



February 13, 2025  
1:00 PM

# Southern Wisconsin Spring Flood Outlook - 1st of 3

2 / 13 / 2025



National Oceanic and  
Atmospheric Administration  
U.S. Department of Commerce

National Weather Service  
Wisconsin



## Key Messages

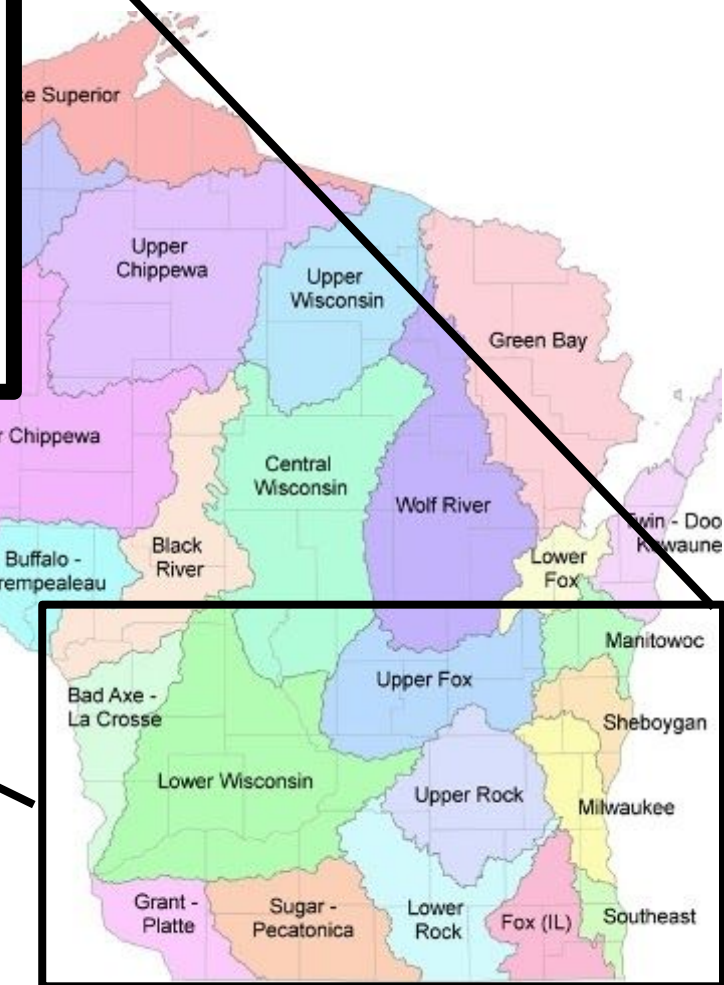
- Spring flood risk is below average in southeast Wisconsin and near average in southwest Wisconsin.
- Flooding is still possible, the underlying risk is not elevated at this time
- The greatest risk will be tied to heavy rain



# Flood Risk by Basin

February 13, 2025  
1:00 PM

River	Flood Risk
Lower Wisconsin	Below Average
Baraboo	Near Average
Pecatonica	Near Average
Sugar	Near Average
Sheboygan	Below Average
Upper Fox	Below Average
Crawfish/Rock/Turtle	Below Average
Lower Fox	Below Average
Root, Cedar Creek, Milwaukee	Below Average





# Flood Risk Factors

February 13, 2025  
1:00 PM

Flood Risk Factor	Status	Risk
Snowpack	Below Average	Lowers Risk
Soil Moisture	Average to Below Average	Lowers Risk
Frost Depth	Above Average	Increases Risk
River Levels	Average to Below Average	Lowers Risk
Spring Precipitation	?	
Spring Temperature	?	

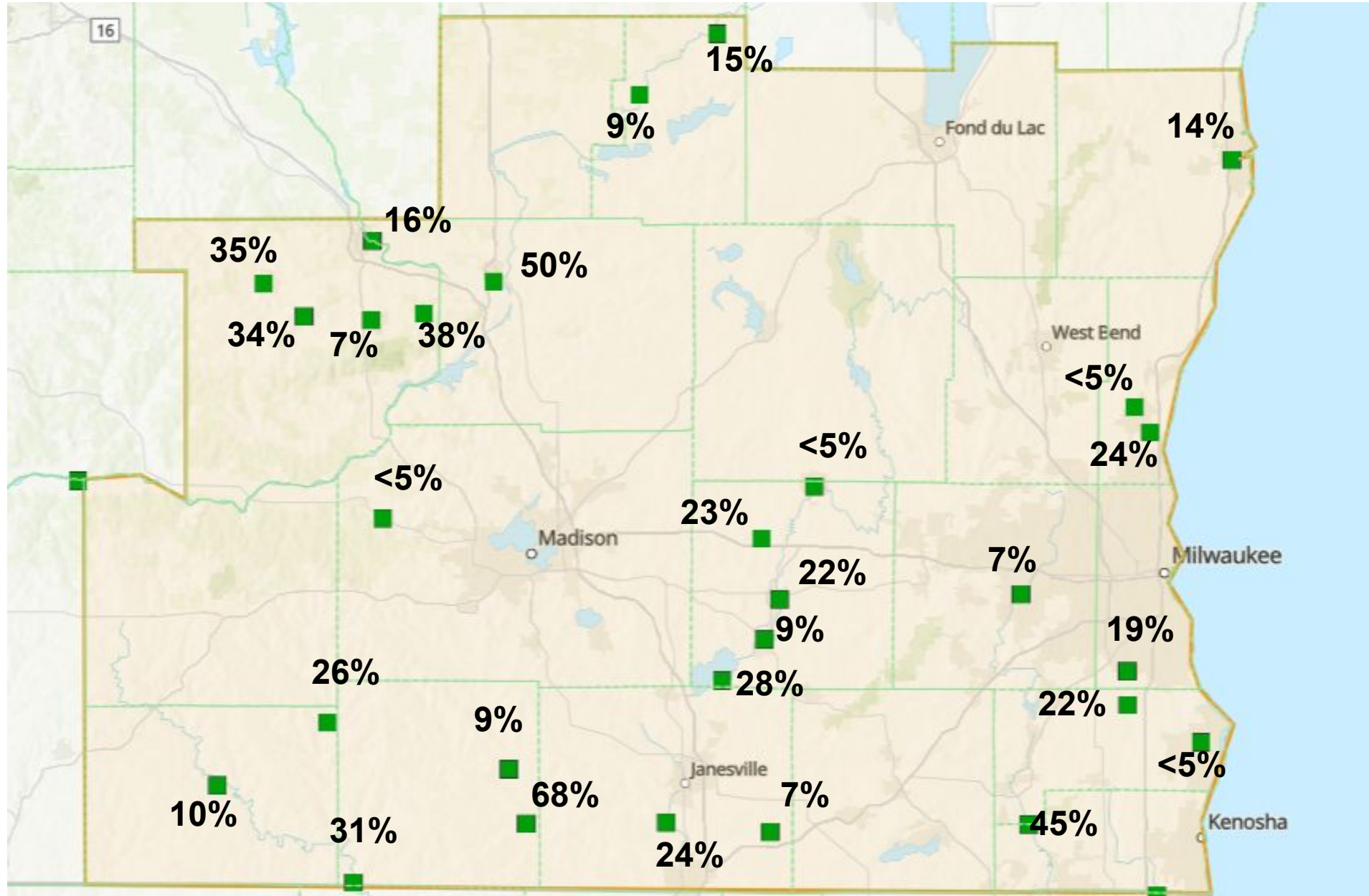




# Flood Risk by Forecast Point

February 13, 2025  
1:00 PM

## Chance of Exceeding Flood Stage Feb 17 - May 18, 2025



- Probabilities close to typical values in Baraboo, Pecatonica, and Sugar River basins.
- Probabilities are lower this year than average for the rest of southern Wisconsin.



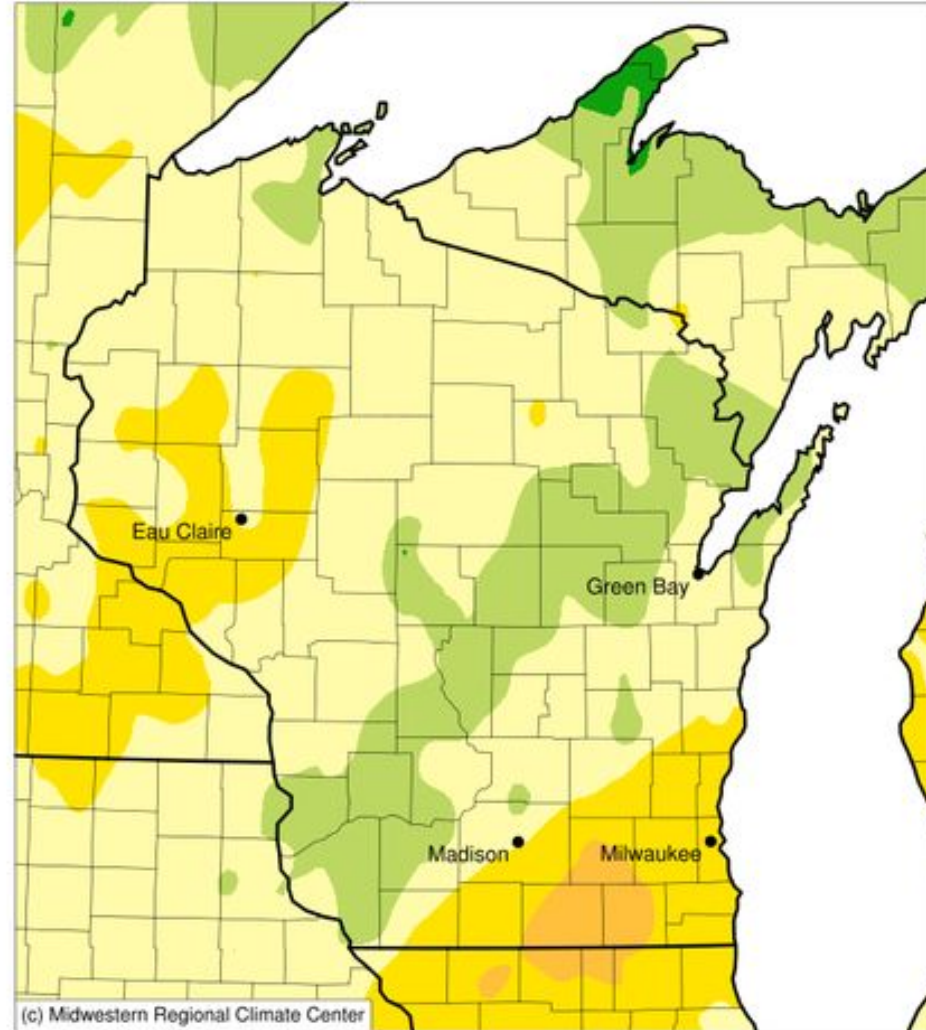


# Precipitation

February 13, 2025  
1:00 PM

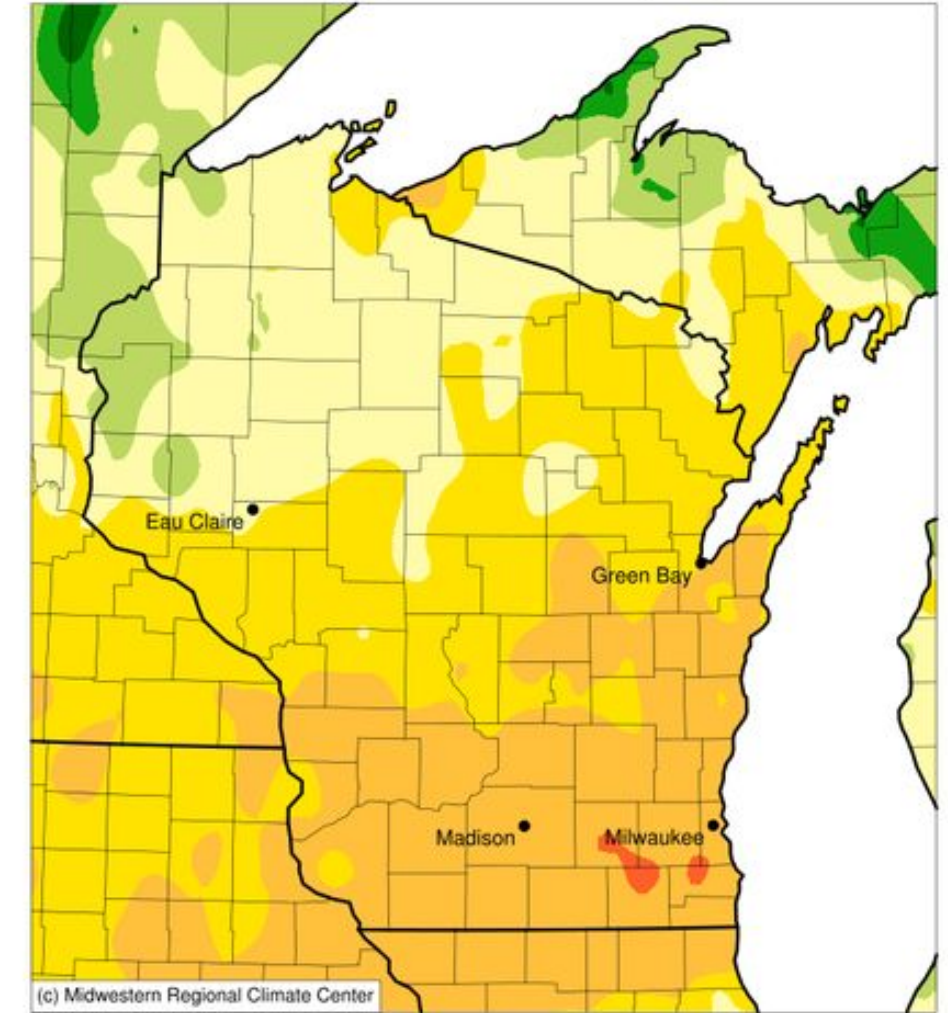
- Since Oct 1, precipitation is 75-125% of normal towards central and SW Wisconsin
- Since Dec 1, precipitation is 25-50% of normal across southern WI. Total precipitation 1 to 1.5 inches.

Accumulated Precipitation: Percent of 1991-2020 Normals  
October 01, 2024 to February 11, 2025



50 75 100 125

Accumulated Precipitation: Percent of 1991-2020 Normals  
December 01, 2024 to February 11, 2025



25 50 75 100 125 150



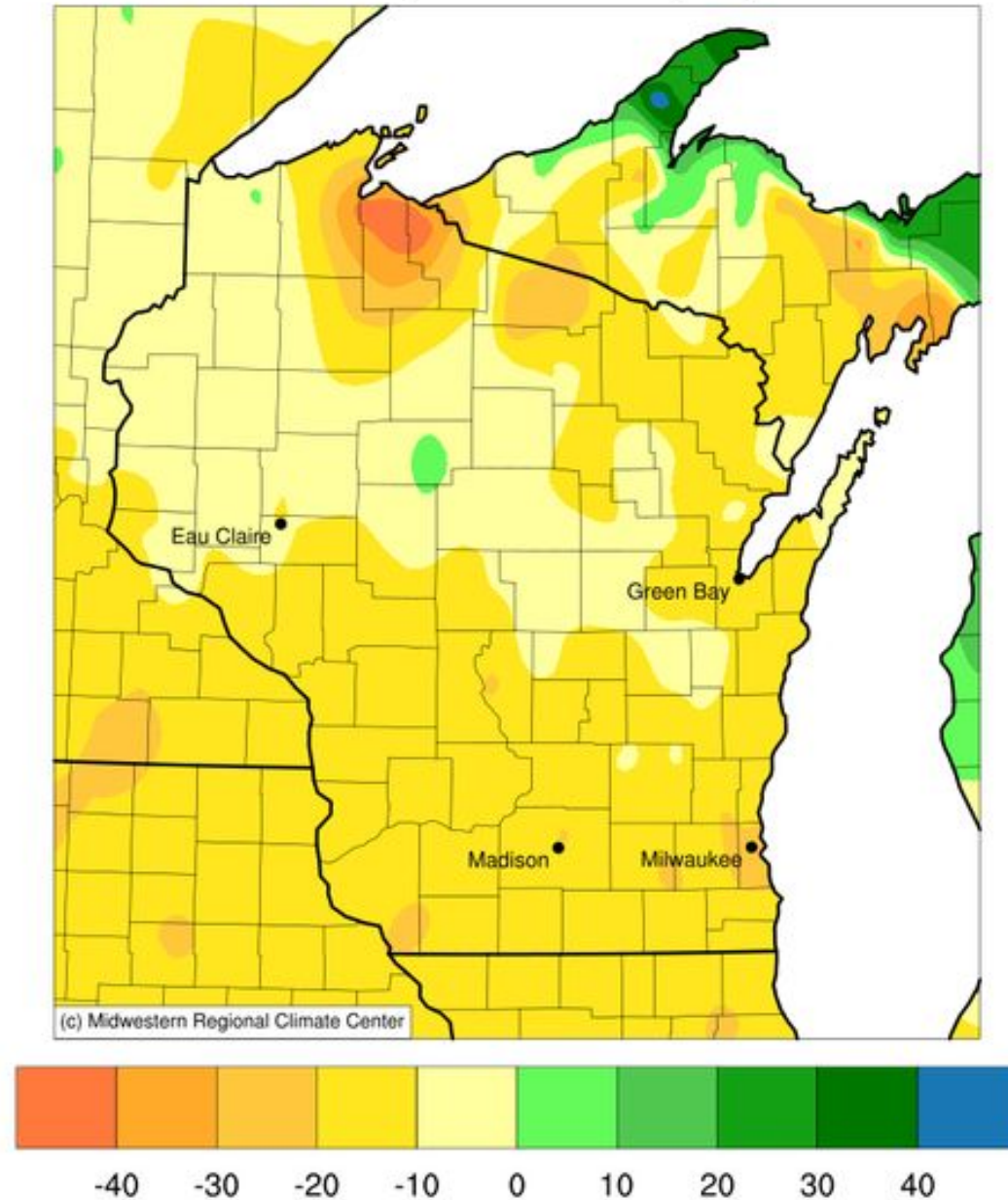


# Snowfall

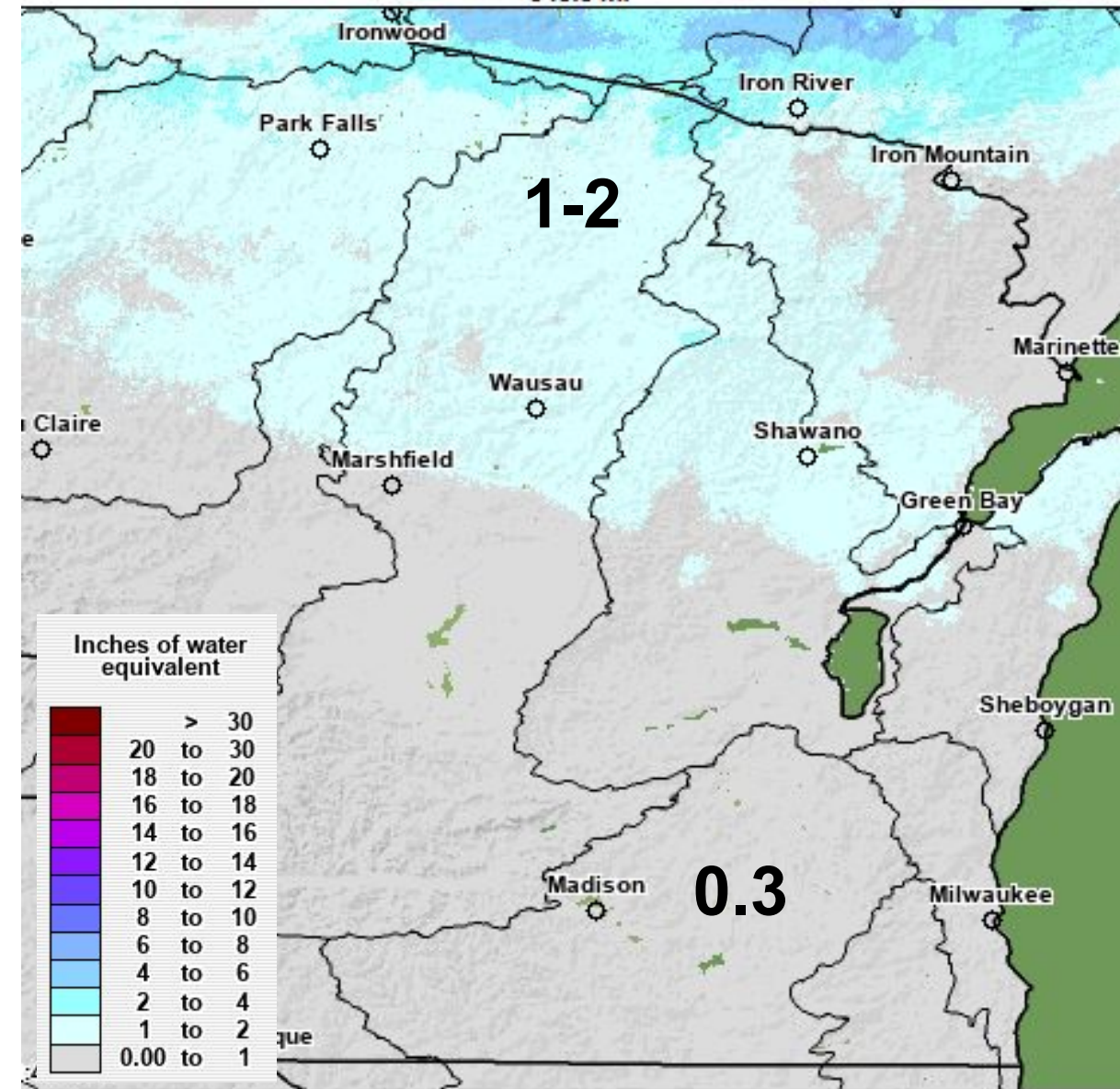
February 13, 2025  
1:00 PM

- Winter snowfall is 10 to 20 inches below average across southern Wisconsin.
- Current snow pack moisture is below average. Average is around 1 inch this time of year.

Accumulated Snowfall (in): Departure from 1991-2020 Normals  
December 01, 2024 to February 11, 2025



Snow Water Equivalent (inches) 2/13/25





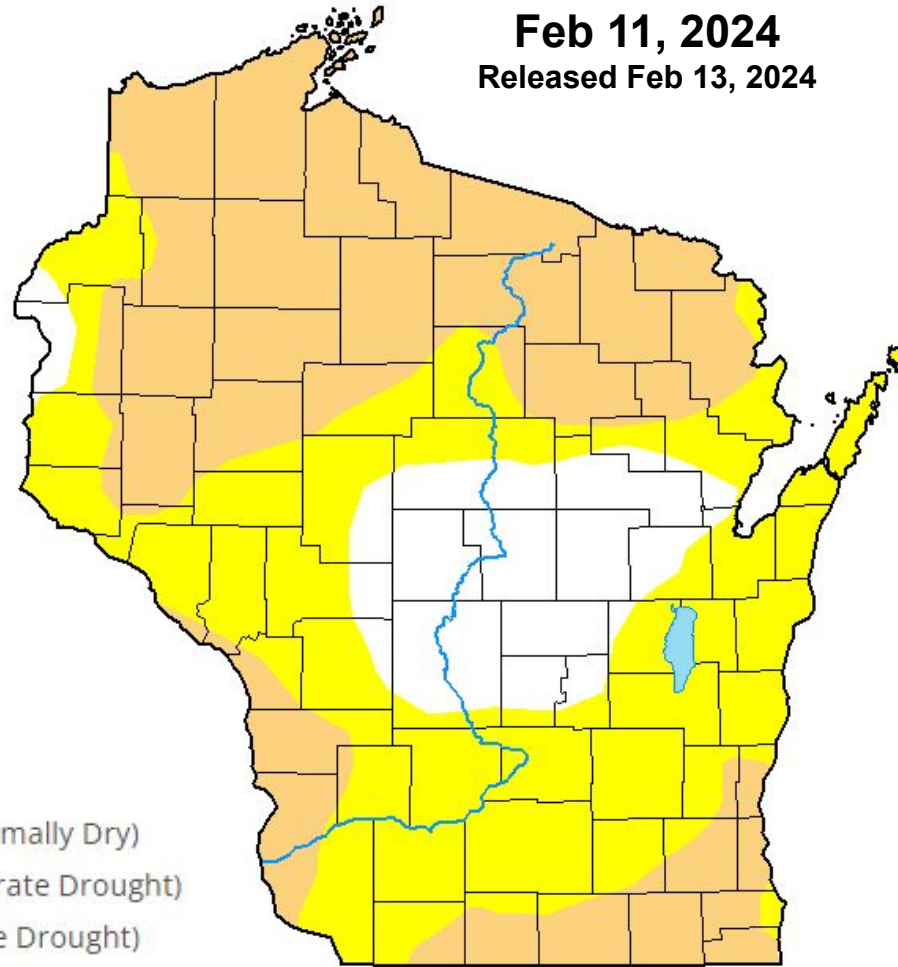
# Current Conditions

February 13, 2025  
1:00 PM

- Moderate drought in far south-central and southeast Wisconsin
- Drought conditions are due to precipitation deficits of 4 to 8 inches since September
- Soil moisture in the 10-30th percentile in southeast Wisconsin

## U.S. Drought Monitor Wisconsin

Feb 11, 2024  
Released Feb 13, 2024



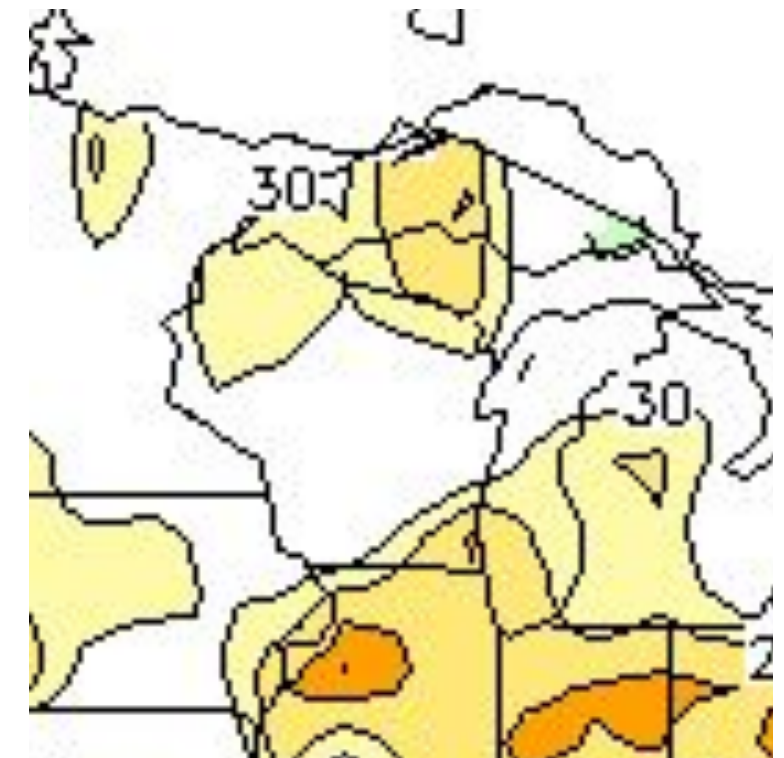
### Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data



[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

## Climate Prediction Center Calculated Soil Moisture 2/11/25



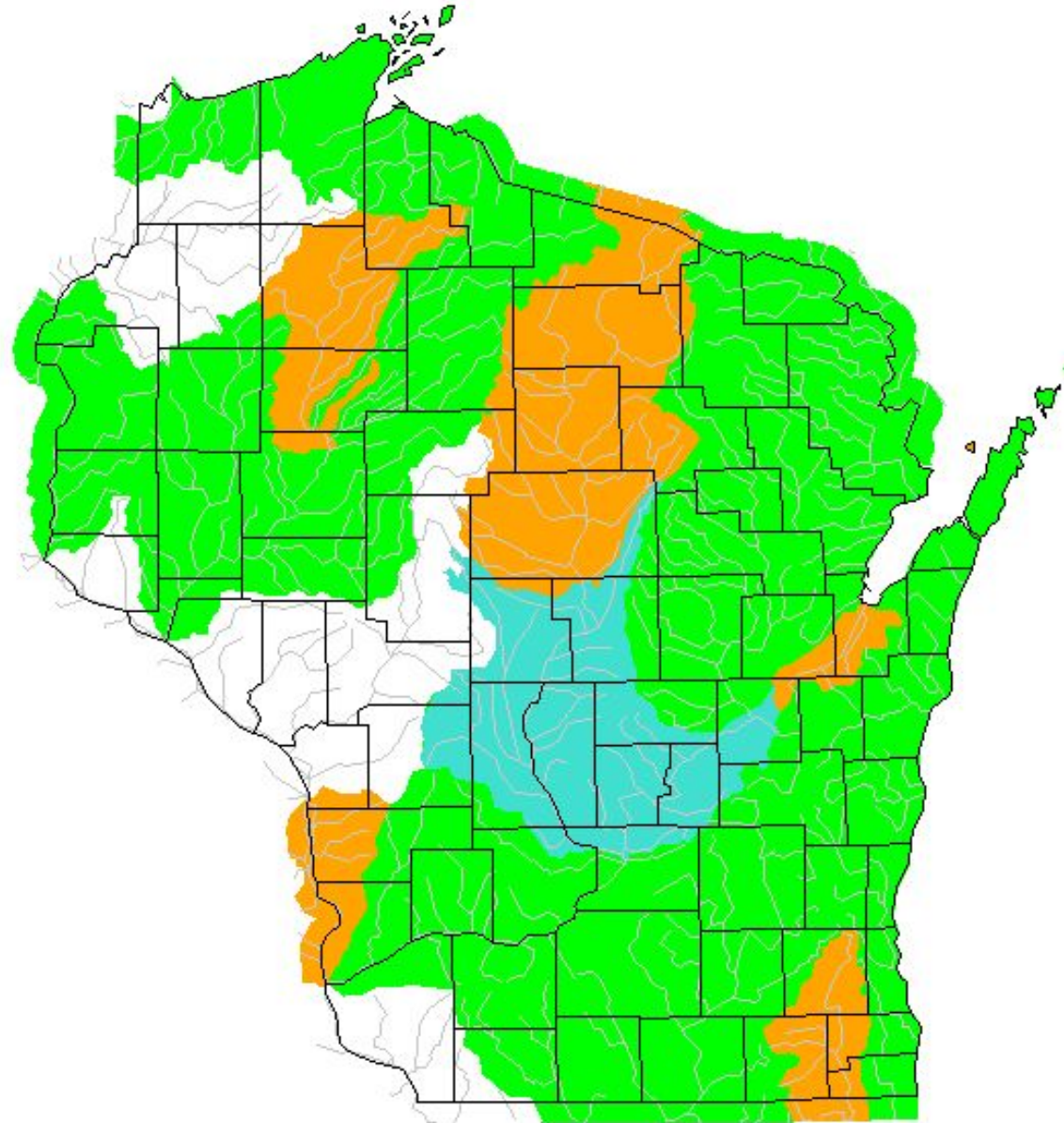




# Current Conditions

February 13, 2025  
1:00 PM

Tuesday, February 11, 2025



## 14 Day Streamflow

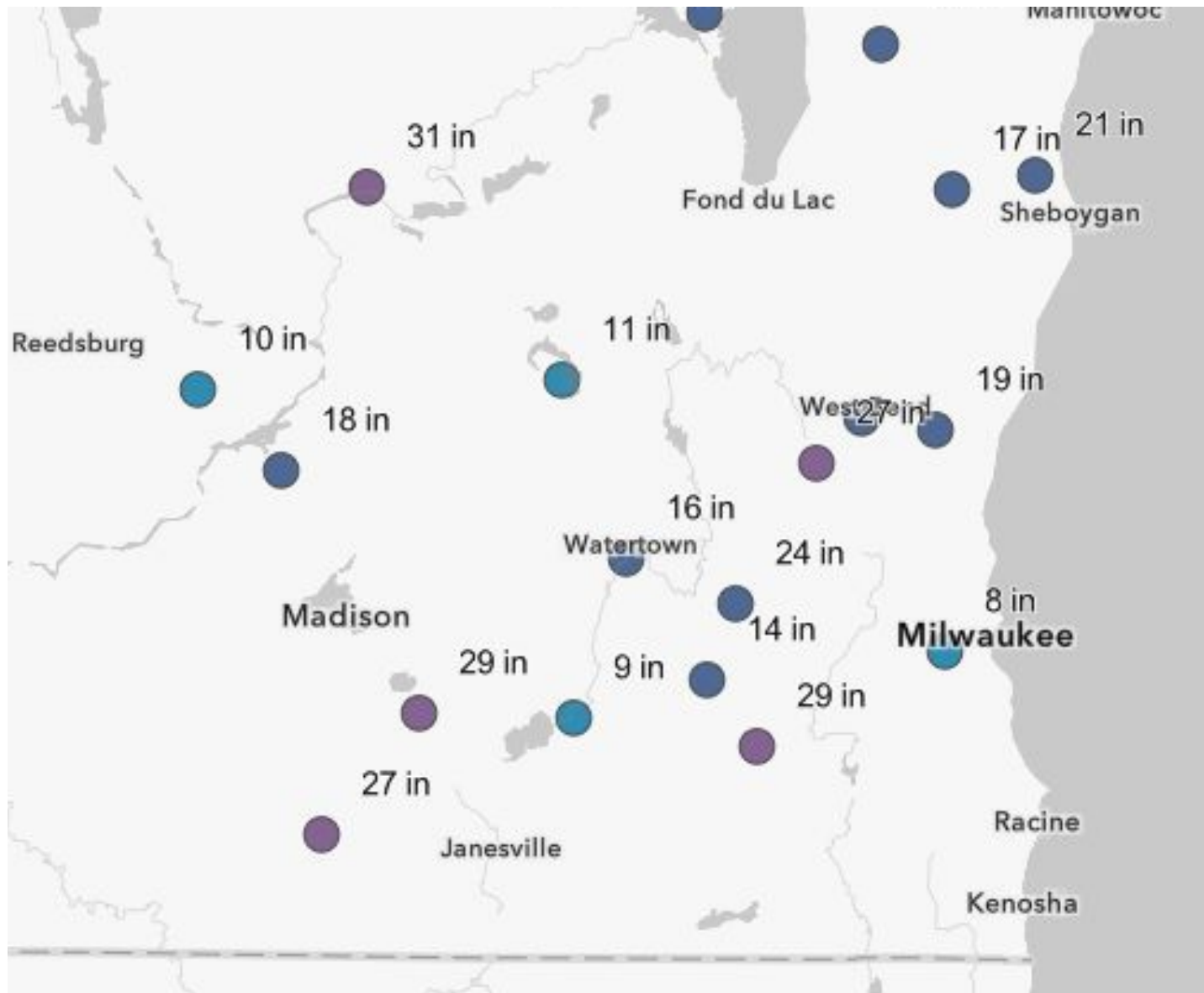
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

- Streamflow values are in the 25-75th percentile across most of southern Wisconsin

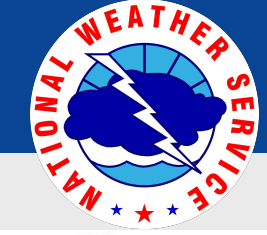




## Frost Depth - 2/12/25



- Frost depth of 10 to 30 inches
- Deeper than usual



# Week 2 Outlook

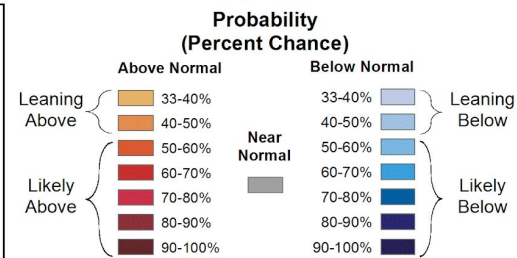
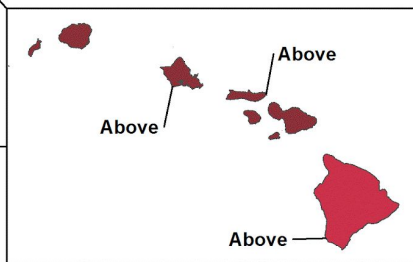
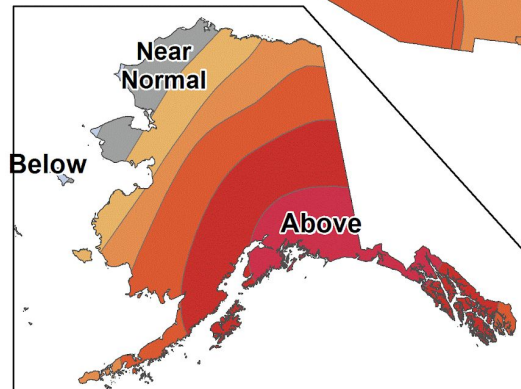
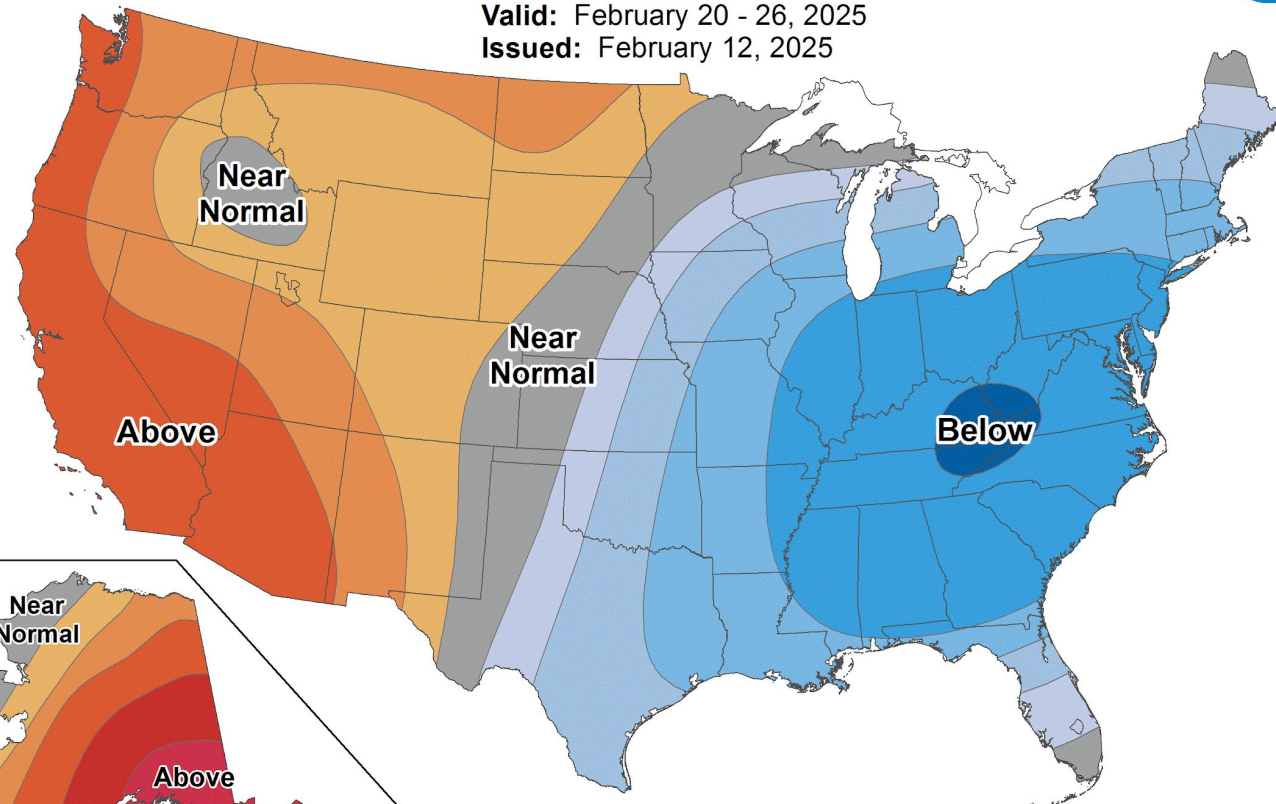
February 13, 2025  
1:00 PM



## 8-14 Day Temperature Outlook



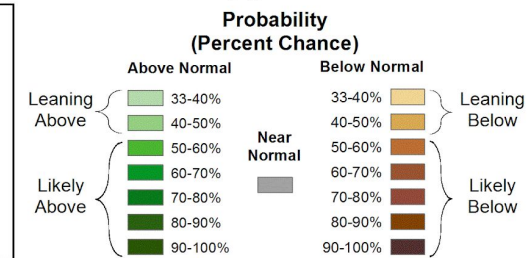
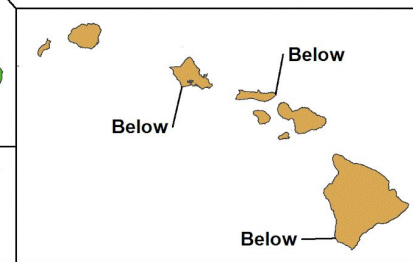
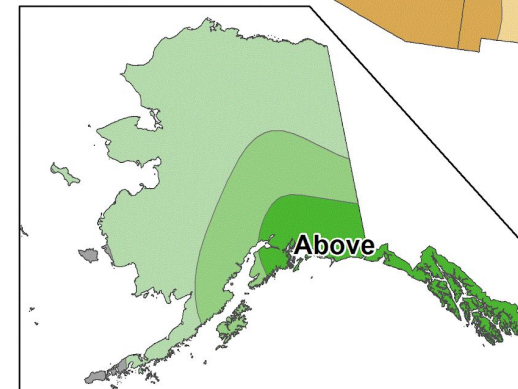
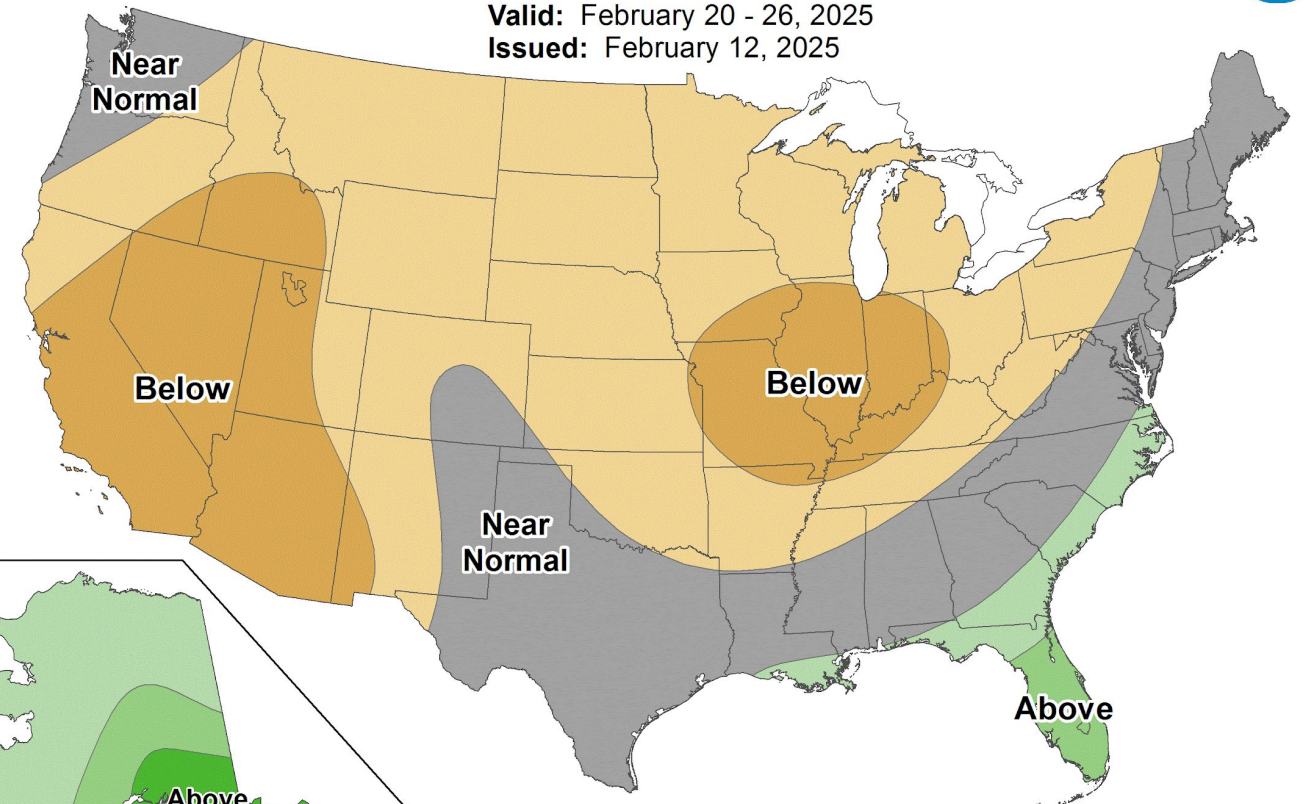
Valid: February 20 - 26, 2025  
Issued: February 12, 2025



## 8-14 Day Precipitation Outlook



Valid: February 20 - 26, 2025  
Issued: February 12, 2025



- Enhanced odds for below average temperature and below average precipitation in late February.





# Extended Outlook

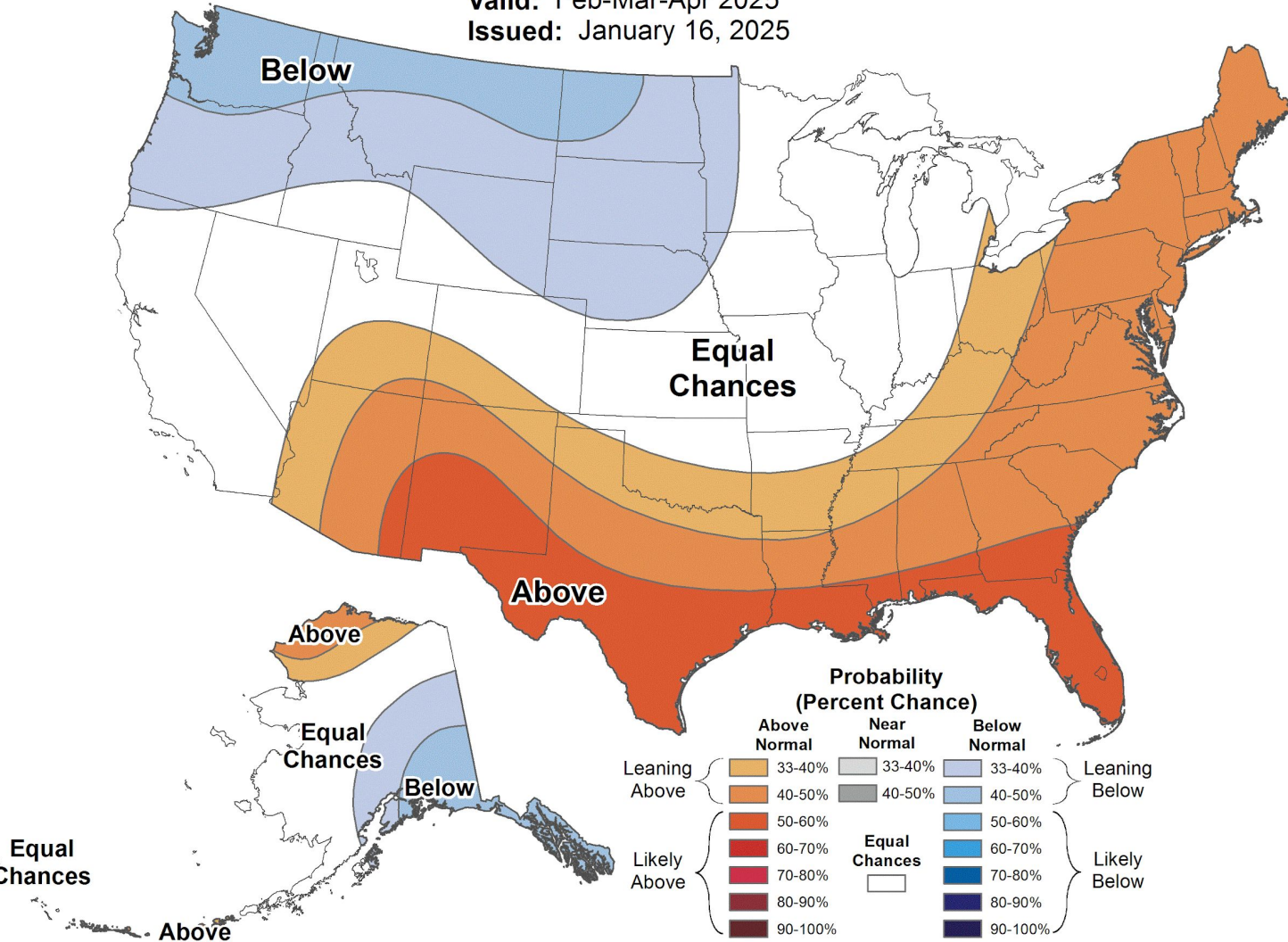
February 13, 2025  
1:00 PM



## Seasonal Temperature Outlook



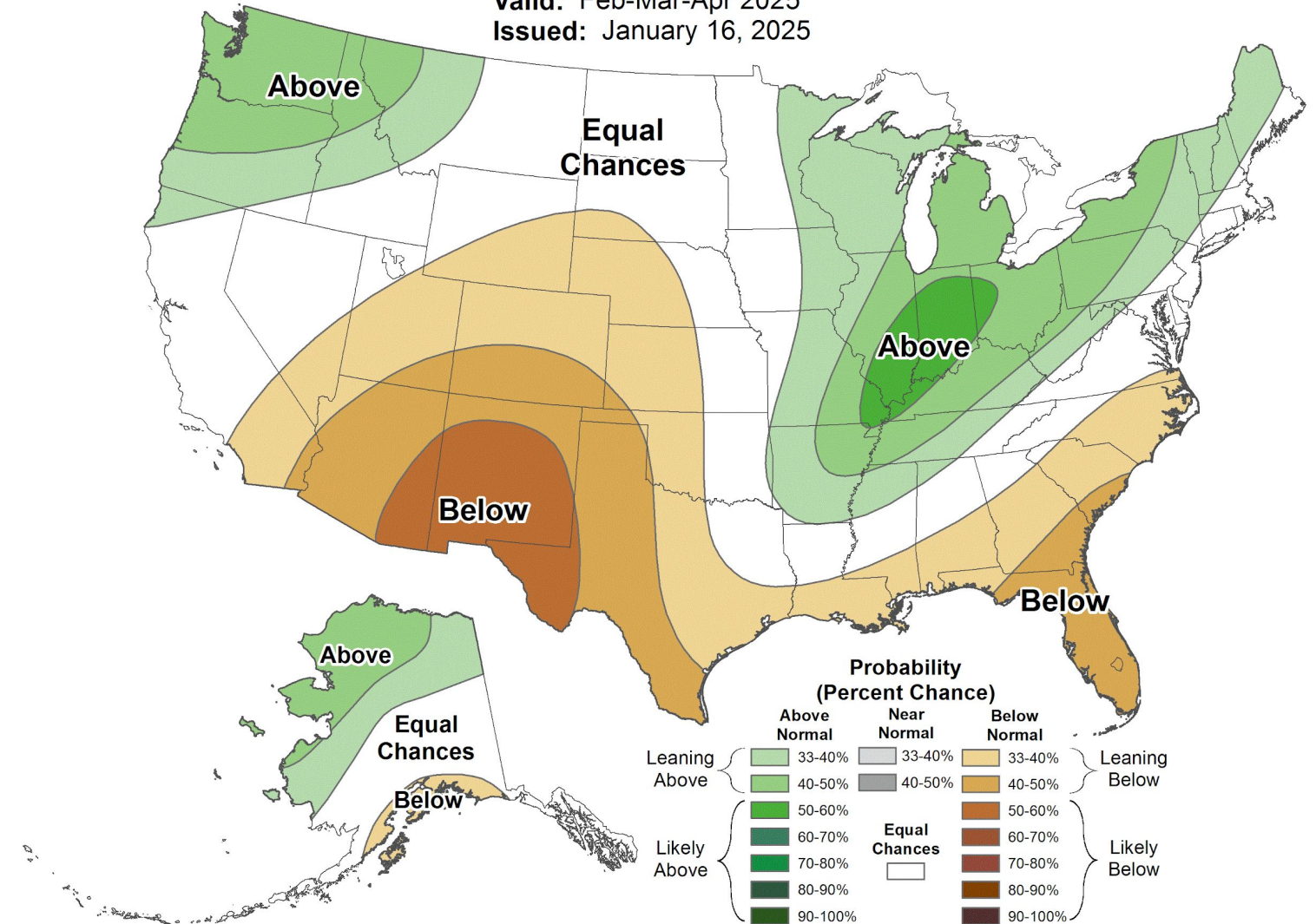
Valid: Feb-Mar-Apr 2025  
Issued: January 16, 2025



## Seasonal Precipitation Outlook



Valid: Feb-Mar-Apr 2025  
Issued: January 16, 2025



- Equal chances of above, near, and below normal temperature and enhanced odds for above average precipitation for Feb to April season.





# River Forecast Website

February 13, 2025  
1:00 PM

[water.noaa.gov/wfo/mkx](http://water.noaa.gov/wfo/mkx)

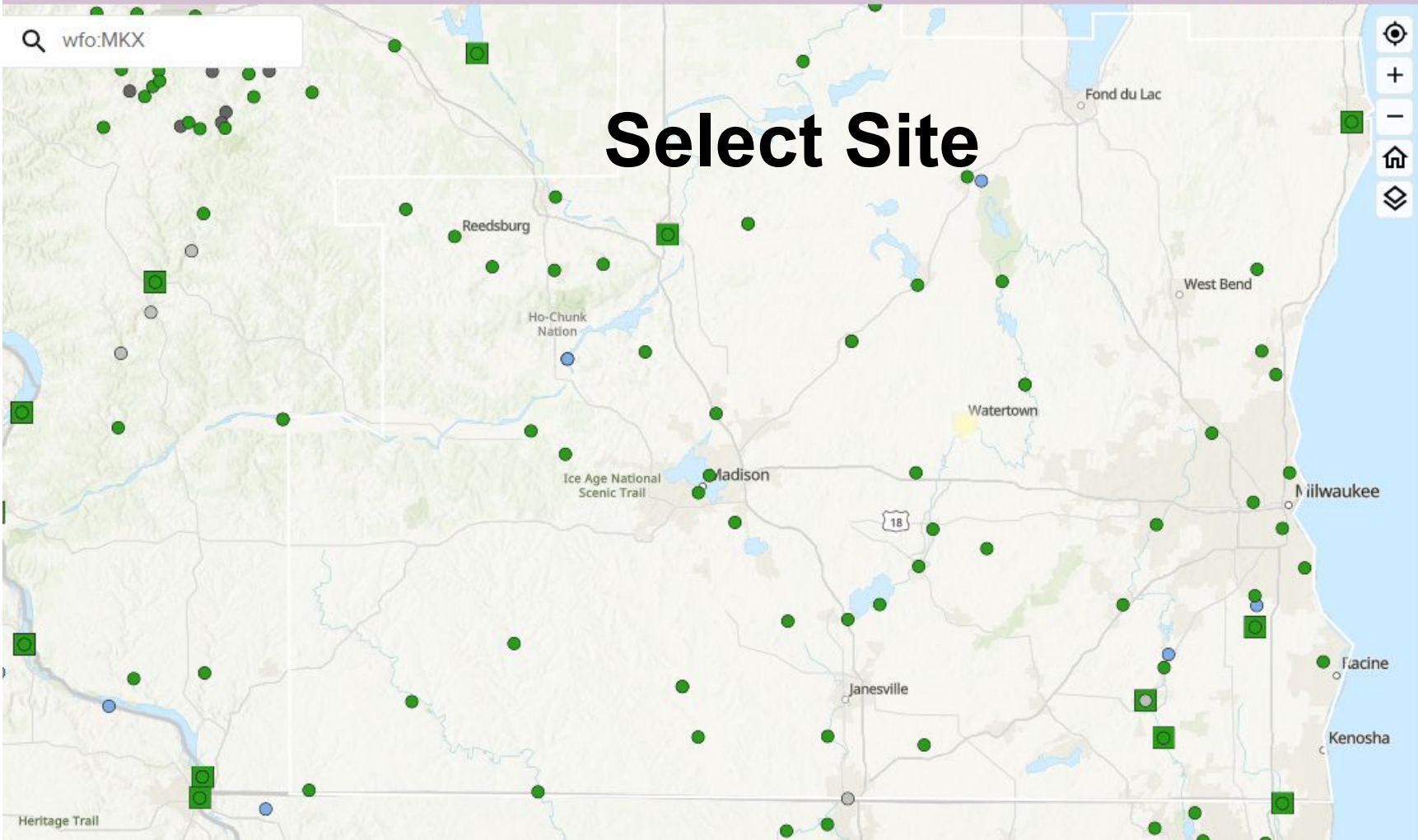


Home NWC Operations More Water Information About Explore NWS Weather

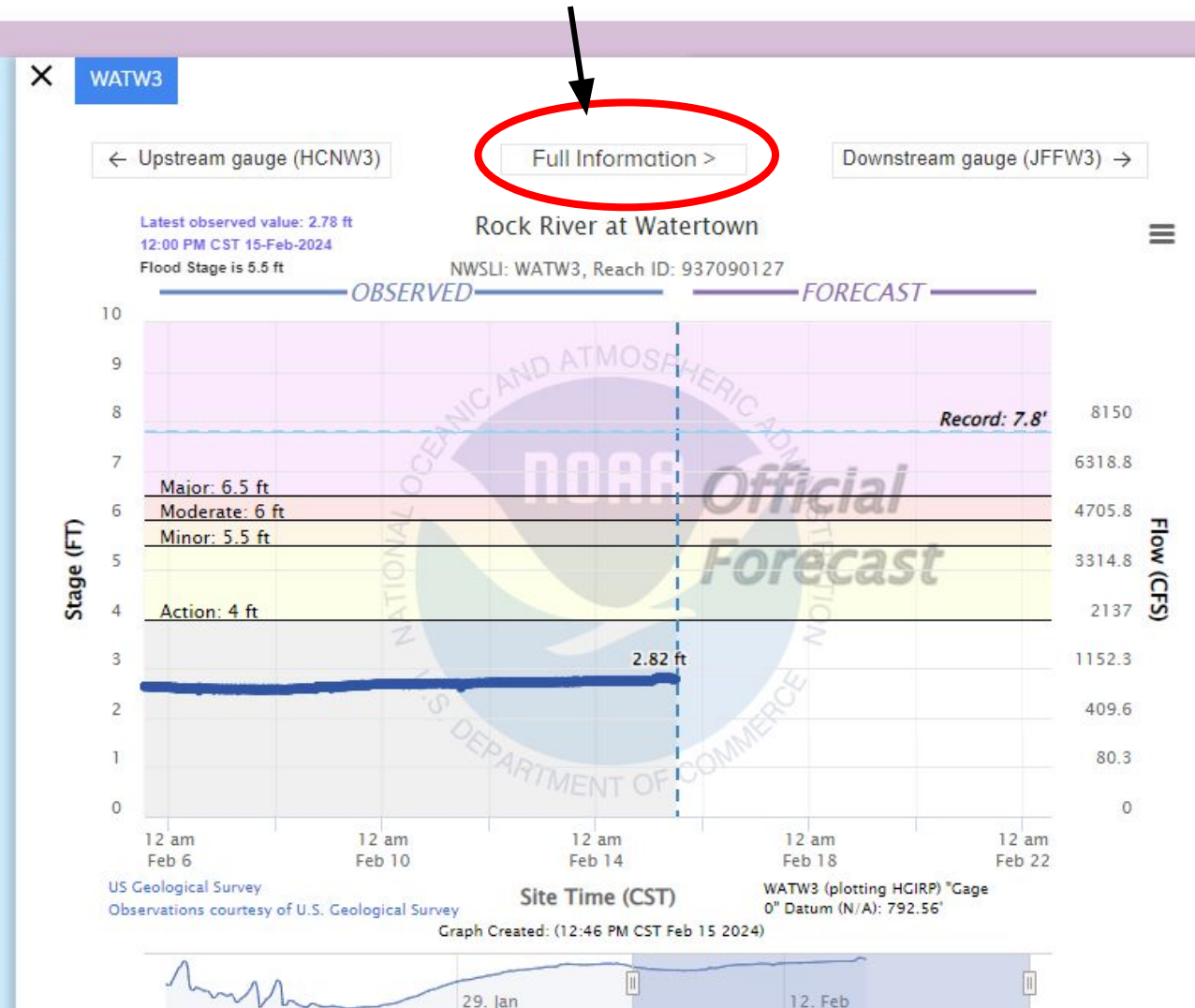


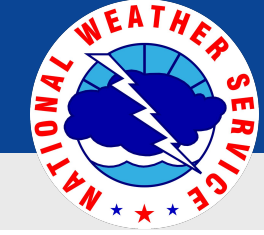
National Observations / Milwaukee/Sullivan, WI

Small Craft Advisory



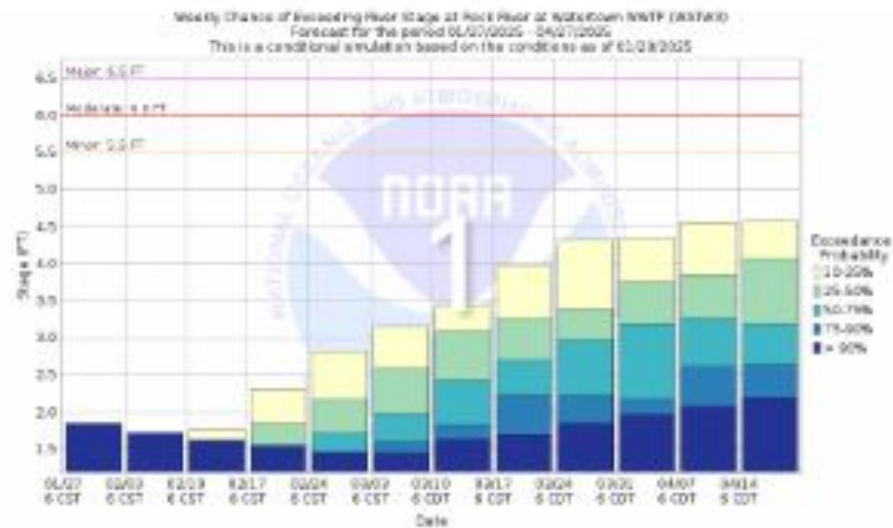
## Select Full Information



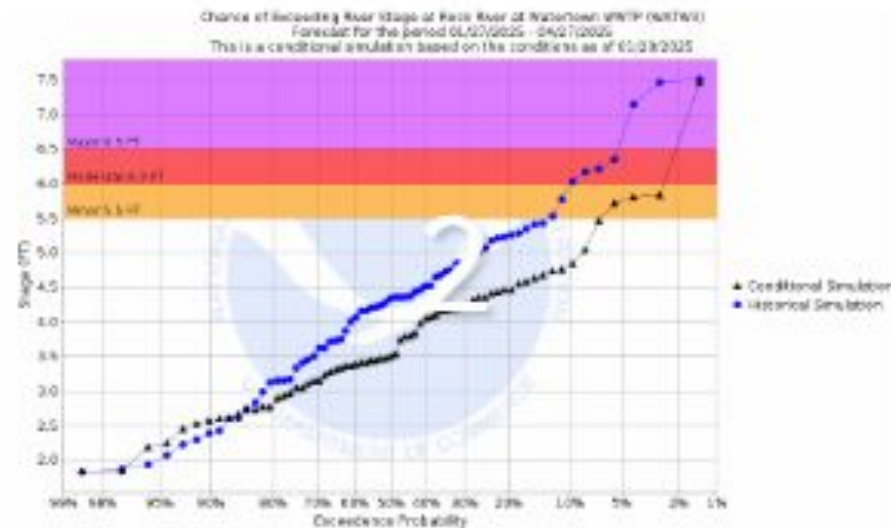


## Scroll down to section titled Probability Information

### Weekly Probability of Exceeding River Stage



### Chance of Exceeding River Stage over a 3 Month Period



### 10 Day River Level Probabilities





# Interpreting the Probability Graphics

February 13, 2025  
1:00 PM

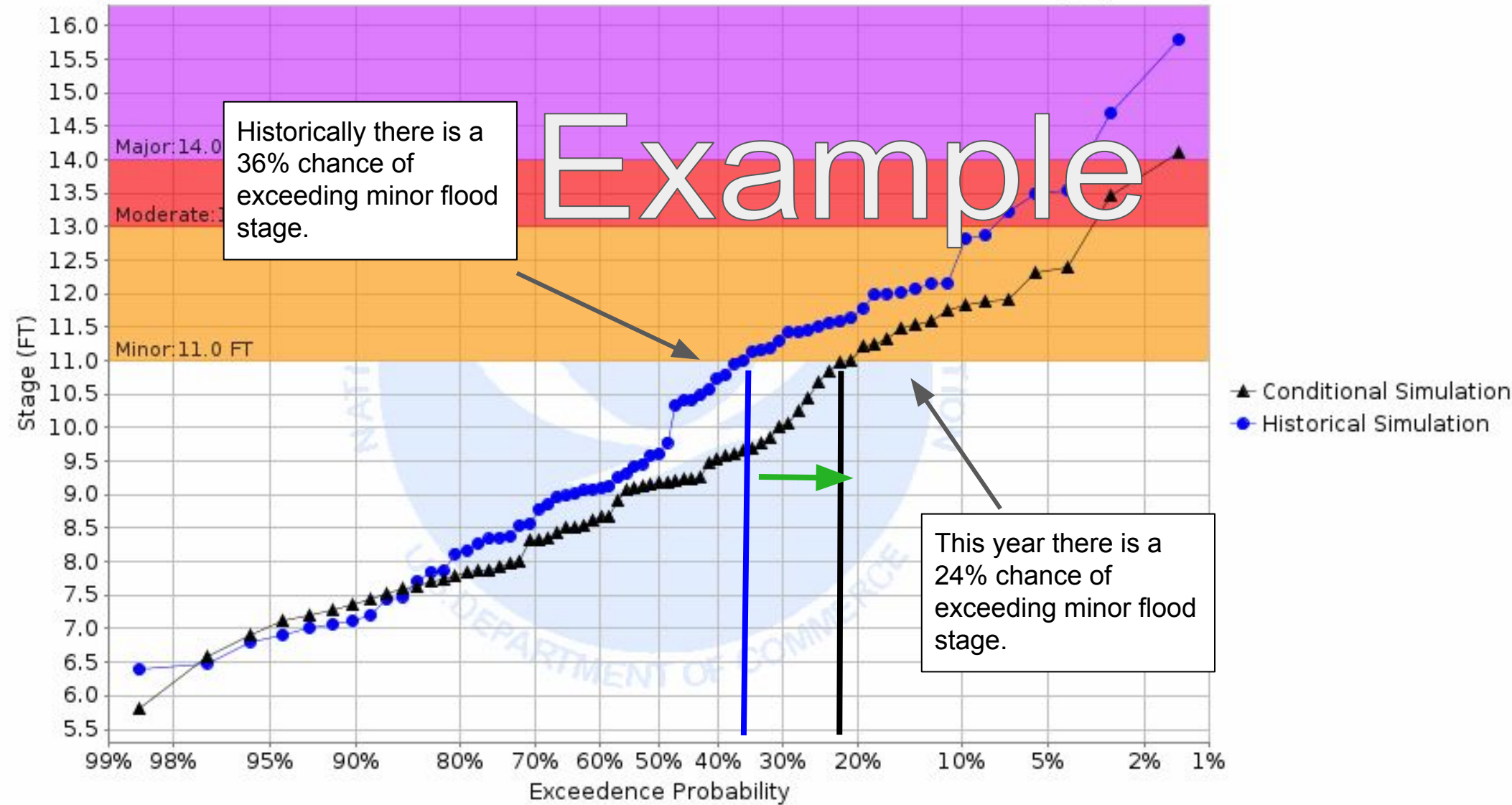
**The outlook is for a 3 Month time period.**

**Black line** is the current forecast, based on current environmental conditions and forecast temperature and precipitation.

**Blue line** is the historical (average) probabilities.

When the black line is above, or to the left of the blue line, the chances this season are greater. When the black line is below, or to the right of the blue line, the chances this season are lower.

Chance of Exceeding River Stage at Milwaukee River at Cedarburg 3SE (CEDW3)  
Forecast for the period 01/27/2025 - 04/27/2025  
This is a conditional simulation based on the conditions as of 01/20/2025





# Interpreting the Probability Graphics

February 13, 2025  
1:00 PM

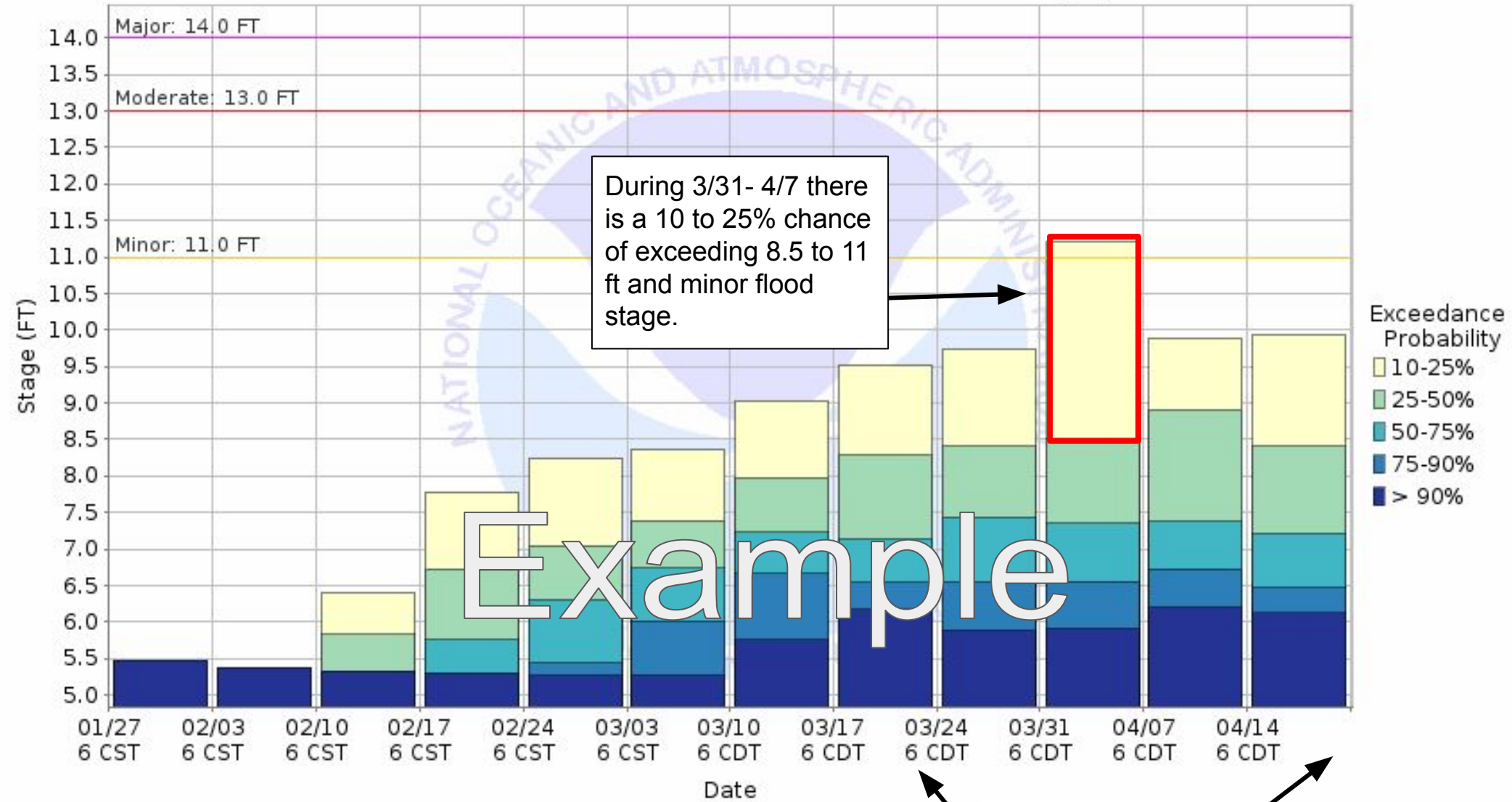
The outlook is for weekly time periods.

Colored boxes show the probability of exceeding each threshold.

Probability increases as colors become more blue.

Tallest boxes show the time frame with the highest probability of exceeding higher river levels.

Weekly Chance of Exceeding River Stage at Milwaukee River at Cedarburg 3SE (CEDW3)  
Forecast for the period 01/27/2025 - 04/27/2025  
This is a conditional simulation based on the conditions as of 01/20/2025



Example

Time frame with the highest probabilities



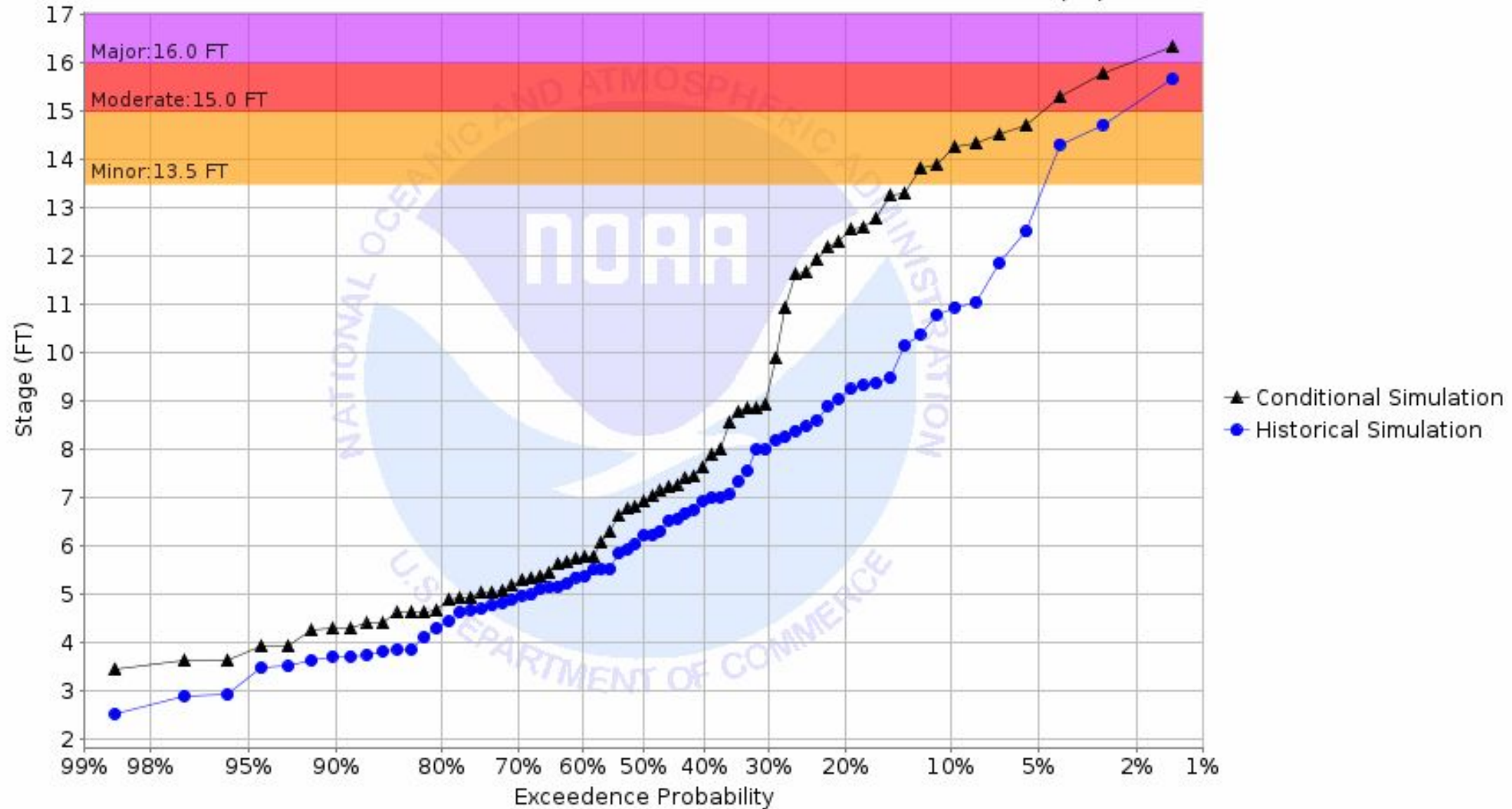




# Interpreting the Probability Graphics

February 13, 2025  
1:00 PM

Chance of Exceeding River Stage at Pecatonica River at Darlington WWTP (DARW3)  
Forecast for the period 01/27/2025 - 04/27/2025  
This is a conditional simulation based on the conditions as of 01/20/2025

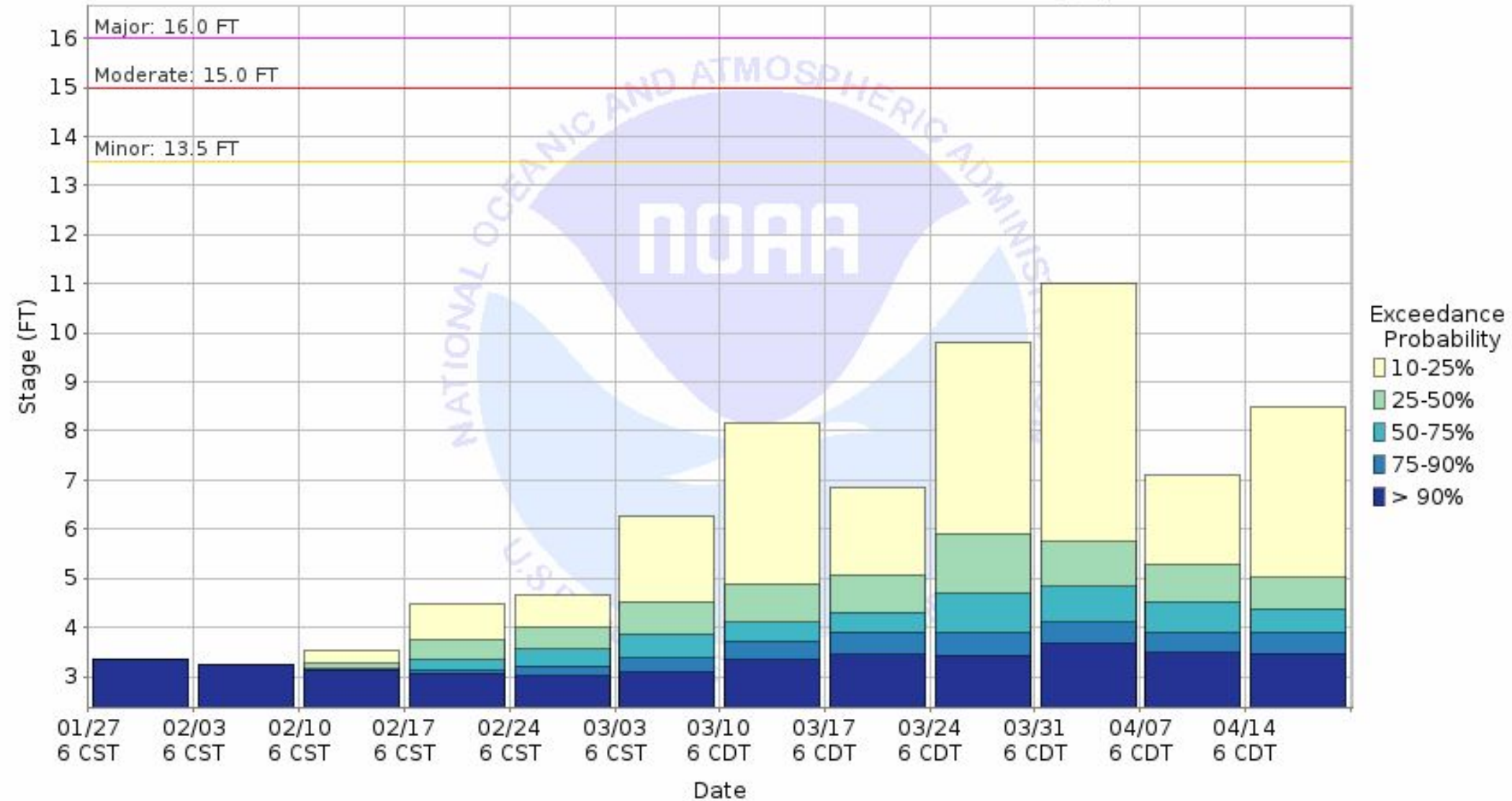




# Interpreting the Probability Graphics

February 13, 2025  
1:00 PM

Weekly Chance of Exceeding River Stage at Pecatonica River at Darlington WWTP (DARW3)  
Forecast for the period 01/27/2025 - 04/27/2025  
This is a conditional simulation based on the conditions as of 01/20/2025





# Interpreting the Probability Graphics

February 13, 2025  
1:00 PM

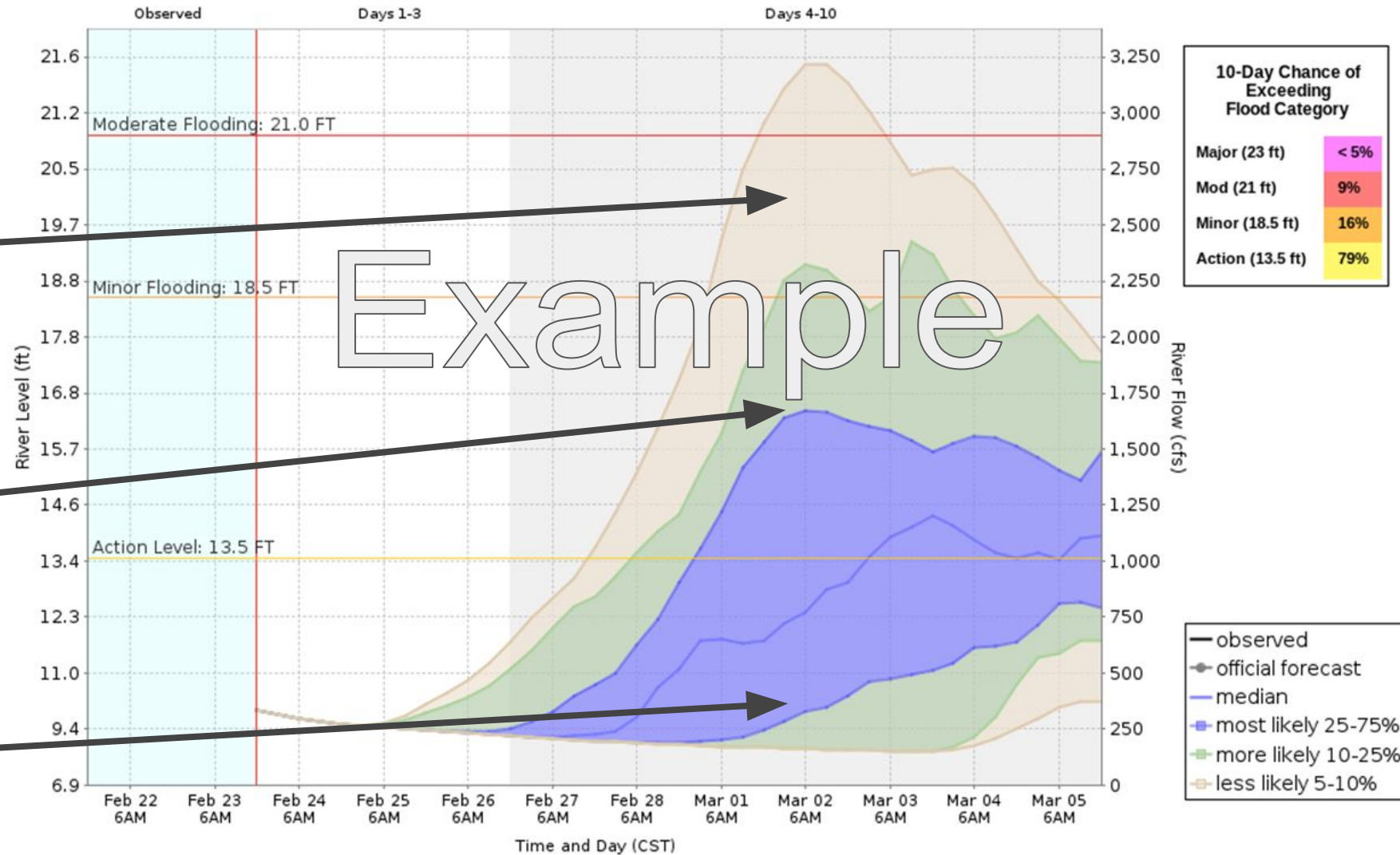


## HEFS - 10 Day River Level Probabilities

Based on Hydrologic Ensemble Forecast Service Model Simulations  
Used to Estimate the Range of Possible River Levels

Feb 24 - Mar 06, 2023

### Baraboo River at Rock Springs (RSPW3)



Shaded area shows the range of possible river levels. There is a small chance the level could end up outside this range.

~90% of forecasts are within the blue, green, and tan ranges. ~5% forecasts are above and ~5% are below the tan range.

~80% of forecasts are within the blue and green ranges. ~10% of forecasts are above and ~10% are below the green range.

~50% of forecasts are within the blue shaded range. ~25% of forecasts are above and ~25% are below the blue range.

Includes 10 days of precipitation and temperature (including snowmelt) applied to river forecast models. The official forecast includes 24-48 hours of precipitation.

Model runtime: 06:00 PM CST Feb 23 2023  
North Central River Forecast Center





## Informational Links

- [Current and Forecast River Levels](#)
- [Long Range Flood Risk by River Point](#)
- [NWS Milwaukee Spring Flood Outlook Website](#)
- [Spring Flood Outlook Text Information](#)

Please reach out to [sarah.marquardt@noaa.gov](mailto:sarah.marquardt@noaa.gov) with any questions or comments.

Additional updates: February 27, 2025

March 13, 2025