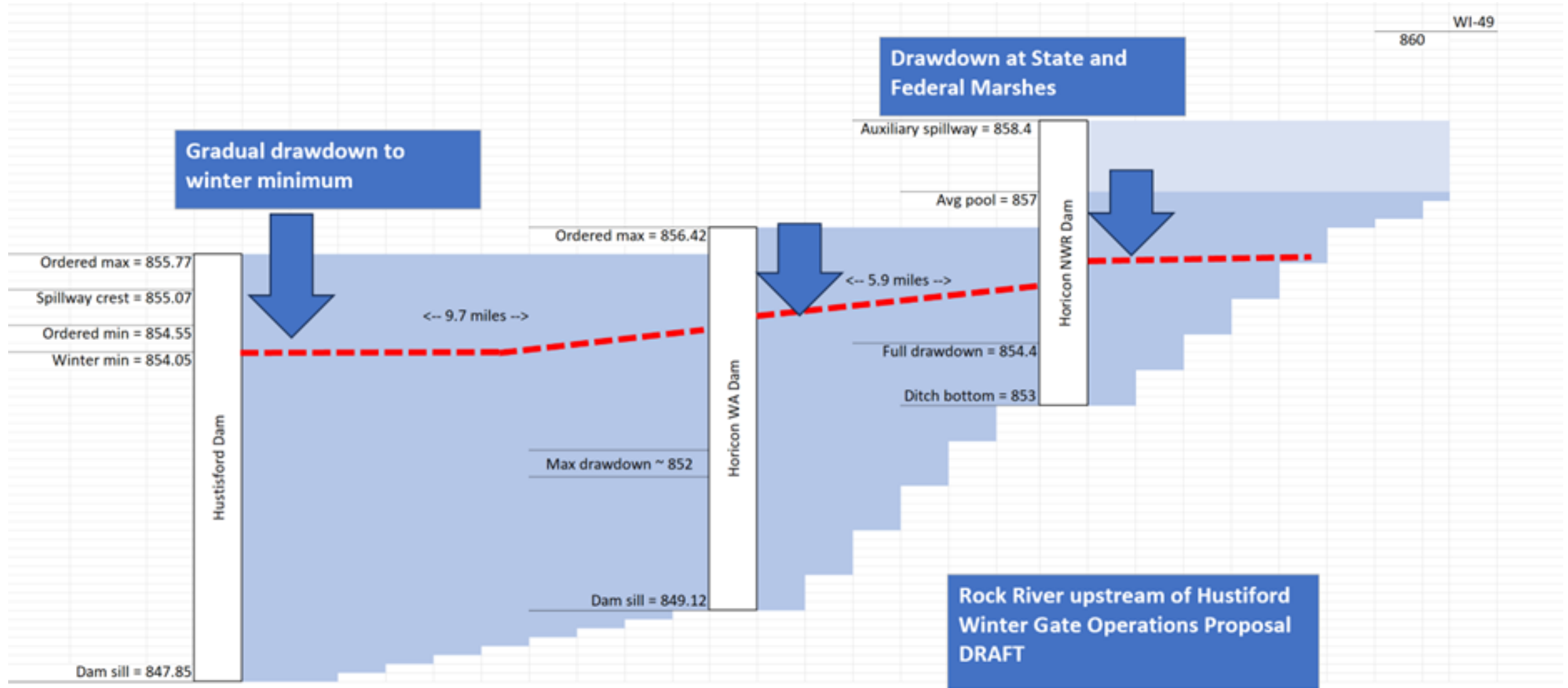


# Progress in 2024 -

1. Identified measures to address flooding:
  - a. Draw down water levels in Sinissippi and Horicon Marsh during the winter to provide storage for spring floods
  - b. Identify opportunities for creating or enhancing water storage in the watershed
  - c. Identify opportunities for river corridor management
2. Reached agreement with US F&W, DNR, Village of Hustisford for trial drawdown over winter of 2024-2025

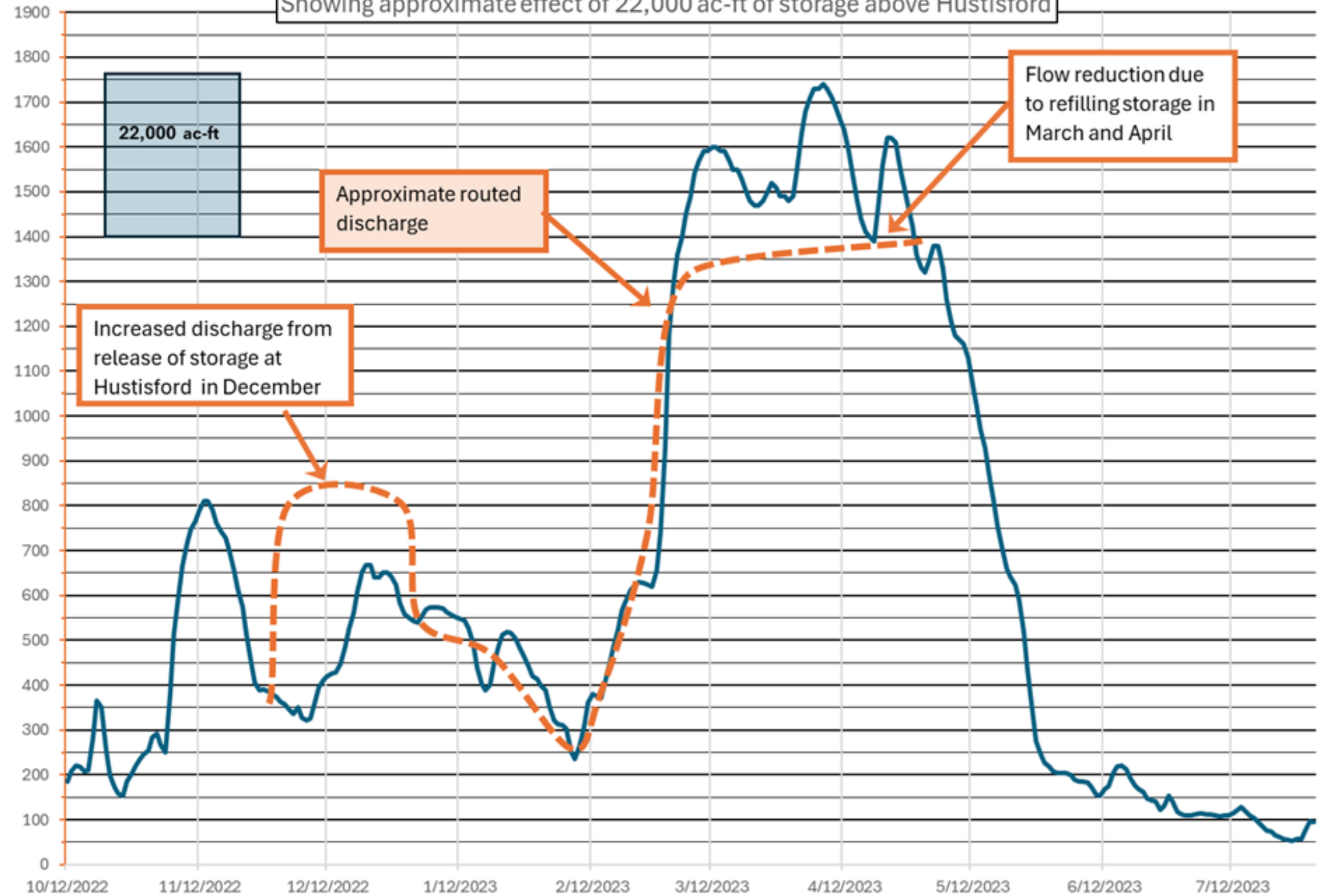
### 3. Action Plan: 2024-2025

- Trial winter draw down





Daily Discharge at Lebanon 2022 - 2023  
Showing approximate effect of 22,000 ac-ft of storage above Hustisford



### 3. Action Plan for 2024-2025 :

#### Trial 2024-2025 Drawdown

- Elevation Survey
- Communication / Coordination
- Flow monitoring
- Data analysis and modeling to
  - Assess benefits
  - Improve plan
- Evaluate rainfall – runoff response and optimization options

Start watershed storage and corridor management options review



# 4. Funding

## To Date

1. Analysis, hydraulic modeling, meetings, reporting:  
Steve Folkman and Tim Cargill, Town of Lebanon residents
2. Ongoing funding for USGS gage on Rock River:  
Village of Hustisford  
Dodge County  
Town of Hustisford  
Town of Ashippun  
Town of Lebanon  
Town of Ixonia (Jefferson County)

## 2024-2025 Action Plan

1. Support from Dodge County Land Conservation  
Meeting administration  
Anticipated elevation survey
2. Town of Ixonia
3. UW-Madison graduate student support
4. ???