



Role of NWS La Crosse with Monroe County River Gages

FEBRUARY 1ST, 2023

JORDAN WENDT & MOLLY PETERS

NATIONAL WEATHER SERVICE (NWS) – LA CROSSE

Who Are We?

- ▶ Jordan Wendt

- ▶ Joined NWS La Crosse Fall 2022 as new Service Hydrologist
- ▶ Previously spent 4 years at the NWS office in Marquette MI
 - ▶ Prior to Marquette, spent some time with the USGS as a Hydrologic Technician in Tulsa, OK

- ▶ Molly Peters

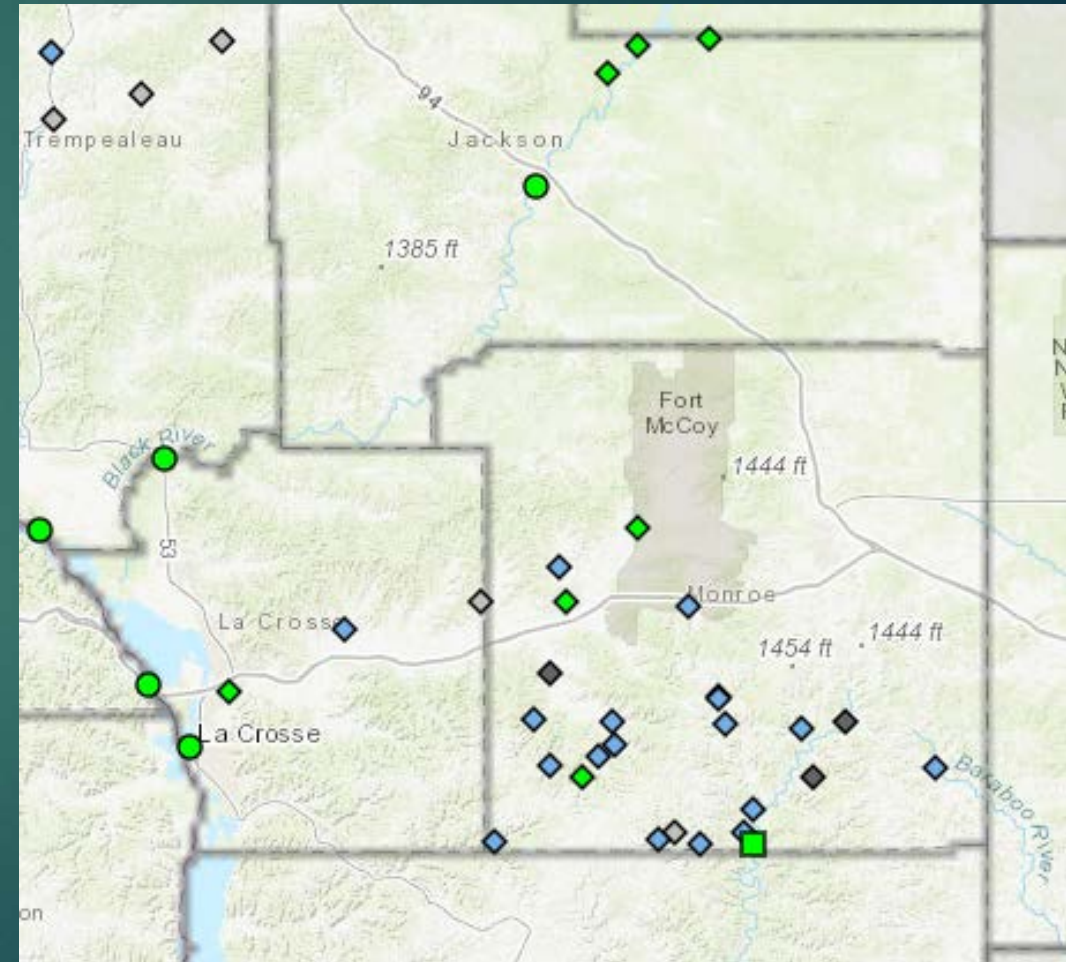
- ▶ Joined NWS La Crosse in Fall 2018
- ▶ Serves as Assistant Hydro Program Manager at NWS La Crosse

National Weather Service's Mission

- ▶ National Weather Service's Mission Statement
 - ▶ Provide weather, water and climate data, forecasts, warnings, and impact-based decision support services for the protection of life and property and enhancement of the national economy.
- ▶ NWS La Crosse accomplishes this mission by engaging with both our partners and the general public.

Monroe County River Gages

- ▶ 27 Total Gages
 - ▶ 4 gages provide near real-time precipitation data
 - ▶ 25 gages provide near real-time river depth



Where Does the NWS Come into Play?

- ▶ NWS has set up a data feed to collect and broadcast these data feeds to the general public through our AHPS page (Advanced Hydrologic Prediction Service)
- ▶ NWS also is building a website page to plot these data alongside other rivers in SW Wisconsin
 - ▶ https://www.weather.gov/arx/swwi_hydro_monitor
 - ▶ Some of the basins included:
 - ▶ Kickapoo
 - ▶ La Crosse
 - ▶ Little La Crosse
 - ▶ Trempealeau
 - ▶ Black
 - ▶ Grant/Platte

Ongoing Work on SW WI Monitor Page

- ▶ Collaboration is ongoing between Monroe County and NWS for how to organize and display this webpage, as well as looking into a few additional features
 - ▶ Including adding Monroe County rain gage data
- ▶ By this spring, we hope to have all of the gages and their data hosted on the page
 - ▶ This should include webcam imagery from most of these gages to supplement USGS webcam imagery

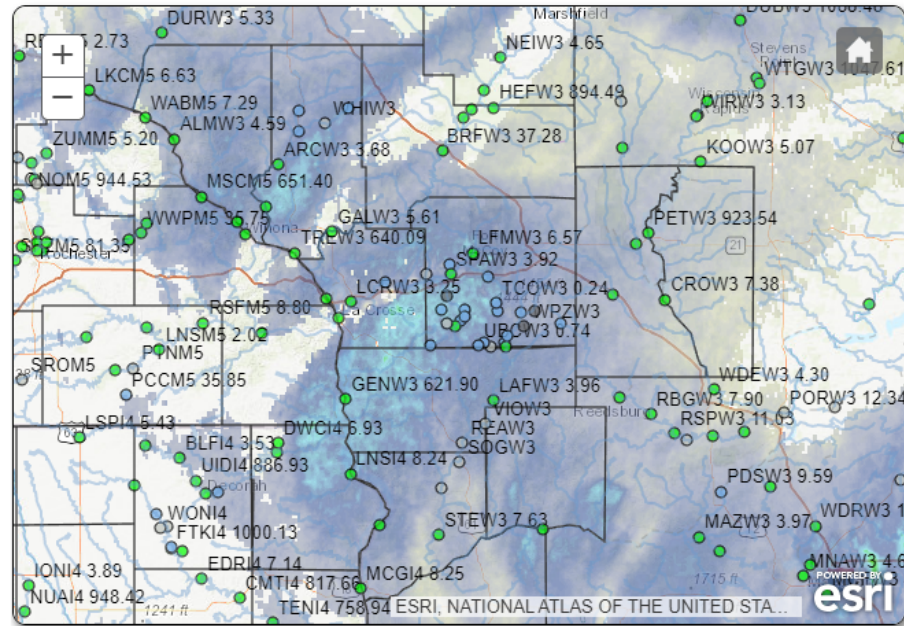
Southwest Wisconsin Hydrology Monitor

Weather.gov > [La Crosse, WI](#) > Southwest Wisconsin Hydrology Monitor

La Crosse, WI
Weather Forecast Office

[Current Hazards](#) [Current Conditions](#) [Radar](#) [Forecasts](#) [Rivers and Lakes](#) [Climate and Past Weather](#) [Local Programs](#)

Click anywhere on the map for the forecast for that location. Turn "on and off" the various weather parameters using the display options. Hover over a highlighted area to see the hazard.



Map Display Options (Click " > " for legend to display option)

- Radar >
- Rivers >
- River Stages >
- 24 Hour Flood Forecast
- Lightning Density
- Severe Thunderstorm Warnings
- Tornado Warnings
- Flash Flood Warnings >
- Severe Thunderstorm Watches
- Tornado Watches
- Flash Flood Watches >
- Other Flooding Hazards >

AHPs [Hazardous Weather Outlook](#) [Forecast Discussion](#) [Local Hydro Outlook](#)

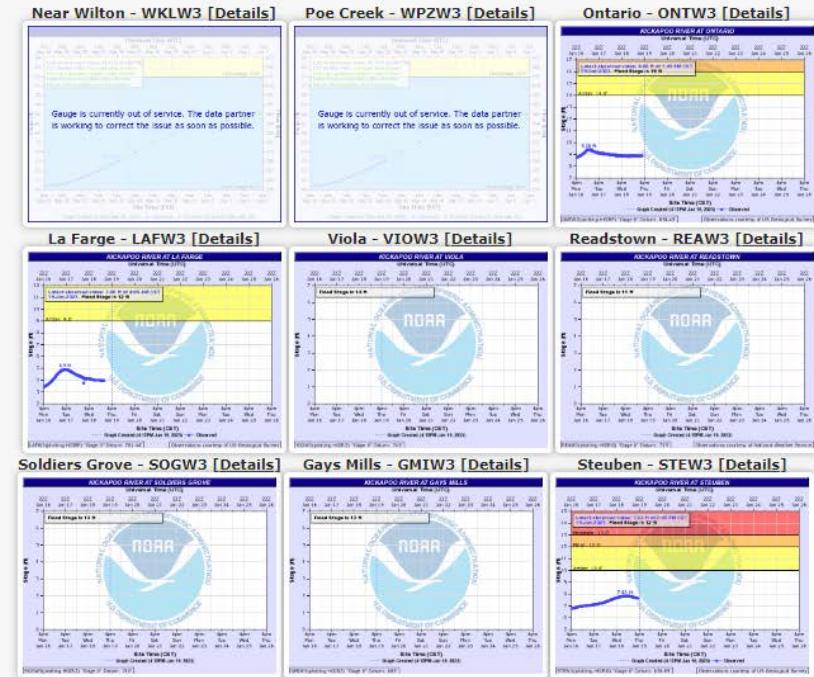
Any questions or comments regarding the information located here, or about the NWS La Crosse's hydrological service area? Please contact the [NWS La Crosse Hydrology Team](#).

Useful Links:

[Latest Soil Moisture Conditions](#)

Latest Watches / Warnings | River Stages / Forecasts | Observations / Rainfall | Outlooks / Rainfall Forecasts | **Kickapoo River** | La Crosse River

KICKAPOO RIVER



Kickapoo River Webcams



(Insert Site) - [Details]

Auto Refresh: OFF



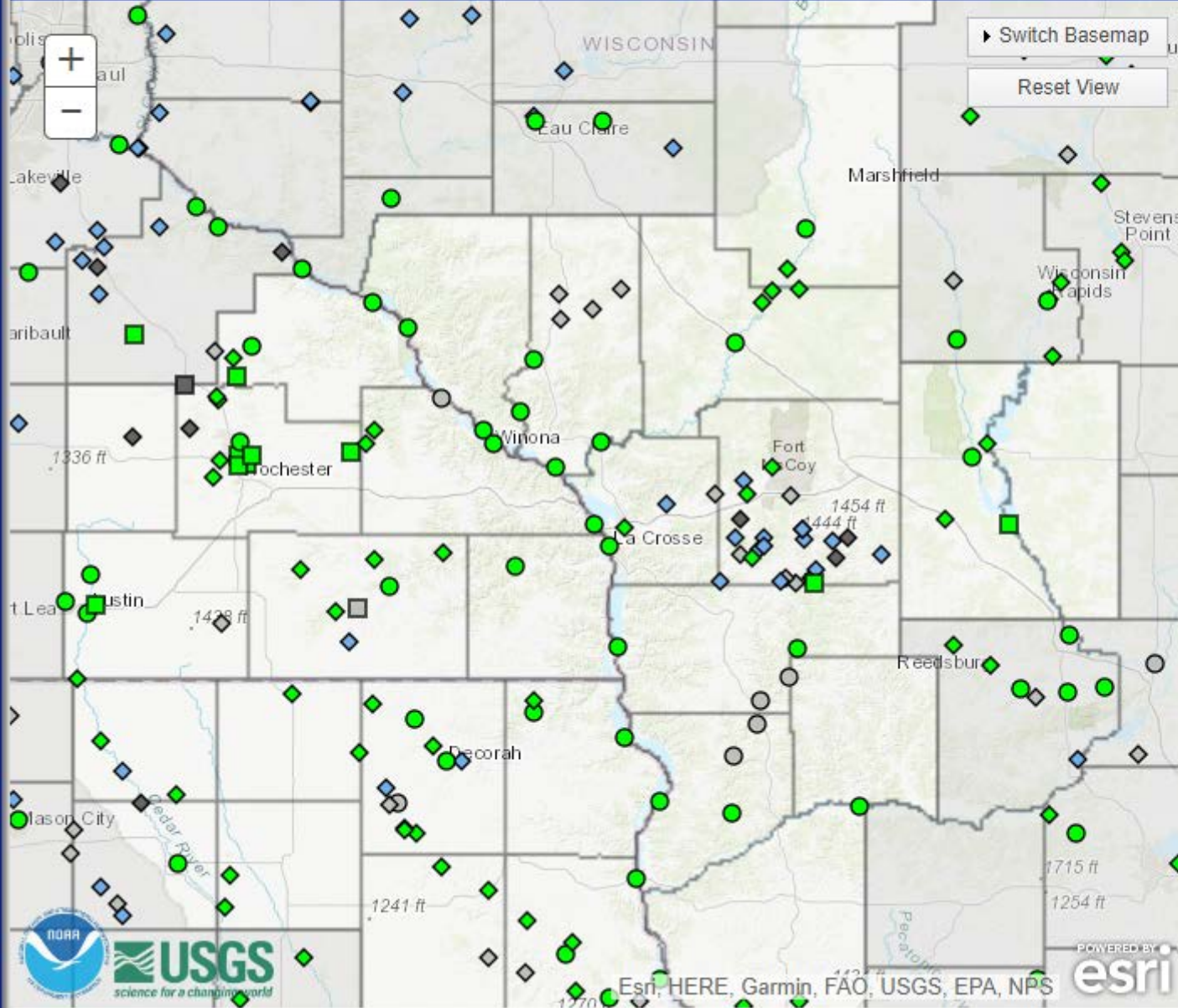
Print this map

Permalink

BOOKMARK



655 total gauges 0 gauges in flood



Switch Basemap

Reset View

- Forecast available
- Probability and forecasts available
- Observations only available
- Major Flooding
- Moderate Flooding
- Minor Flooding
- Near Flood Stage
- No Flooding
- Observations Are Not Current
- Out of Service
- Flood Category Not Defined
- At or Below Low Water Threshold

Last map update:
01/19/2023 at 04:46:09 pm CST
01/19/2023 at 22:46:09 UTC

What is UTC time?

Map Help

Disclaimer



How Will the NWS use These Data?

- ▶ Recall NWS mission, “Provide weather, water and climate data, forecasts, warnings, and impact-based decision support services for the protection of life and property and enhancement of the national economy.”
- ▶ Providing arbitrary stage or river depth data covers the water data portion of our mission – but what about the protection of life and property?
- ▶ NWS will finish establishing Action and Flood (Minor, Moderate, and Major where applicable) Stages, impact statements, and photos at each of these sites
 - ▶ Action Stage – River stage that represents where action is taken in preparation for possible hydrologic activity (typically where river exceeds its banks)
 - ▶ Flood Stage – River stage that represents where water causes or threatens damage to property and/or lives

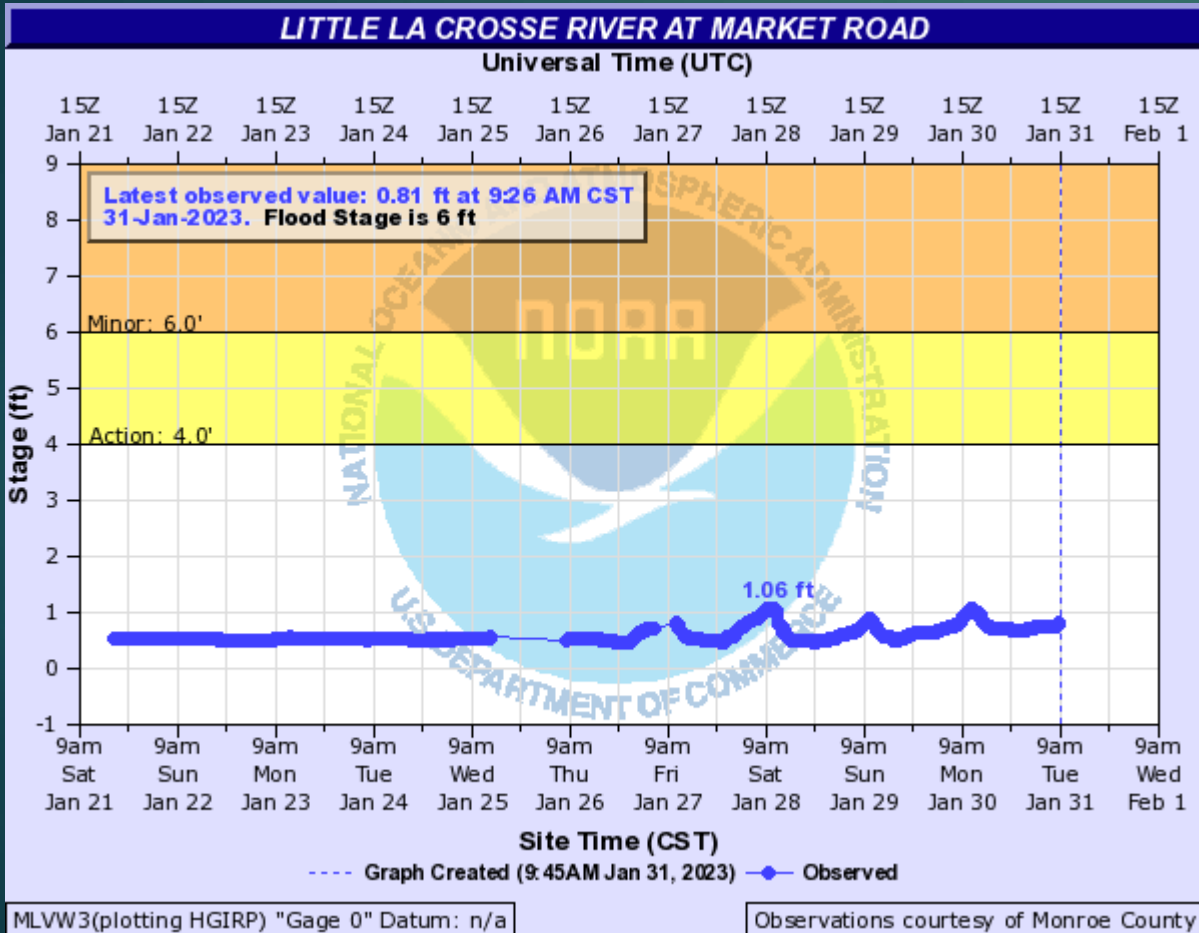
How Are These Stages Determined?

- ▶ Action Stage - Typically when a river escapes its natural banks at its lowest point within the corresponding gage's river reach
- ▶ Minor Flood Stage - Minimal or no property damage, but possibly some public threat (e.g., inundation of roads).
- ▶ Moderate Flood Stage - Inundation of structures and roads near stream, evacuations of people and/or transfer of property to higher elevations.
- ▶ Major Flood Stage - Extensive inundation of structures and roads, significant evacuations of people and/or transfer of property to higher elevations

Monroe Gages, Flood Stages, and Impacts

- ▶ We will survey and establish these values at every location, but...
 - ▶ Most Monroe CCTF gages will only have an Action and Minor Flood Stage
- ▶ This was completed for the first 4* gages installed in Monroe County
 - ▶ WKLW3 - Kickapoo River near Wilton (Lincoln Ave)
 - ▶ MLVW3 - Little La Crosse River near Melvina (Market Rd)
 - ▶ WPZW3 - Poe Creek near Wilton (County Rd Z)
 - ▶ *LLXW3 - Russel Valley Creek near Portland, now Baraboo River at Kendall
 - ▶ Site has been moved and needs to be surveyed again

What Does this Look Like?



Flood Categories (in feet)
Flood Stage: 6
Action Stage: 4

Historic Crests
 Currently none available.

Recent Crests
 Currently none available.

Low Water Records
 Currently none available.



For more information on your flood risk go to www.floodsmart.gov.

Show FEMA's National Flood Hazard Layers



KML

Disclaimer

Latitude/Longitude Disclaimer: The gauge location shown in the above map is the approximate location based on the latitude/longitude coordinates provided to the NWS by the gauge owner.

Flood Impacts & Photos

Collapse

If you notice any errors in the below information, please contact our Webmaster

- 9.39 Water may be flowing over the road and bridge on Lincoln Avenue.
- 6.84 Water starts to flow over the top right bank, upstream of bridge.
- 6.09 Water could approach residents along right bank, downstream of bridge.



Questions?

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