

ROCK RIVER FLOODPLAIN WORKING GROUP

Watertown – Ixonia – Ashippun – Lebanon – Hustisford - Horicon

Meeting of May 22, 2025

Dodge County Administration Building
Juneau, WI

Agenda

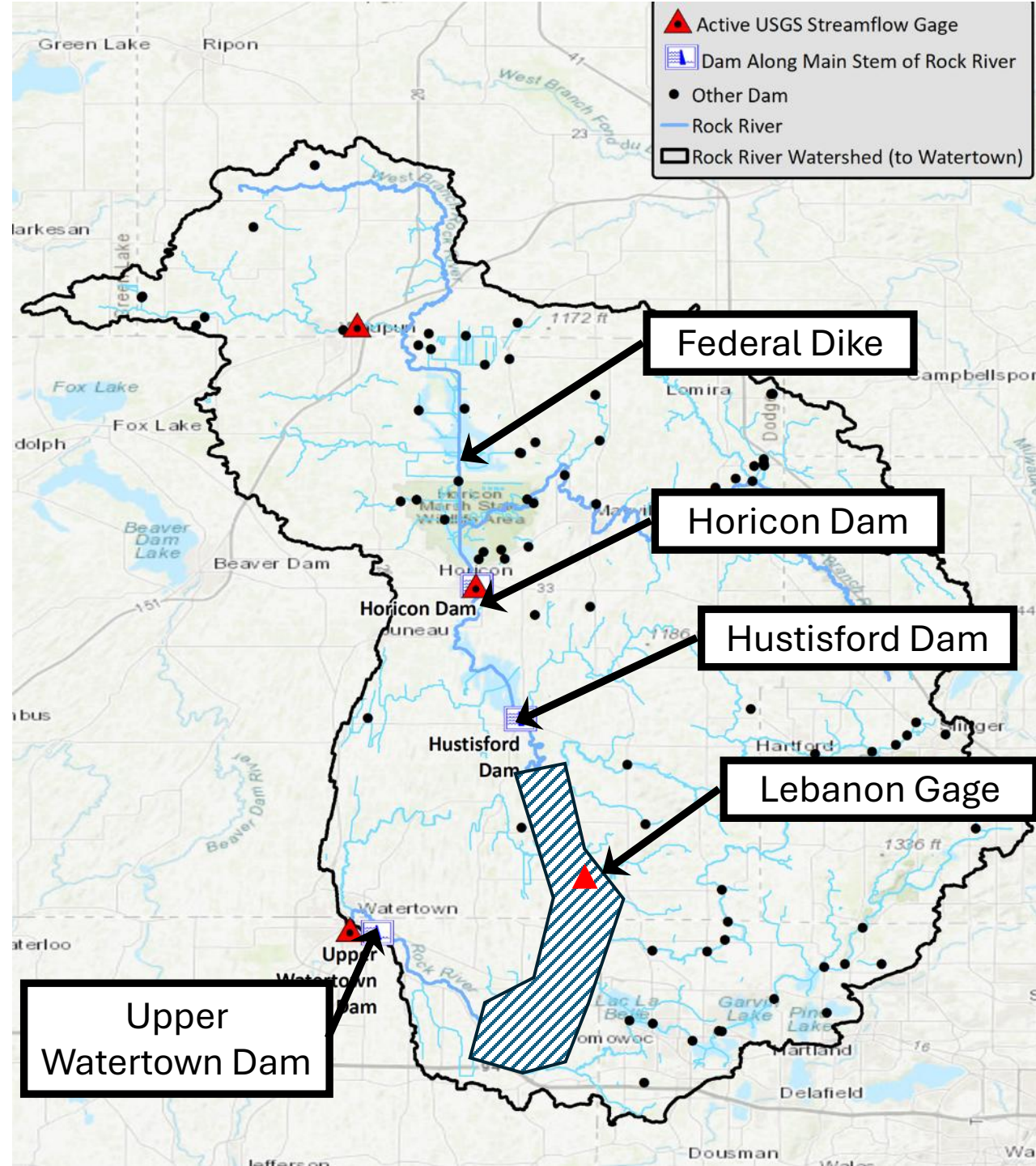
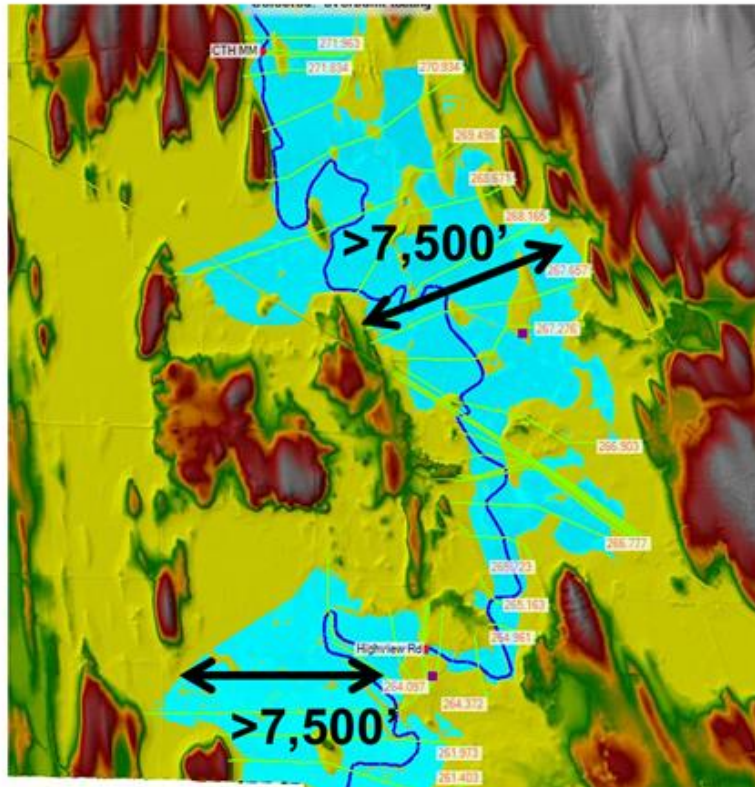
- 1. Introductions for new attendees**
- 2. Update on current flows, water levels and gate operations**
- 3. Update on UW-Madison Rural Partnerships Institute activities**
- 4. Continuing from our April meeting: Discussion of watershed storage options and programs that may be helpful water in the watershed**
- 5. Confirming subcommittee members, activities, and timeframe for 2025:**
 - a. Define analysis approach and assistance programs to increase watershed storage to reduce flood runoff**
 - b. Work with UW-Madison RPI team on 1) Watershed & Climate and 2) analysis of gate operation to improve water management**
 - c. Development of combined gate operation plan**
- 6. Next meeting**

1. Introductions

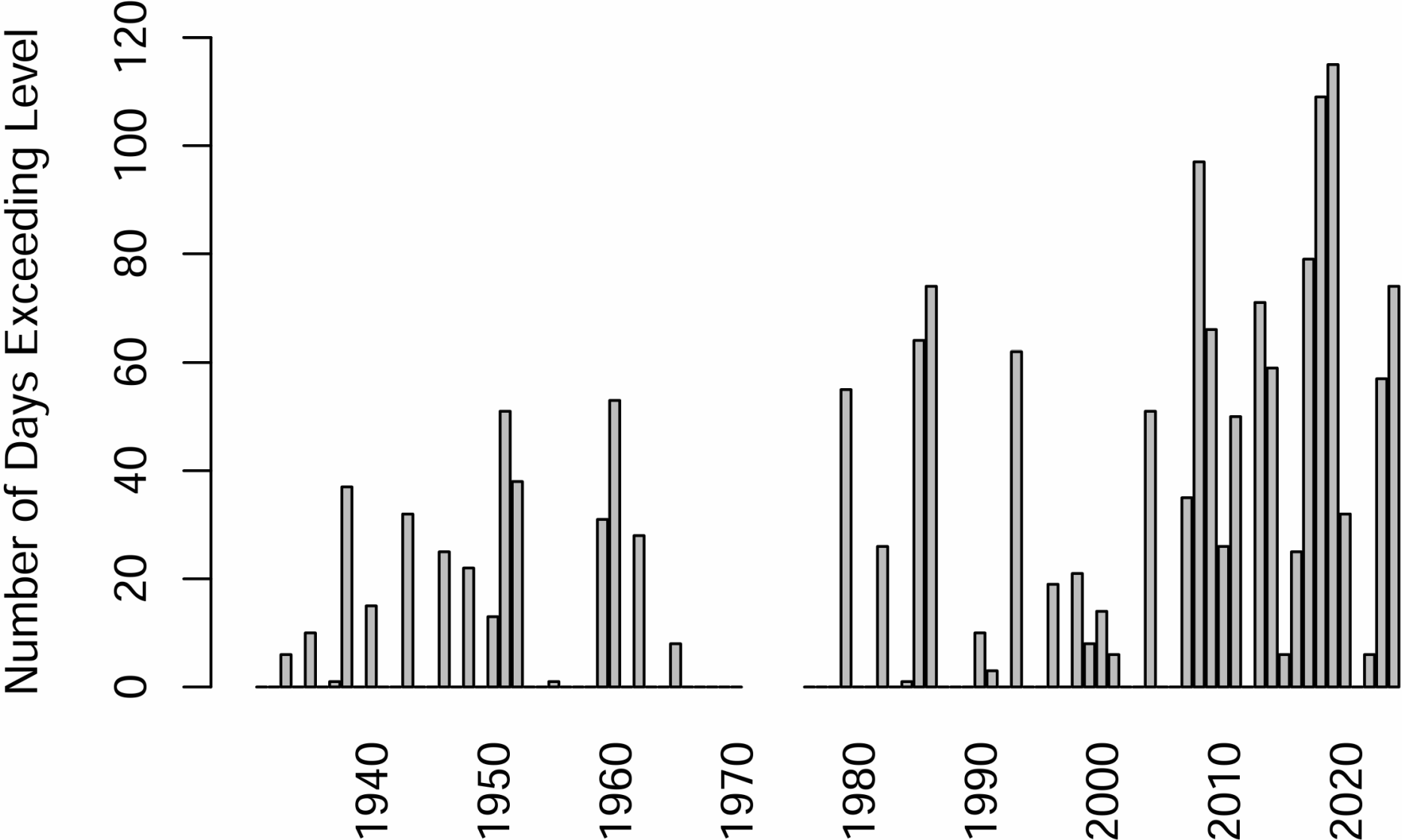
- Any new attendees?
- Meeting recorder?

Reach with increased flooding impact

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



Rock River at Watertown
Number of Days Exceeding Action Level (2000 cfs)

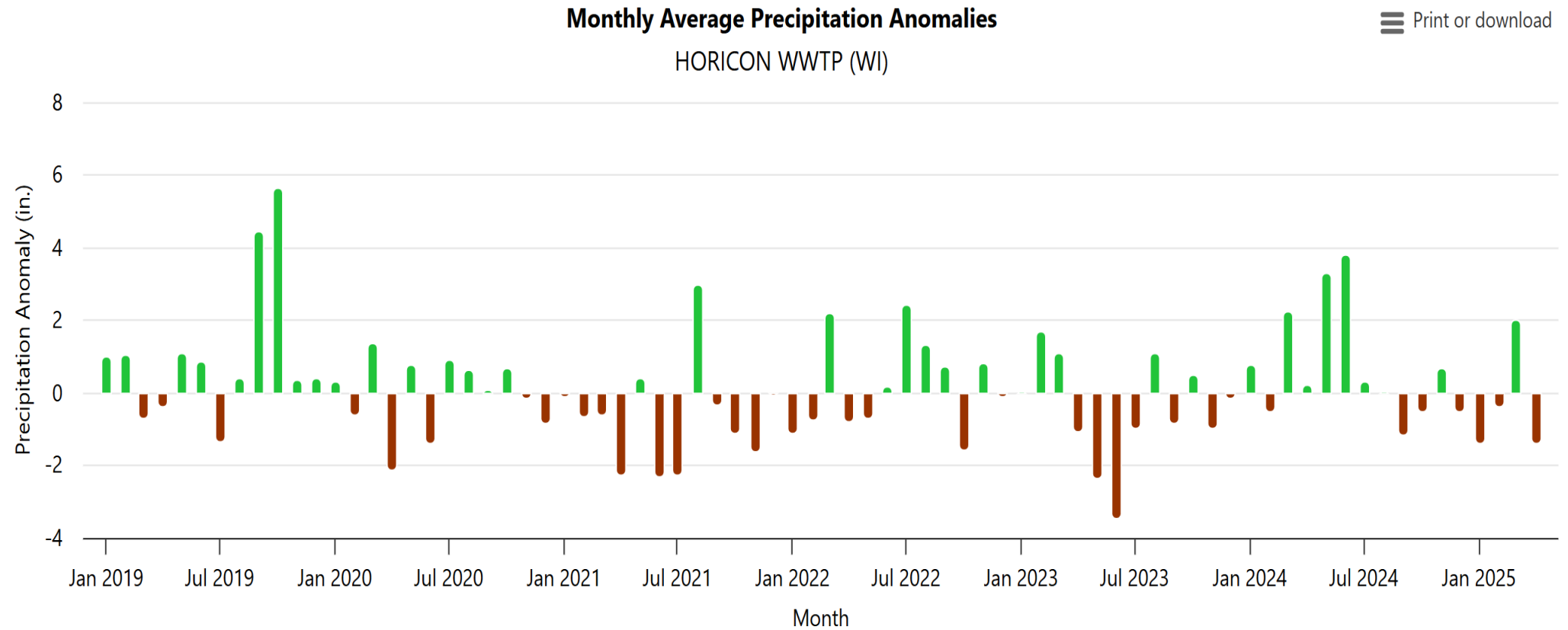


Progress in 2024 -

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. US F&W, DNR, Village of Hustisford trial drawdown and data collection over winter of 2024-2025

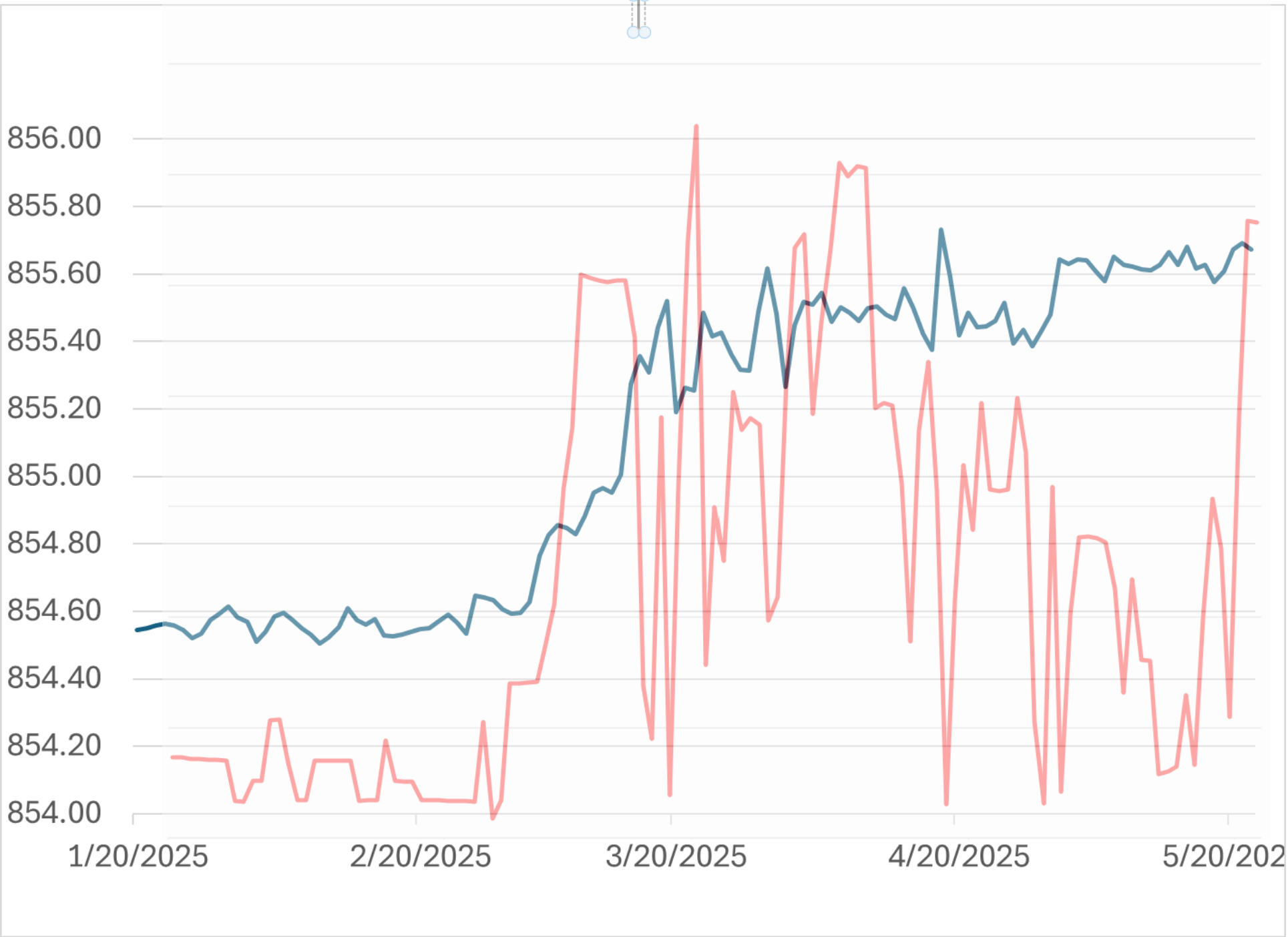
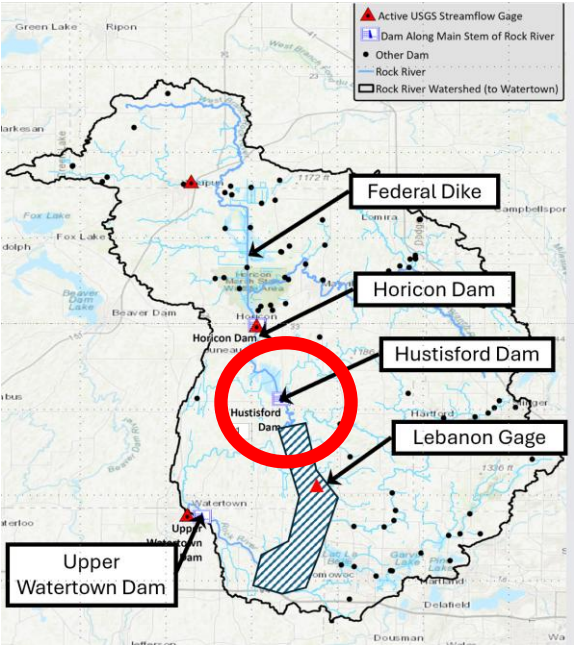
Update on precip, flows, and stages

Heavy rain May/June
Little rainfall last winter
Recent wet weather



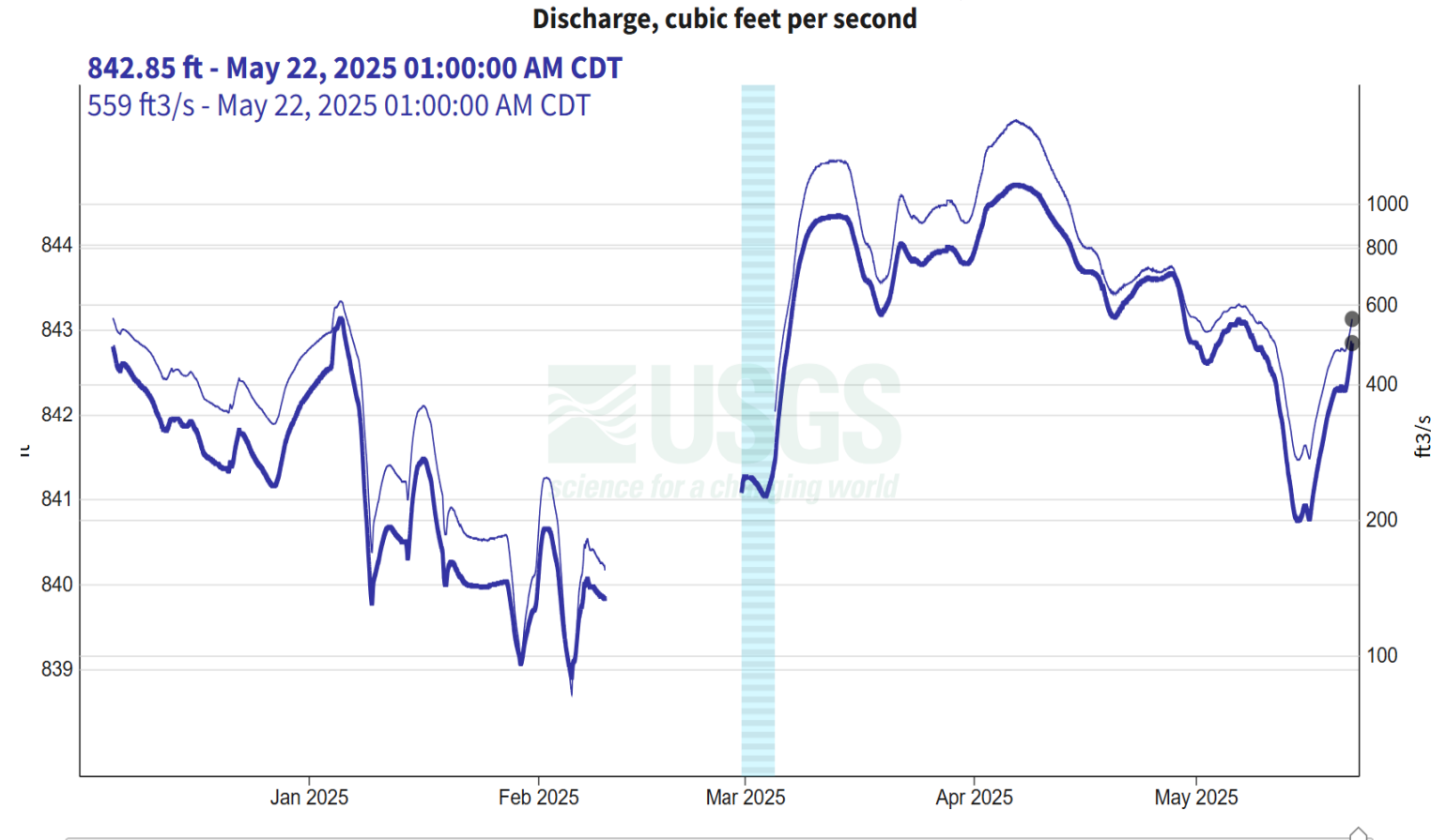
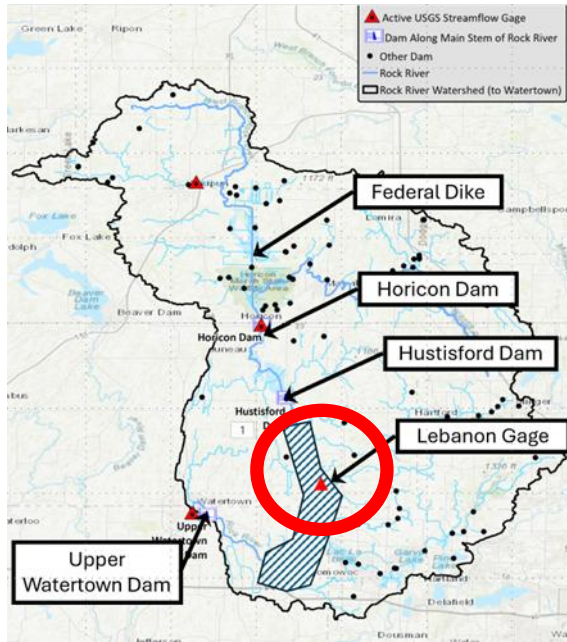
Water Level at
Hustisford
Sept 2024-
March 2025

Discharge at
Hustisford
Sept 2024-
March 2025



What happened Downstream?

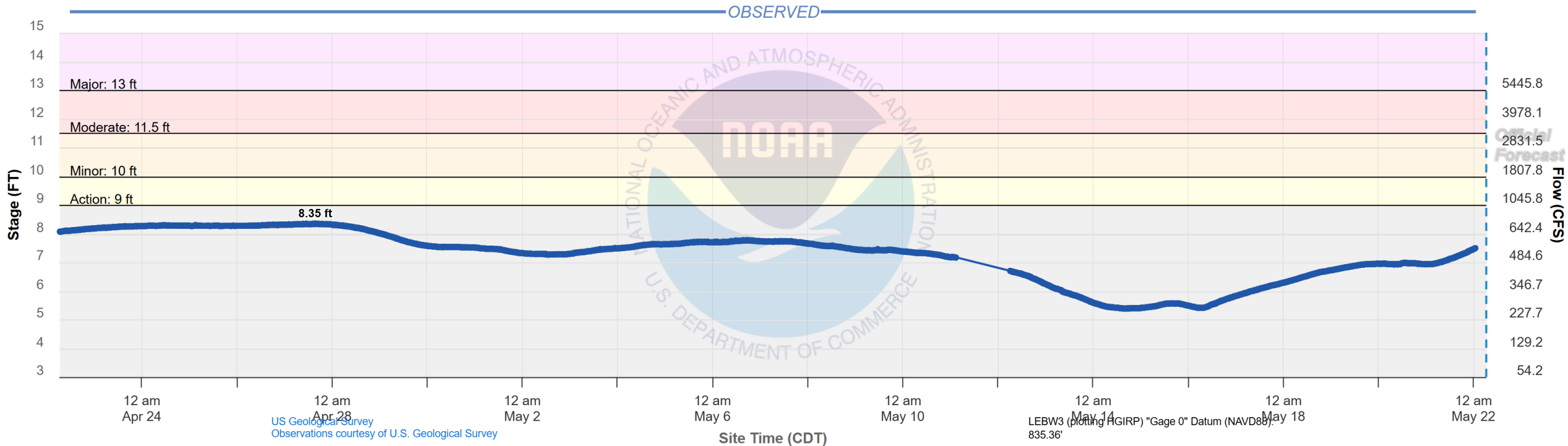
Flows and stage,
USGS Lebanon gage



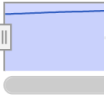
National Weather Prediction Service Flood Action Levels

Latest observed value: 7.49 ft
1:00 AM CDT 22-May-2025
Flood Stage is 10 ft

Rock River at Lebanon-3 E-Hwy MM bridge
NWSLI: LEBW3, Reach ID: 13292364



Graph Created: (06:29 AM CDT May 22 2025) - Forecast Issued (06:29 AM CDT May 22 2025)



Zoom 1c

CATEGORY		STAGE
>	Major Flooding	13 ft
>	Moderate Flooding	11.5 ft
>	Minor Flooding	10 ft
>	Action	9 ft



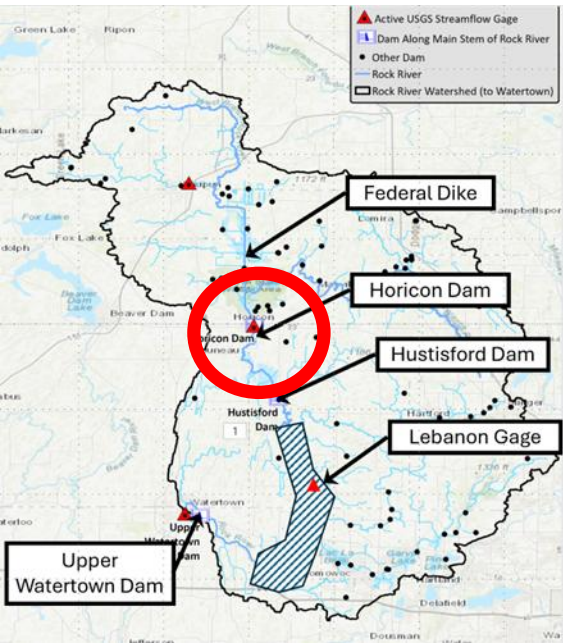
22 May / 2025

Ixonia Staff Gage



What happened upstream?

DNR Horicon Dam



Rock River at Horicon, WI - 05424057

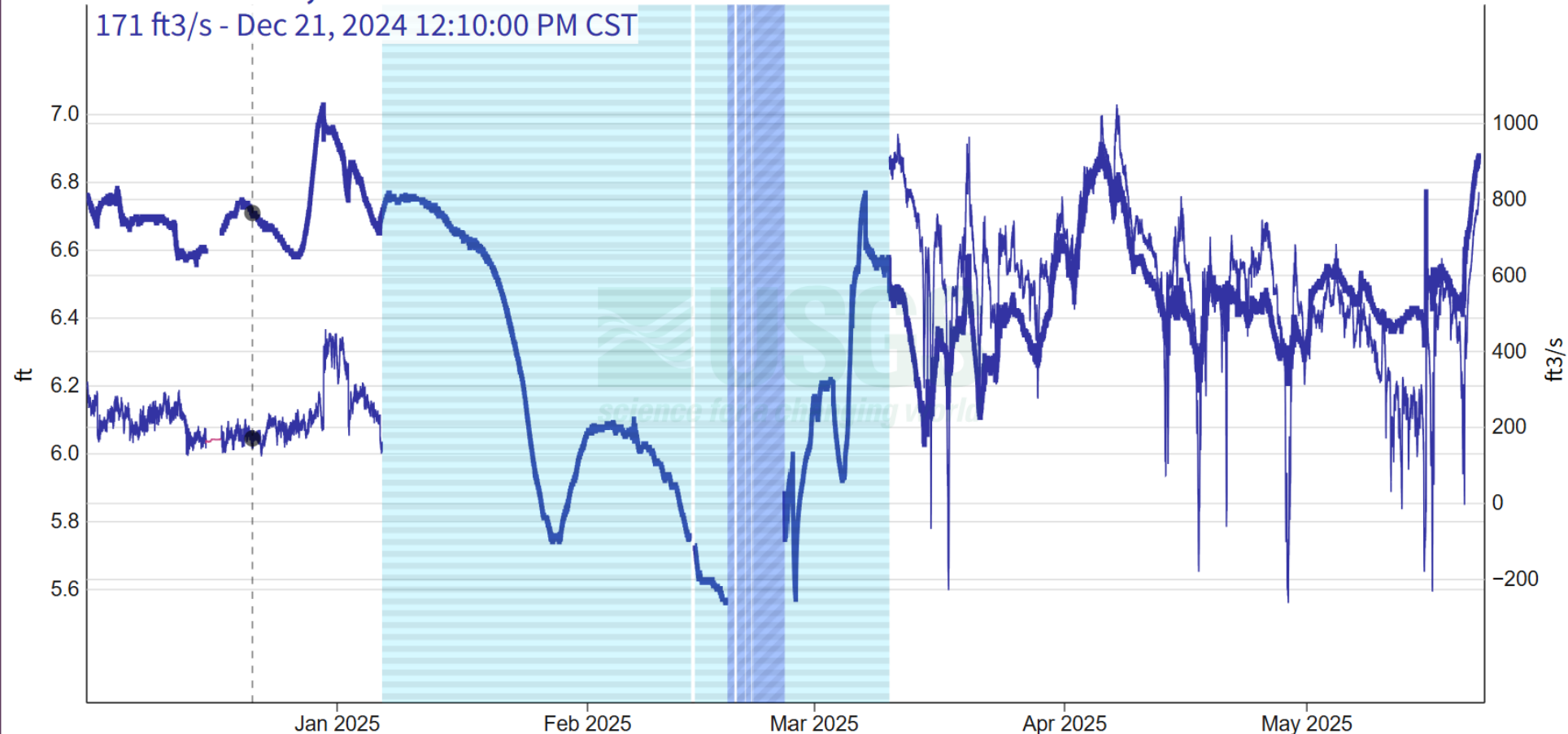
[Subscribe to WaterAlert](#)

- using custom time span -
December 1, 2024 - May 22, 2025

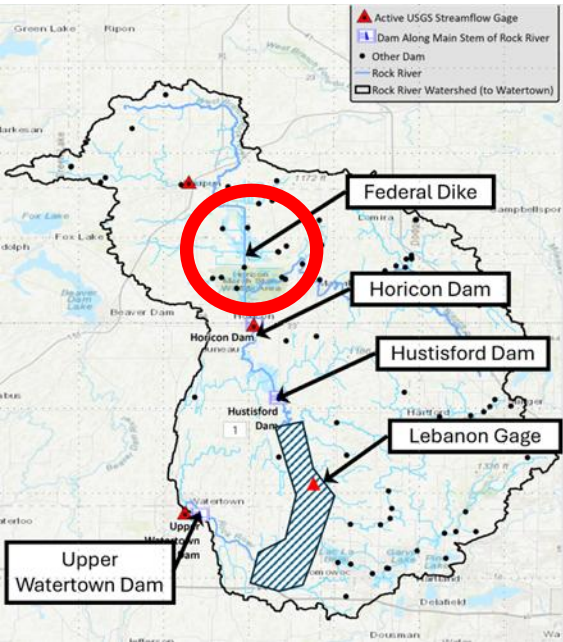
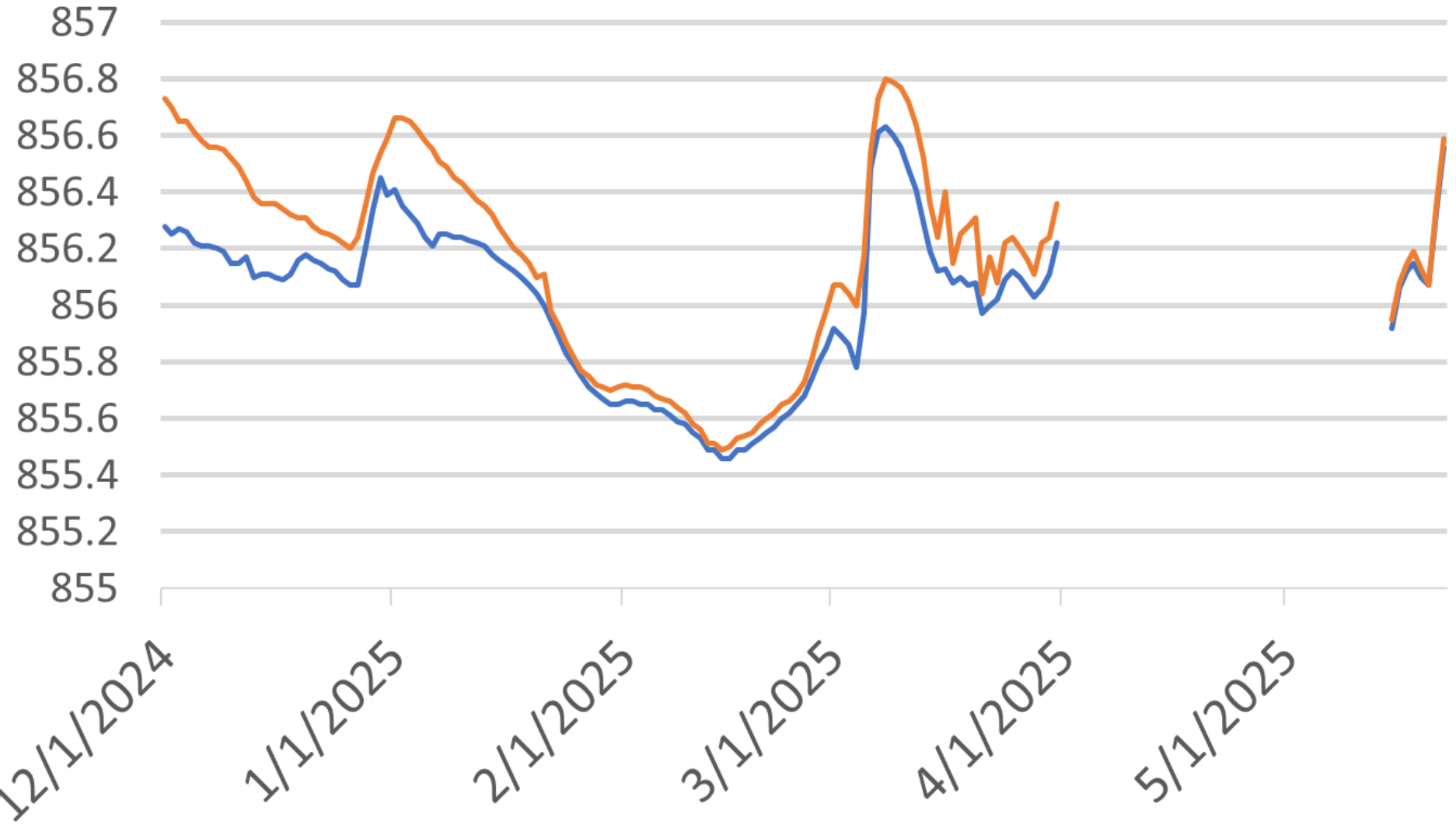
Gage height, feet
Discharge, cubic feet per second [PRIMARY, Q-Vel]

6.71 ft - Dec 21, 2024 12:10:00 PM CST

171 ft³/s - Dec 21, 2024 12:10:00 PM CST



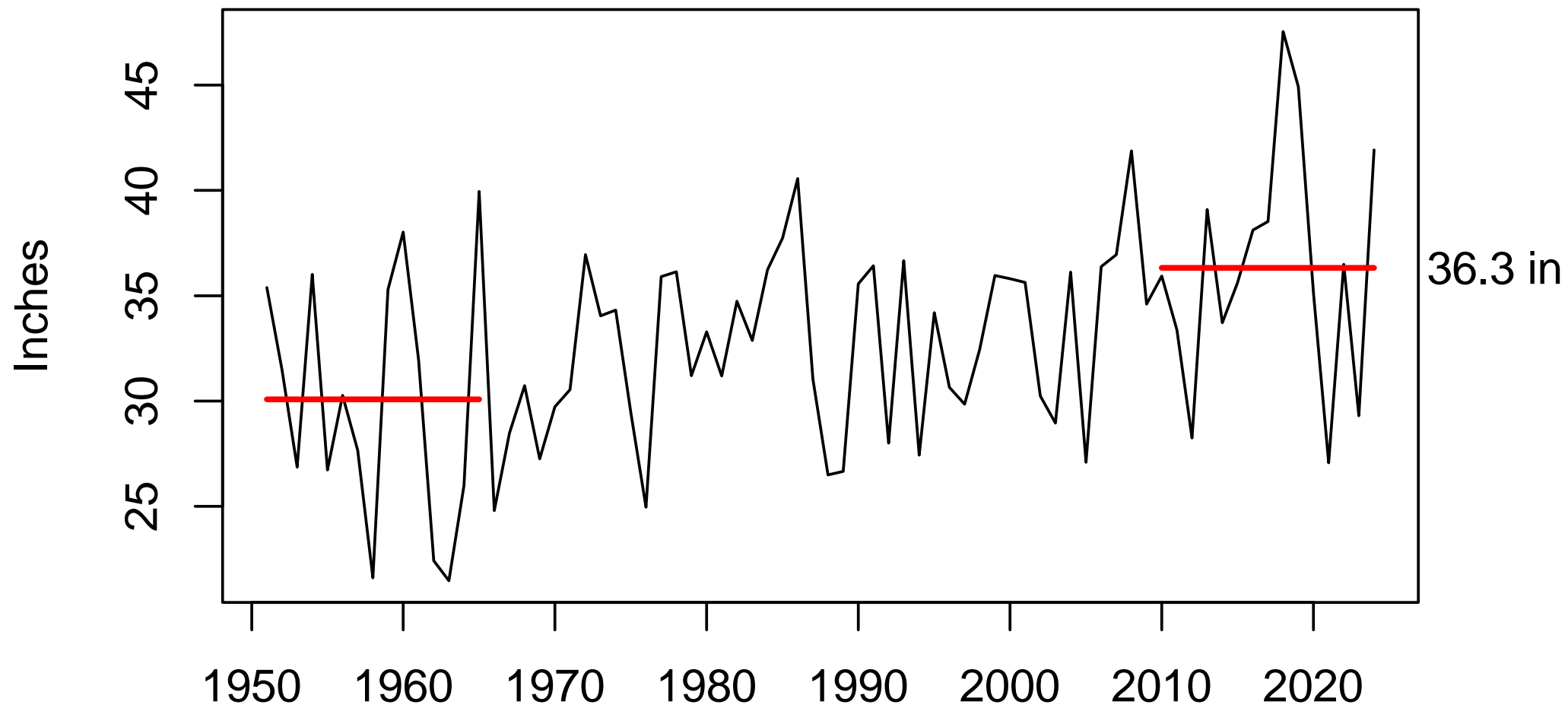
Federal Dike Water Level Upstream and Downstream Dec 2024 - May 2025



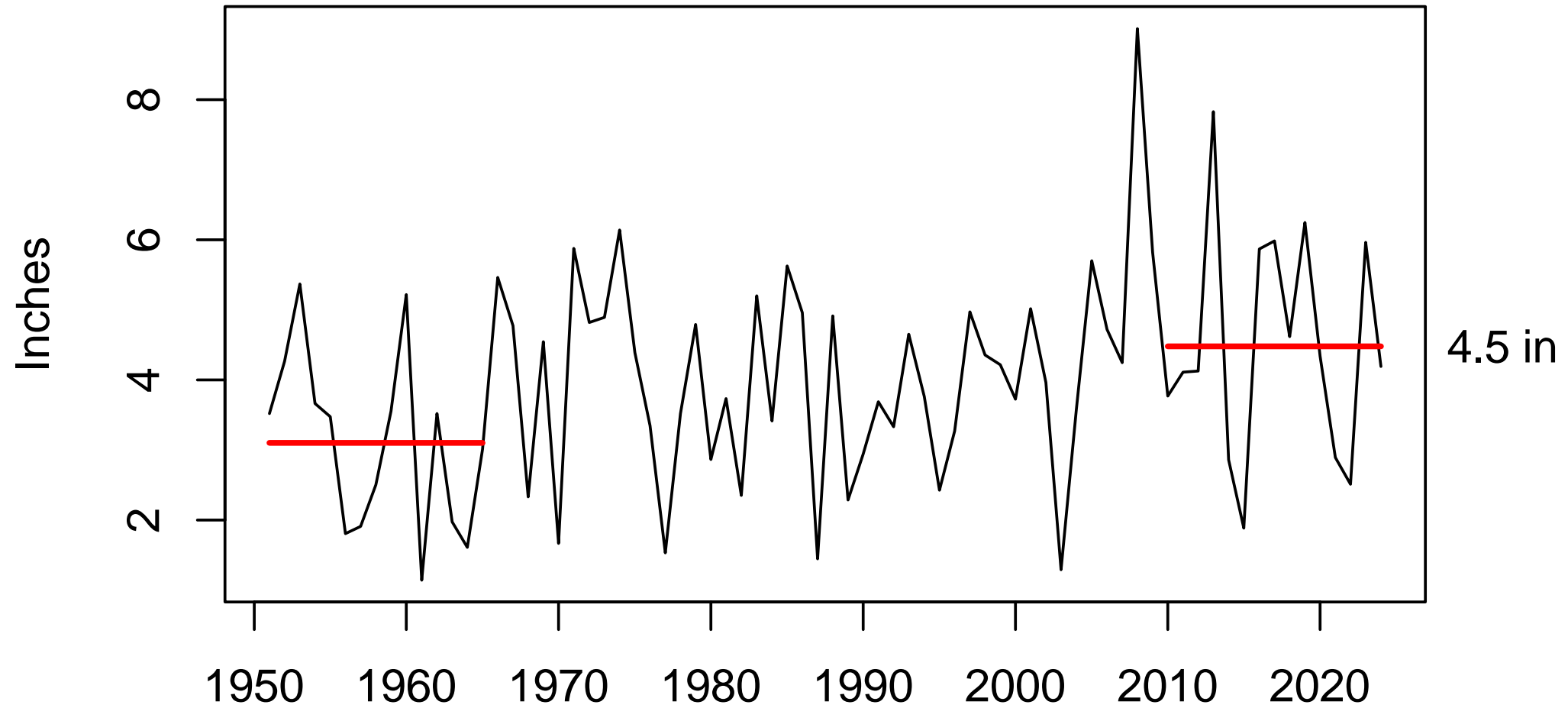
Update on UW-Madison RPI activities

- Met with NWS flood forecasting staff
- Analysis of trends in Precipitation
- Hydraulic analyses will start this summer

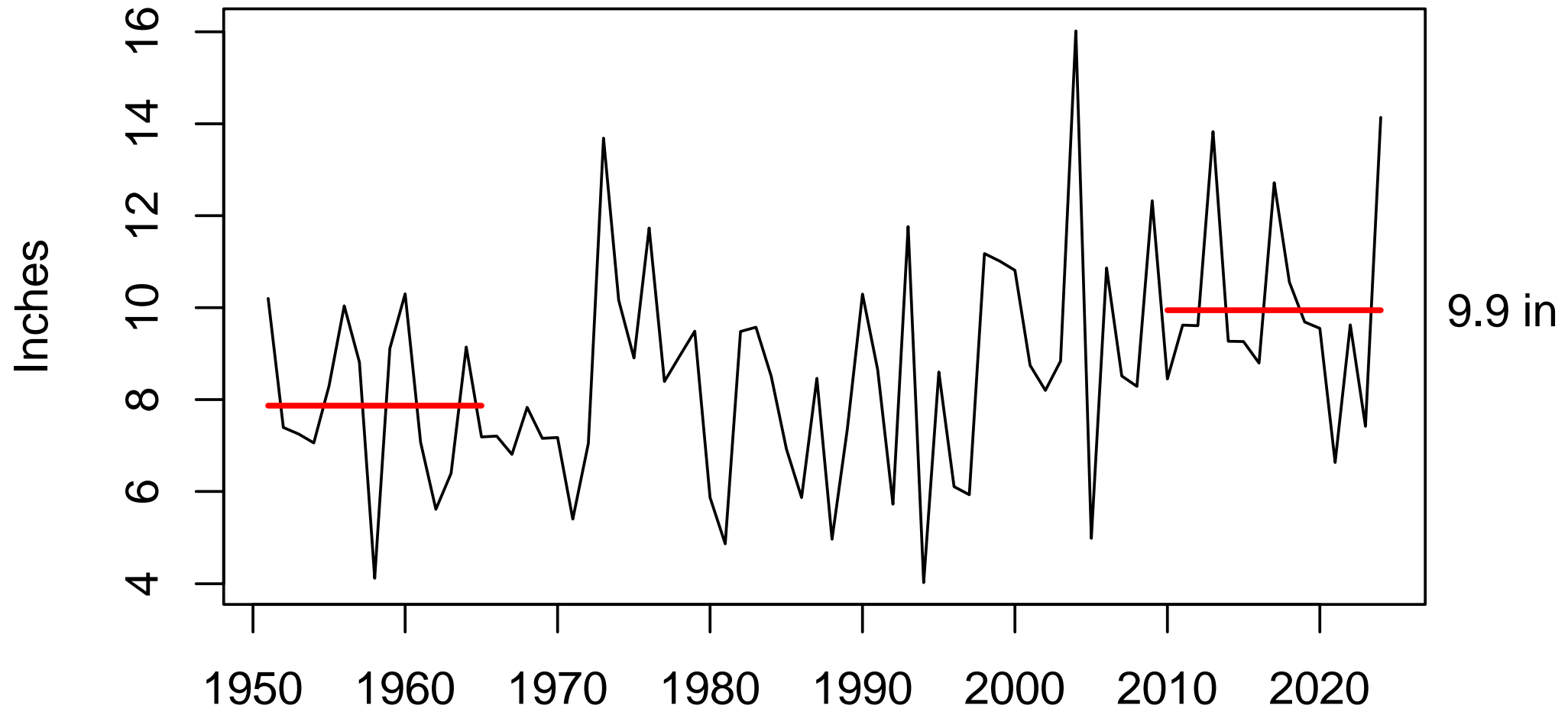
Annual Precip over Rock River Basin



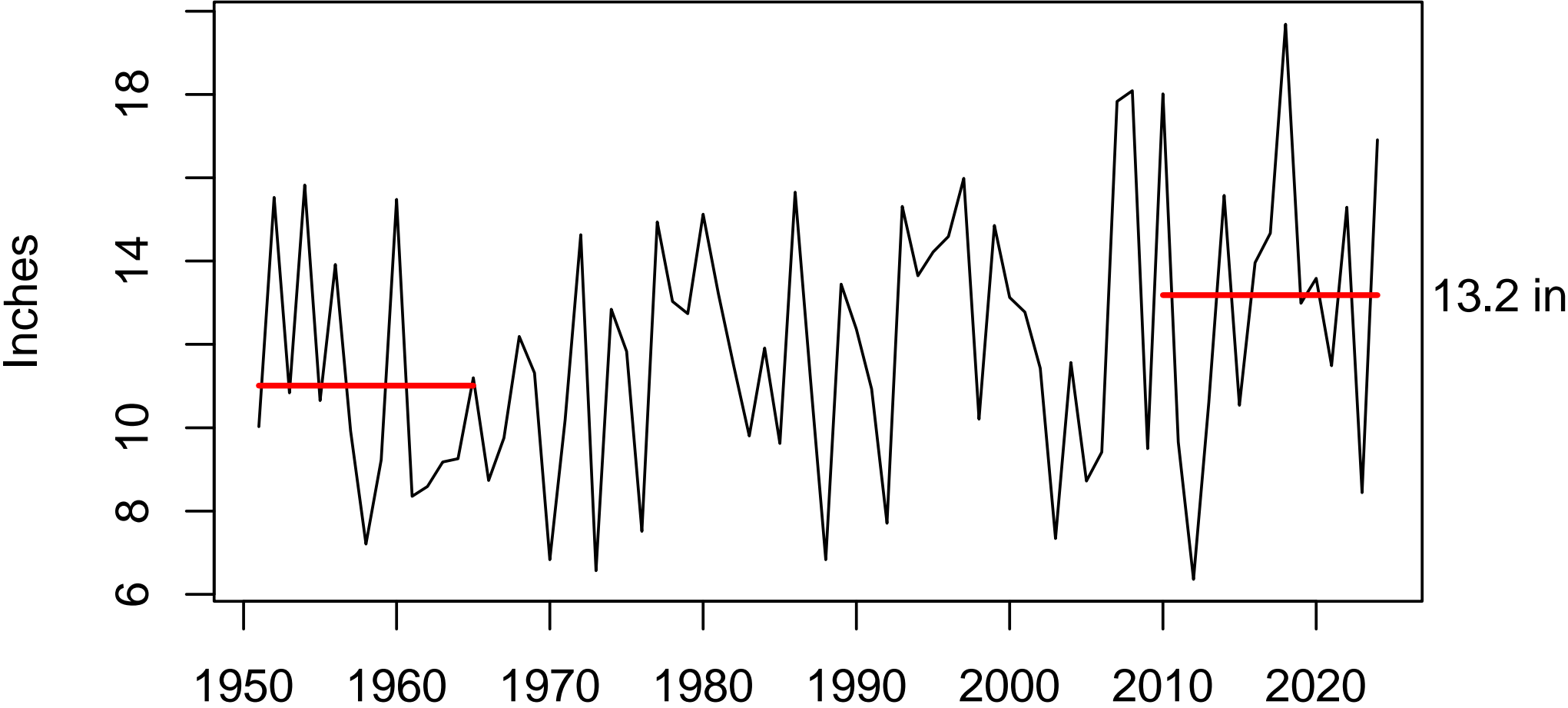
Winter Precip over Rock River Basin



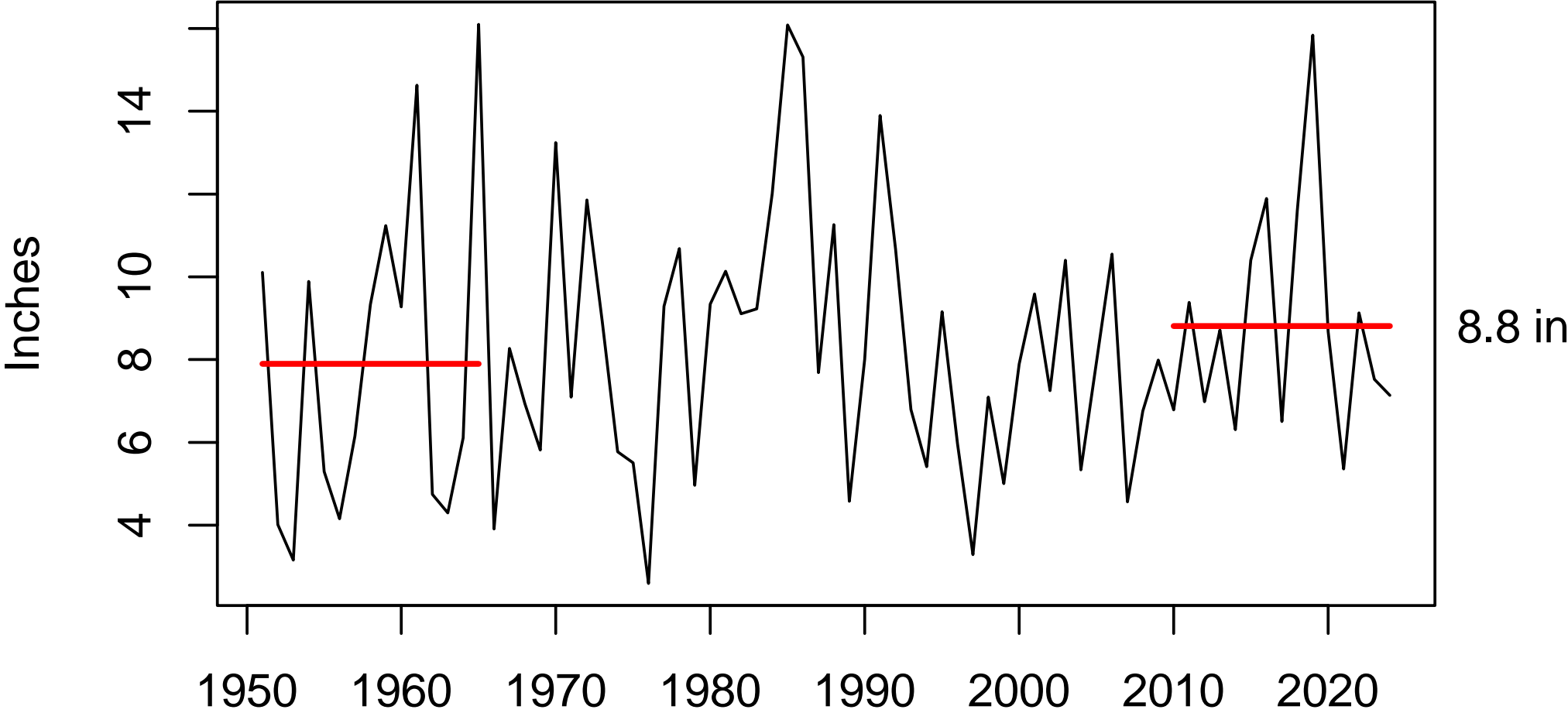
Spring Precip over Rock River Basin



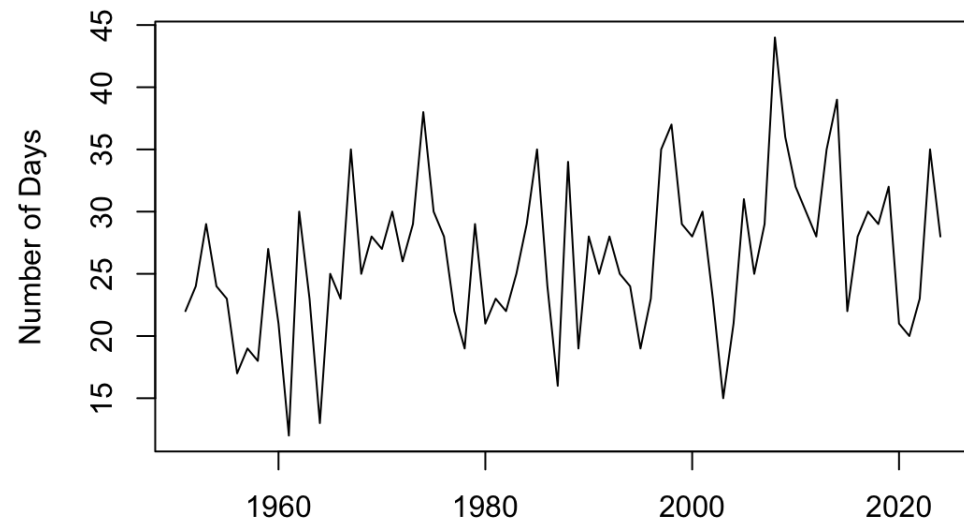
Summer Precip over Rock River Basin



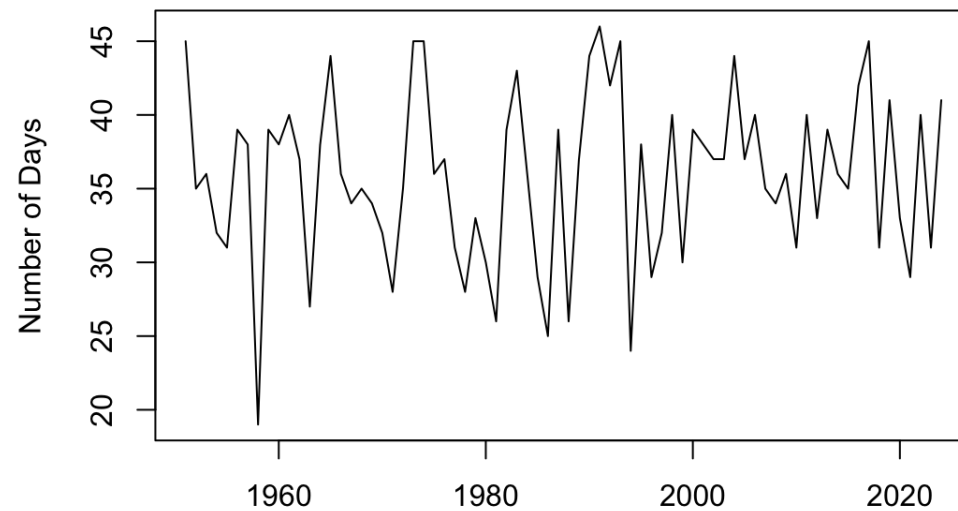
Fall Precip over Rock River Basin



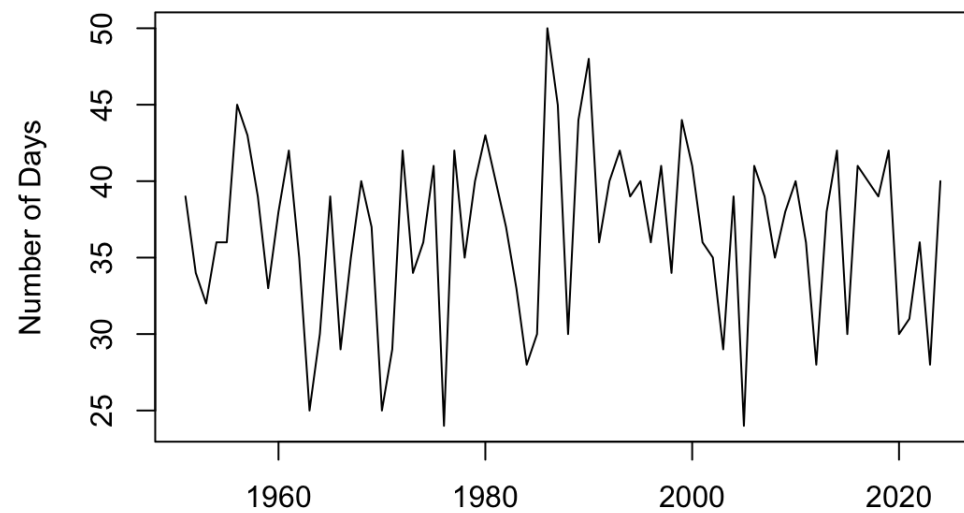
Winter How Many Days Does it Rain



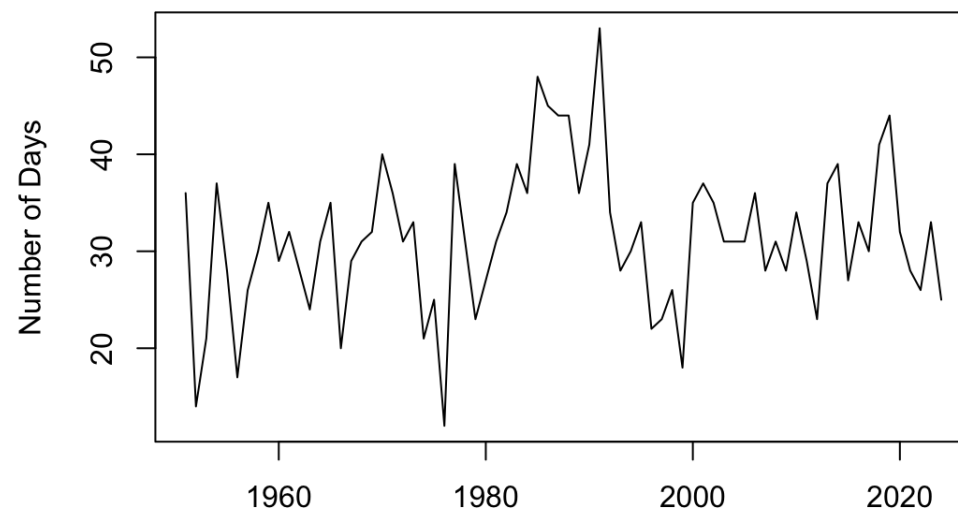
Spring How Many Days Does it Rain



Summer How Many Days Does it Rain



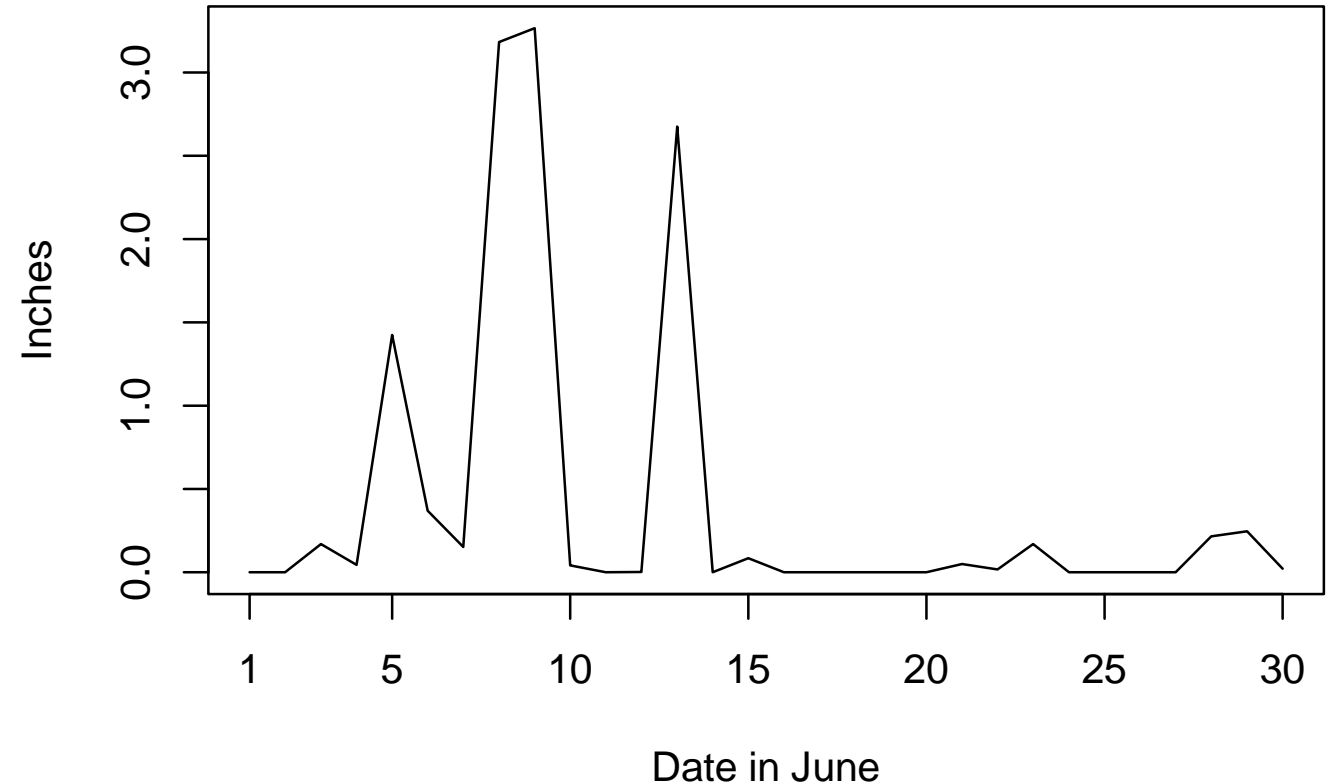
Fall How Many Days Does it Rain



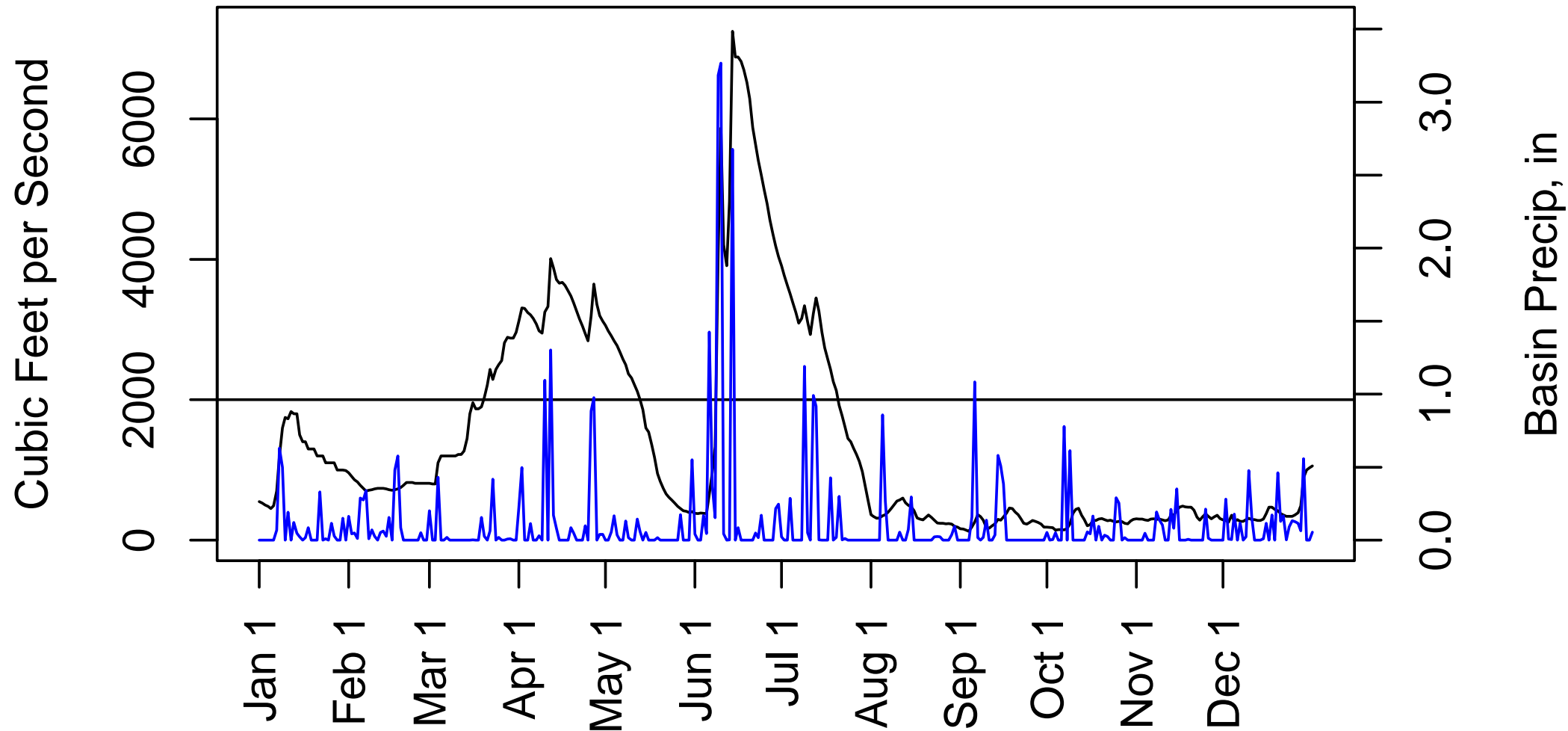
Summer 2008 flood

- June 5-13 got 11.1 inches of rain
- 85% of expected summer precip
- 1/3 of total annual precip

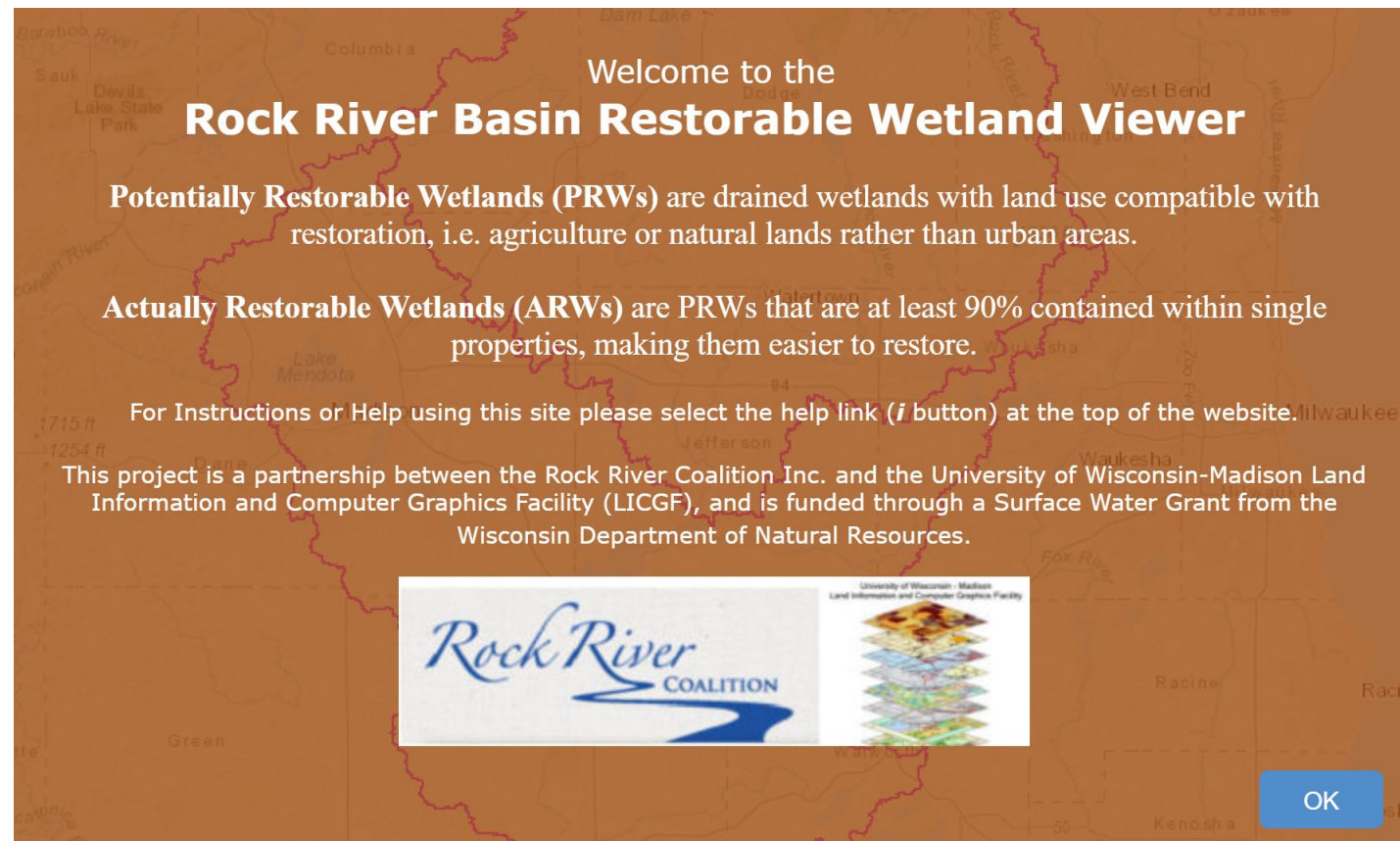
June 2008 Precip over Rock River Basin



Watertown Gage and Basin Precip, 2008



Further Discussion of Watershed Storage to manage runoff

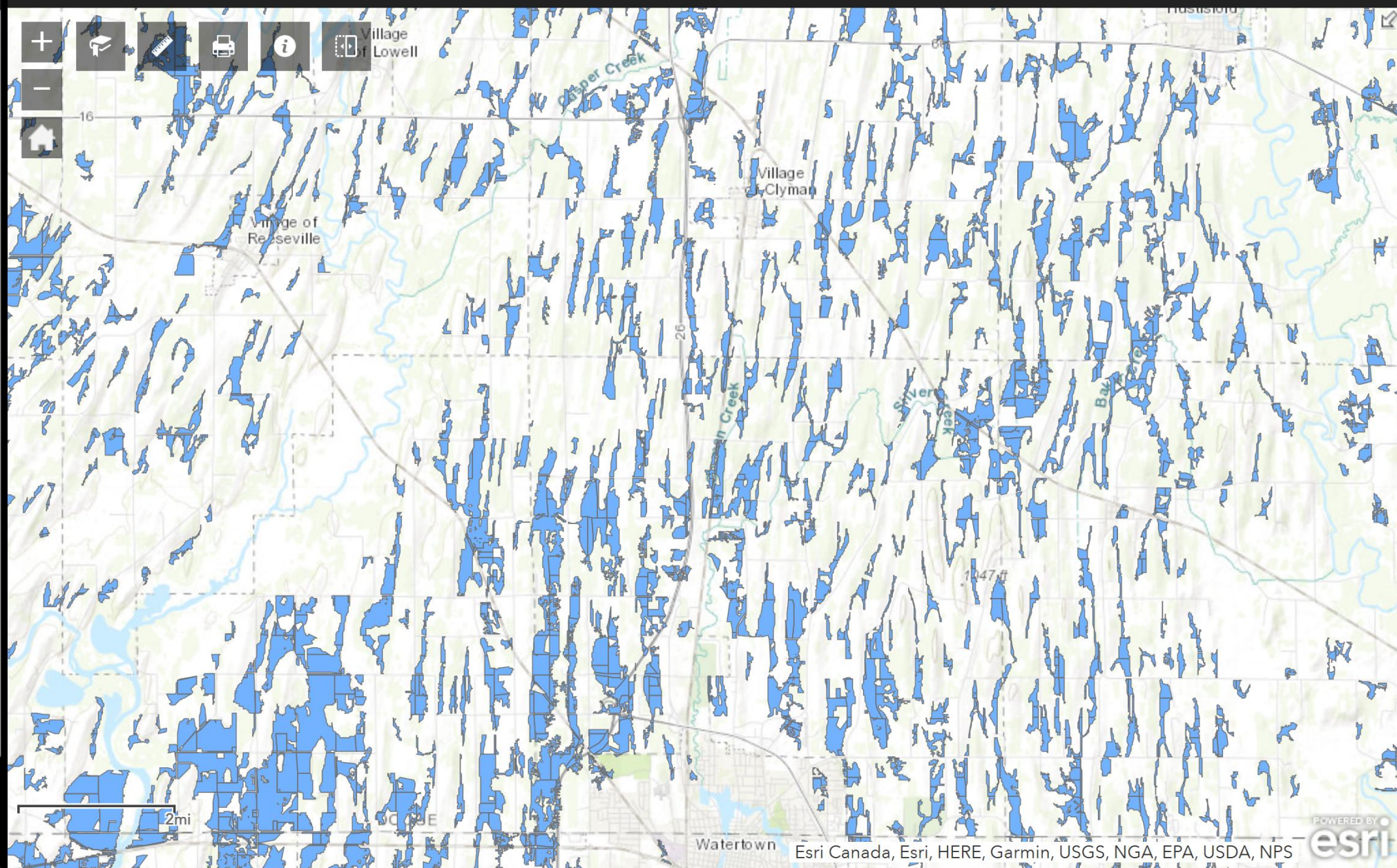


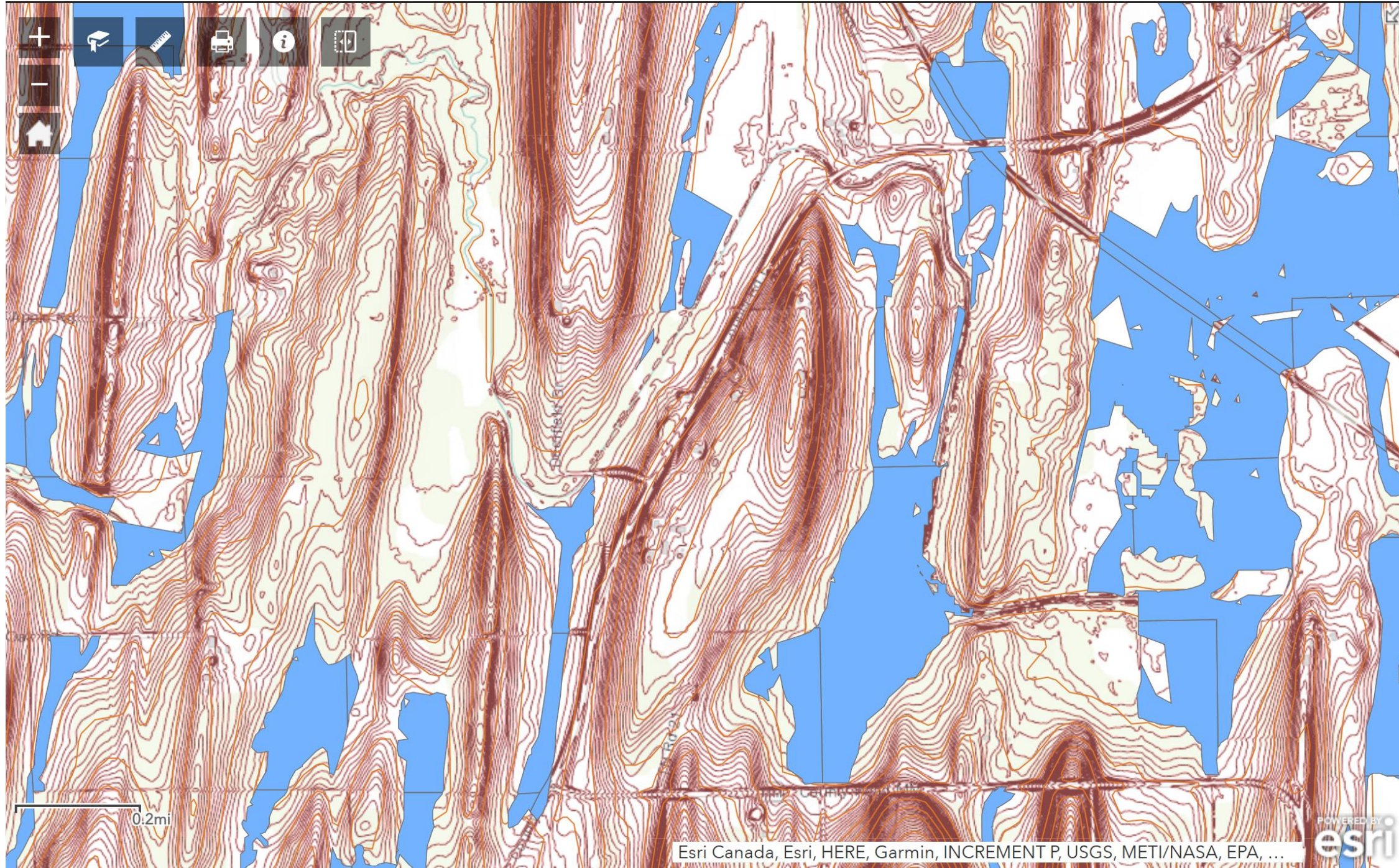
All Layers

Water

Layers

- ☐ 24k Hydro Ditches ...
- ☐ 24k Hydro Stream Order ...
- ☐ Huc 10 Watersheds ...
- ☐ Huc12 Watersheds ...
- ☐ Cities Towns Villages (MCD) ...
- ☐ Counties ...
- ☐ Drainage Districts ...
- ☐ ARWs ...
- ☒ PRWs ...
- ☐ ARW Properties ...
- ☐ PRW Properties ...
- ☒ Rock River Watershed ...
- ☒ 10ft Contours ...
- ☐ NRCS Soils ...
- ☒ 2ft Contours ...





Identifying storage opportunities

- Hydrologic opportunity
- Landowners
- Programs available

Confirming subcommittee members, activities, and timeframe for 2025:

1. Define analysis approach and assistance programs to increase watershed storage to reduce flood runoff
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Next meetings

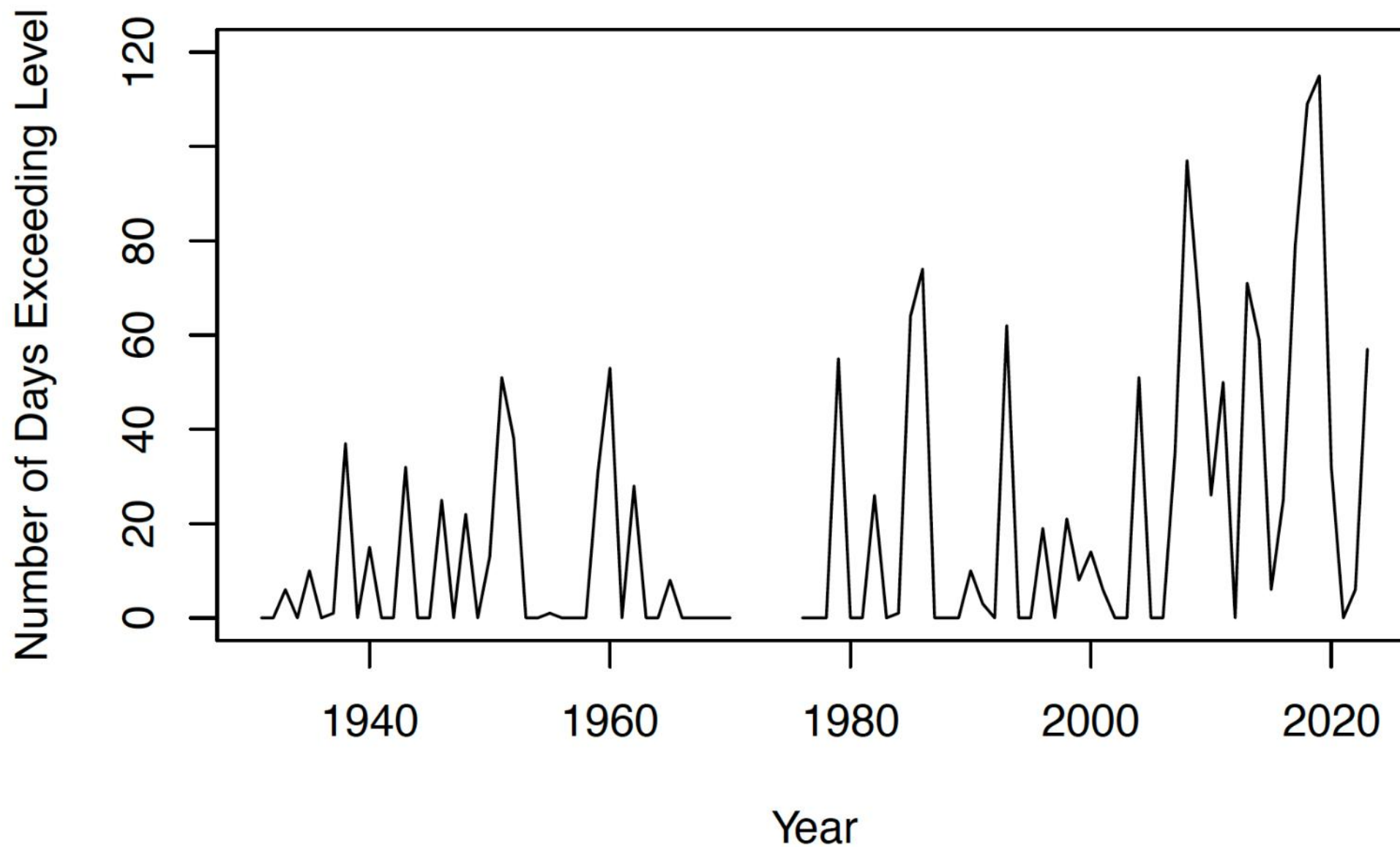
1. Storage group
2. UW RPI Group
3. Operating Order Group
4. Whole Working Group

Some observation on trends in flow on the Rock River

- USGS Gage at Watertown, record 1931-present
- Action level for flood response: 4 ft, ~2000cfs Minor lowland flooding in rural areas around Watertown
- How to quantify how the river is changing?
- Use “Action Levels” describing flooding conditions
- Changes in seasons of high flow through the decades

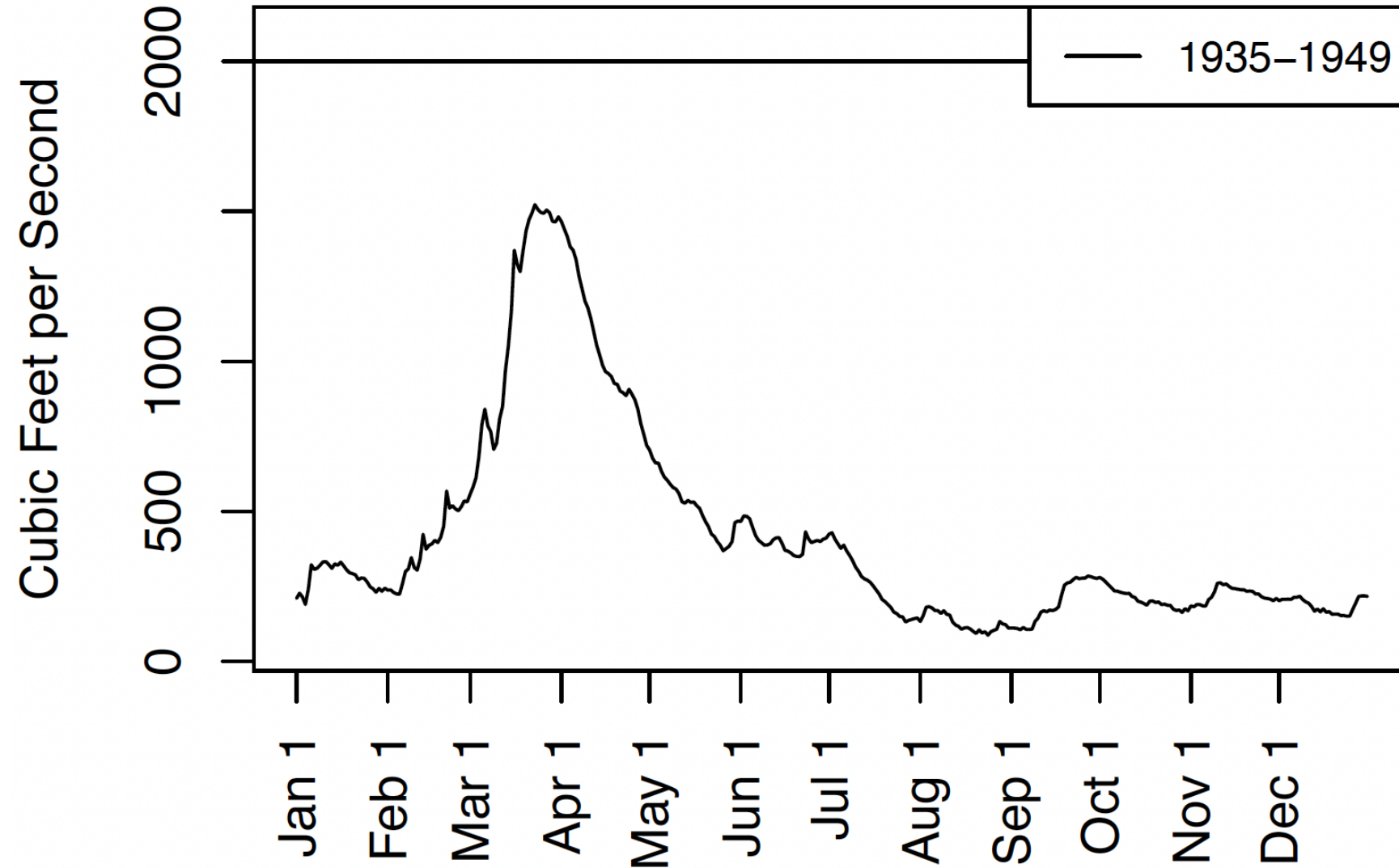
Rock River at Watertown

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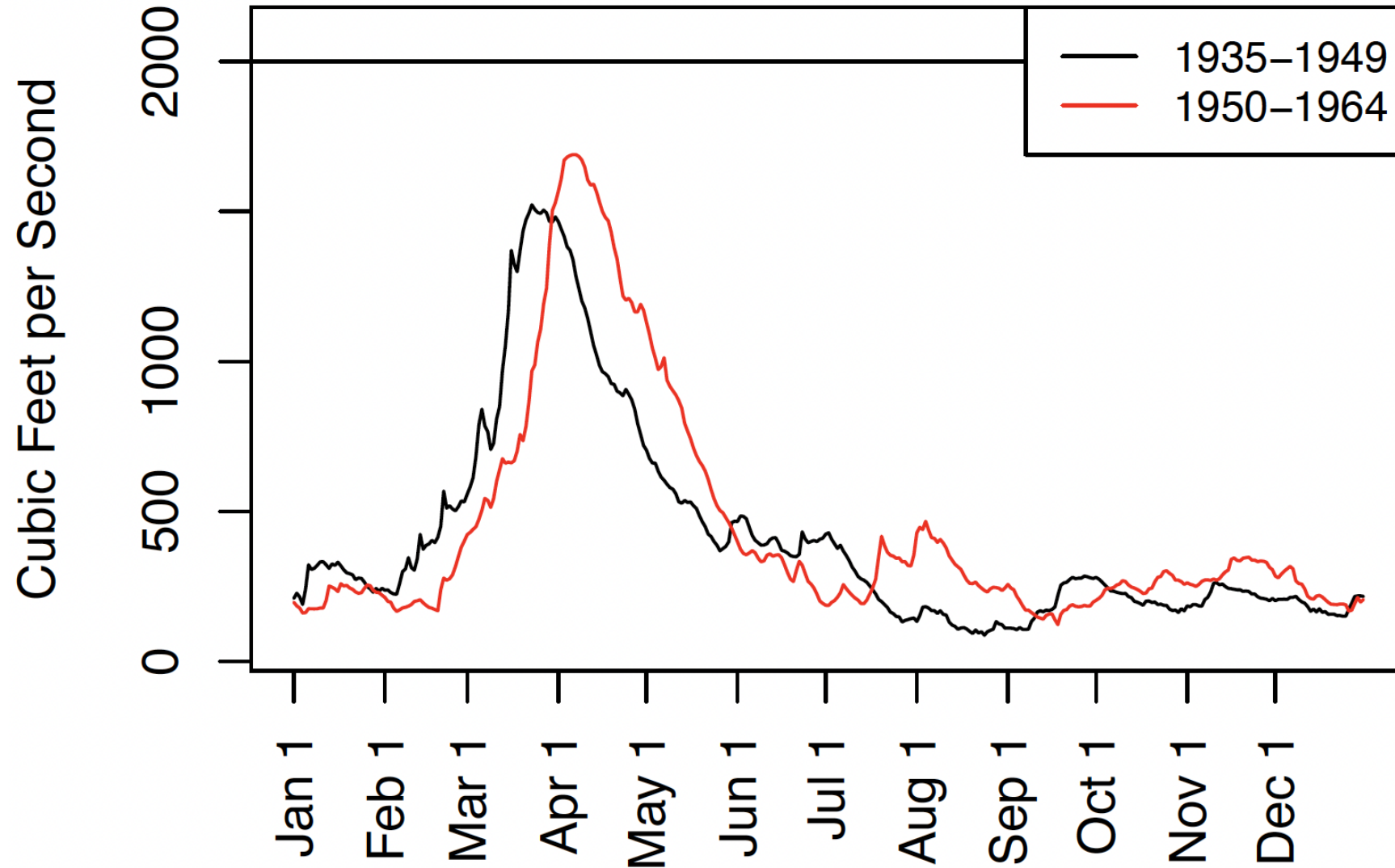
Rock River at Watertown

Average Daily Flow recalculated every 15 years



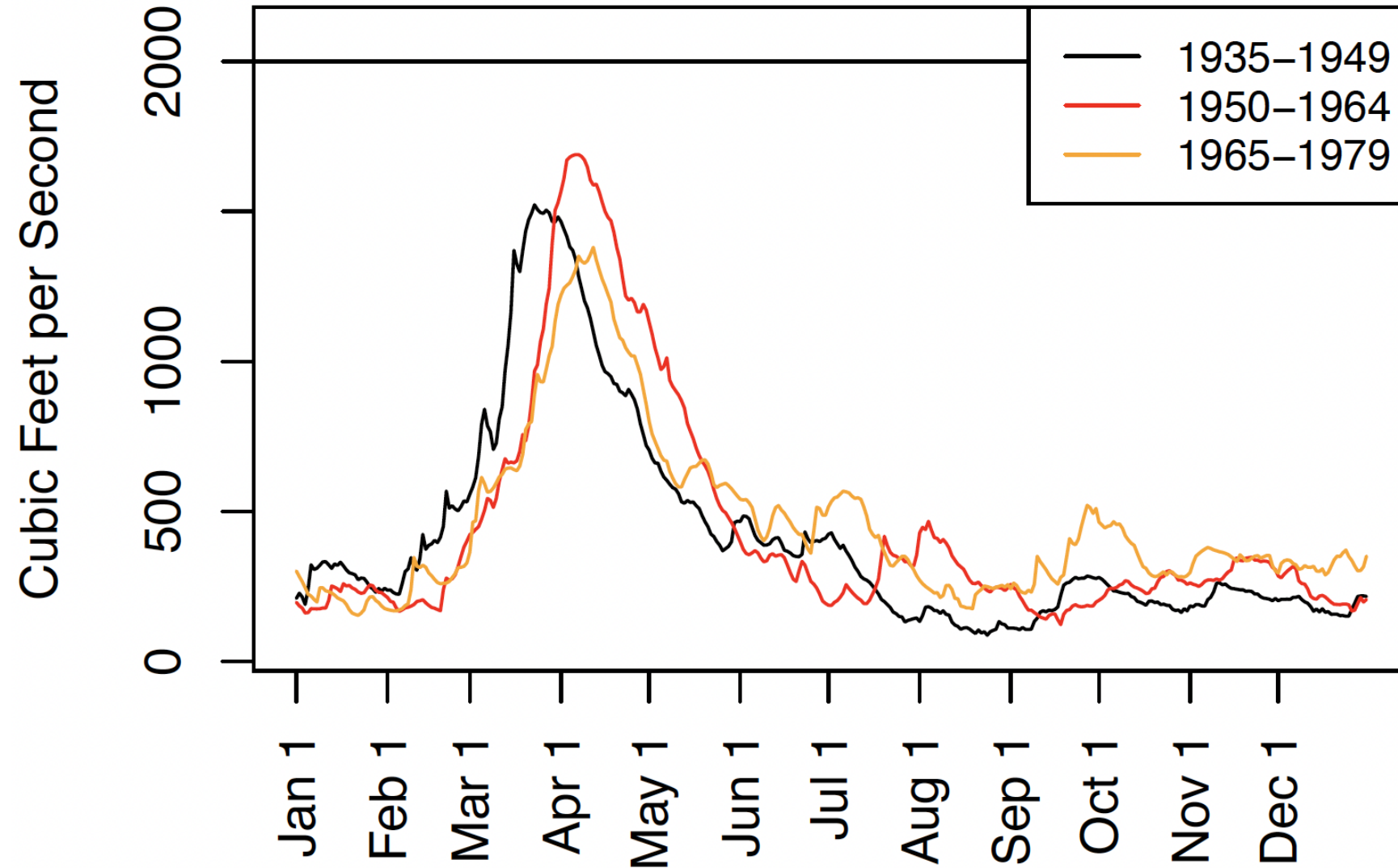
Rock River at Watertown

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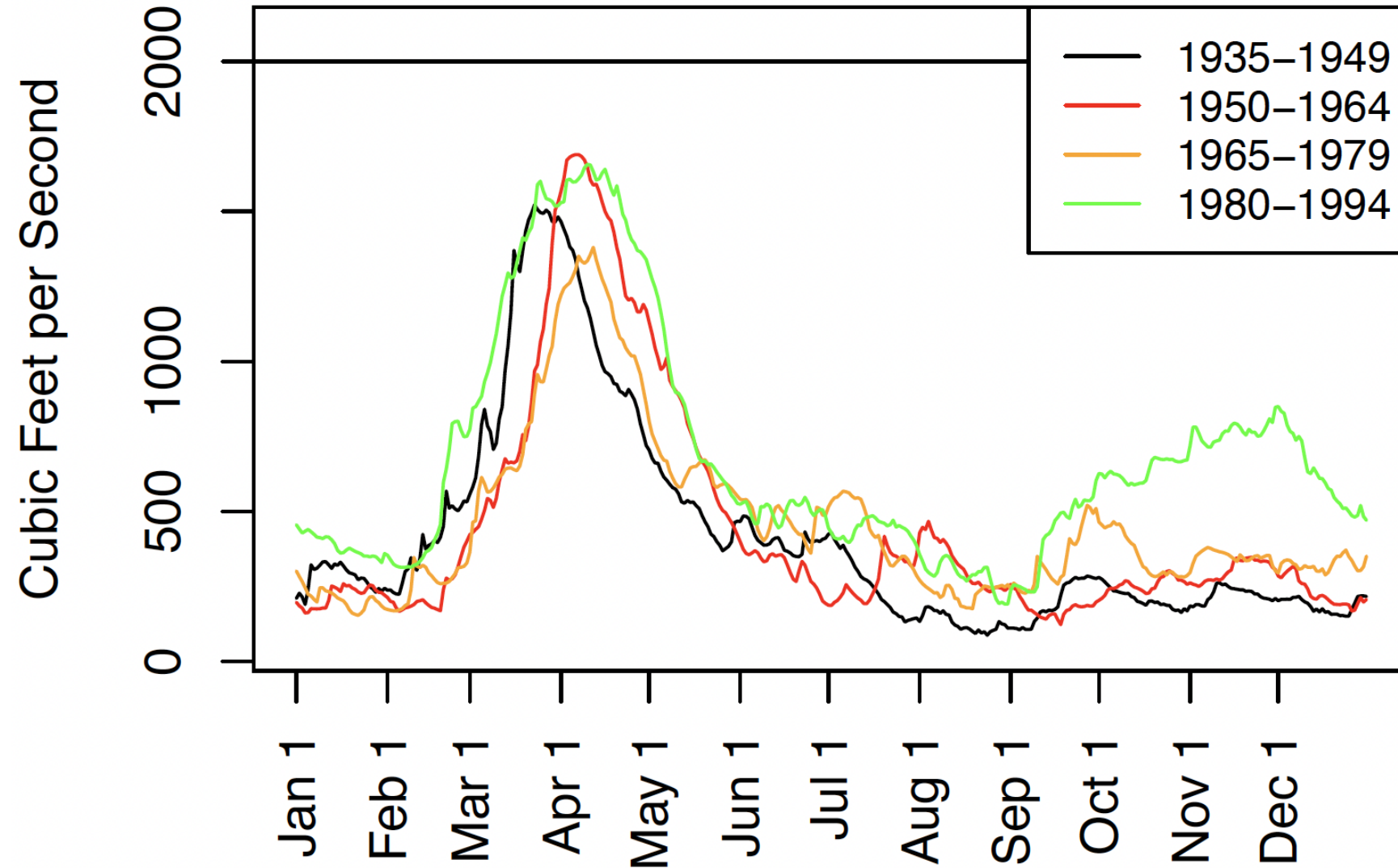
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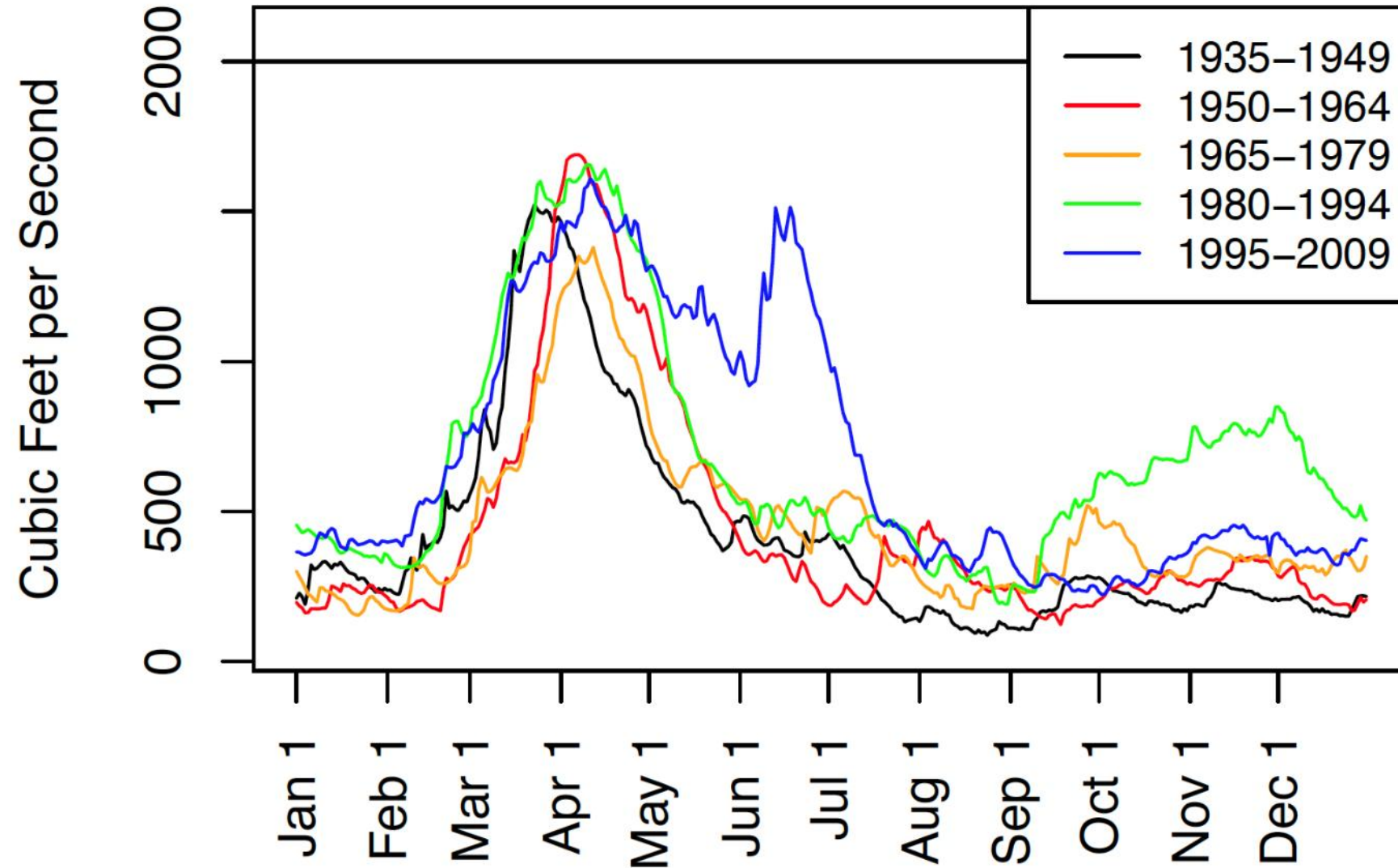
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