

February 27, 2025
1:00 PM

Southern Wisconsin Spring Flood Outlook - 2nd of 3

2 / 27 / 2025



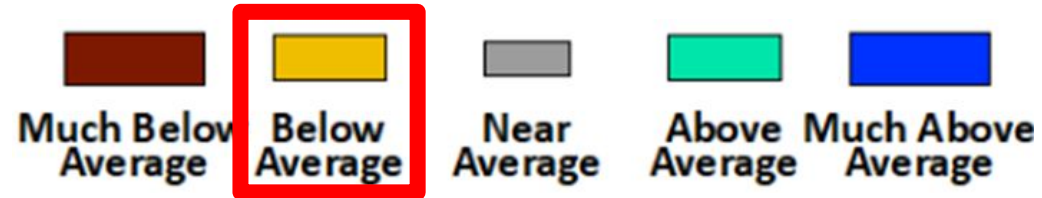
National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Wisconsin

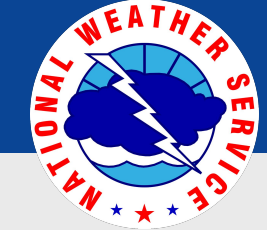


Outlook Time Period March 3 - June 6, 2025

Key Messages



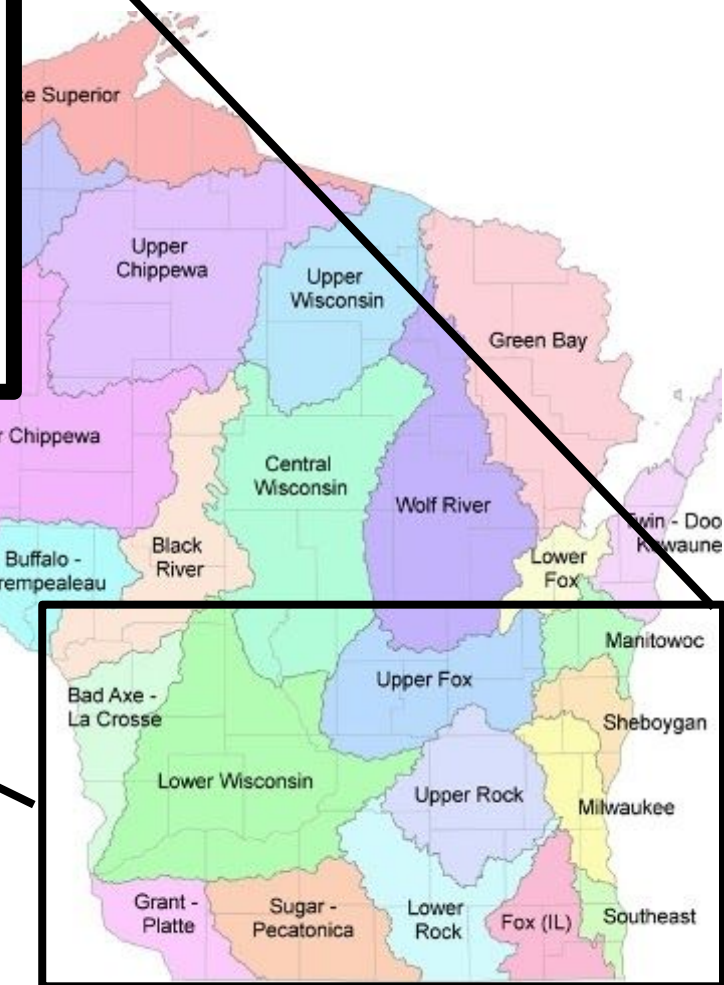
- Spring flood risk is below average across southern Wisconsin.
- Flooding is still possible, the underlying risk is not elevated at this time. Risk of flooding with individual weather events may be greater.
- The greatest risk will be tied to heavy rain, especially while the ground is still frozen and vegetation is dormant.
- River ice jam potential increases next week

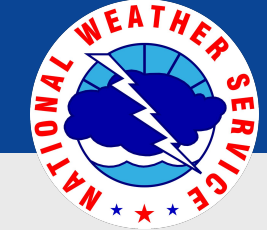


Southern Wisconsin Spring Flood Risk by Basin

February 27, 2025
1:00 PM

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



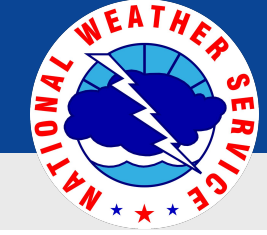


Flood Risk Factors

February 27, 2025
1:00 PM

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





Flood Risk Factors

February 27, 2025
1:00 PM

Factors Limiting Flood Risk	Factors Increasing Flood Risk
Little additional snowfall	Deeper snowpack
Dry, warm weather promoting evaporation and thaw ground	Heavy rain on top of snow or frozen ground
Gradually warming temperatures in spring	A rapid snowmelt
No extreme cold snaps without snow cover	Very cold temperatures increasing frost depth and building river ice

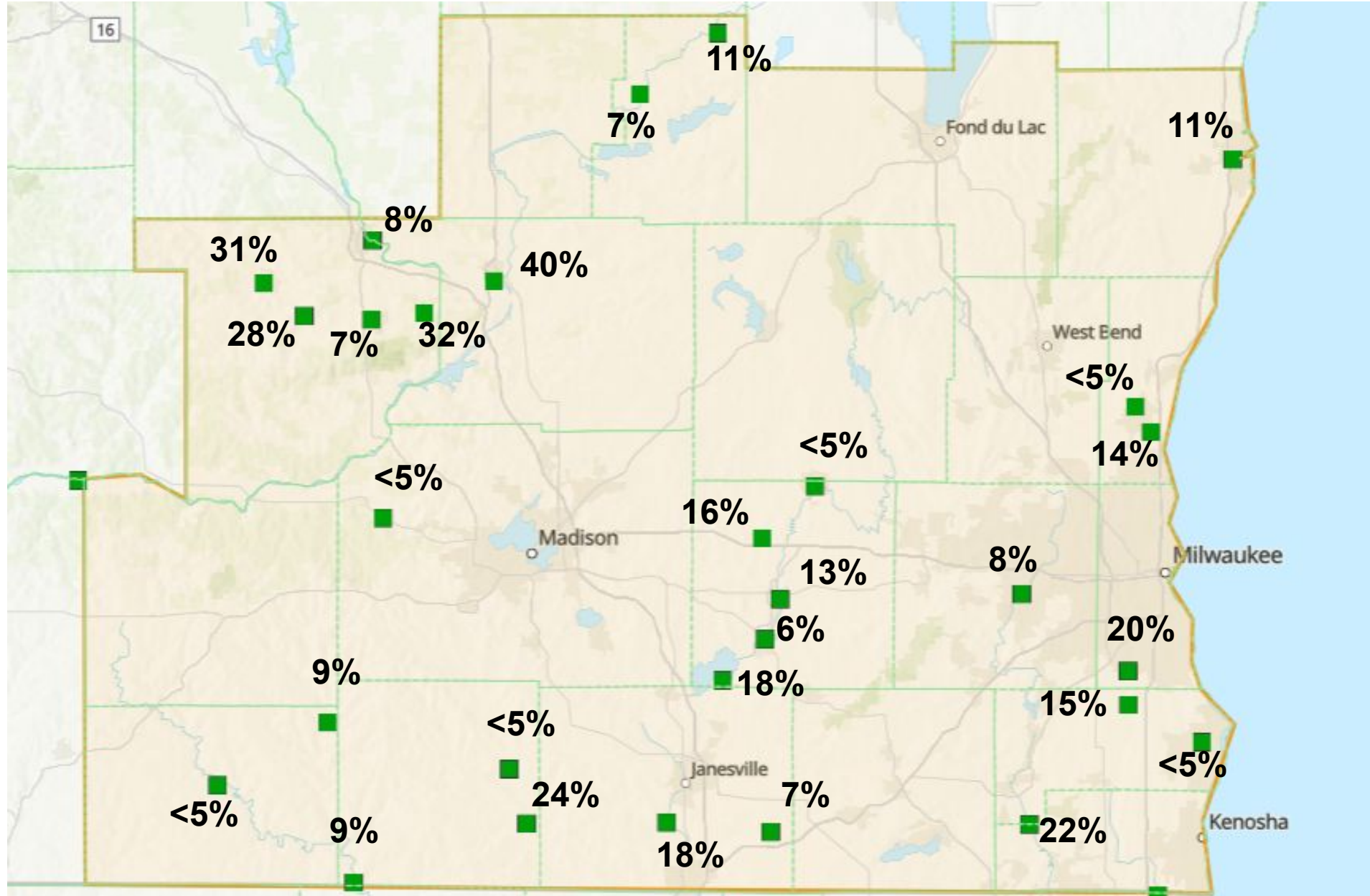




Flood Risk by Forecast Point

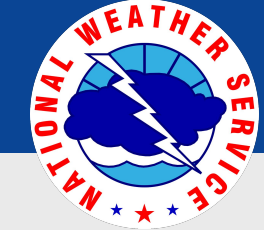
February 27, 2025
1:00 PM

Chance of Exceeding Flood Stage March 3 - June 6, 2025



- Probabilities are lower this year than average





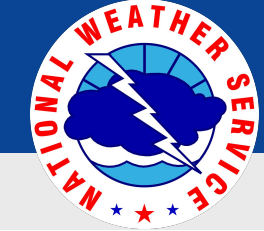
Flood Risk by Forecast Point

February 27, 2025
1:00 PM

Chance of Exceeding Flood Stage March 3 - June 6, 2025

Location	Chance of Exceeding Minor Flood Stage / Historical Values	Chance of Exceeding Moderate Flood Stage / Historical Values
Wis River - Wis Dells	8 / 25	<5 / 13
Wis River - Portage	40 / 71	23 / 52
Baraboo - Reedsburg	31 / 37	14 / 22
Baraboo - Rock Springs	28 / 37	12 / 21
Baraboo - West Baraboo	7 / 14	<5 / 6
Baraboo - Baraboo	32 / 42	<5 / 5
Black Earth Creek	<5 / <5	<5 / <5
Fox River - Princeton	7 / 20	<5 / <5
Fox River - Berlin	11 / 24	<5 / <5





Flood Risk by Forecast Point

February 27, 2025
1:00 PM

Chance of Exceeding Flood Stage March 3 - June 6, 2025

Location	Chance of Exceeding Minor Flood Stage / Historical Values	Chance of Exceeding Moderate Flood Stage / Historical Values
Rock River - Watertown	<5 / 16	<5 / 11
Rock River - Jefferson	13 / 37	8 / 26
Rock River - Fort Atkinson	6 / 19	<5 / 9
Rock River - Lake Koshkonong	18 / 43	11 / 31
Rock River - Afton	18 / 43	7 / 17
Crawfish River - Milford	16 / 39	<5 / 10
Turtle Creek - Clinton	7 / 13	<5 / <5
Pecatonica River - Darlington	<5 / <5	<5 / <5
Pecatonica River - Blanchardville	9 / 15	<5 / <5
Pecatonica River - Martintown	9 / 23	<5 / <5
Sugar River - Albany	<5 / <5	<5 / <5
Sugar River - Brodhead	24 / 36	<5 / 8





Flood Risk by Forecast Point

February 27, 2025
1:00 PM

Chance of Exceeding Flood Stage March 3 - June 6, 2025

Location	Chance of Exceeding Minor Flood Stage / Historical Values	Chance of Exceeding Moderate Flood Stage / Historical Values
Sheboygan River - Sheboygan	11 / 28	6 / 8
Cedar Creek - Cedarburg	<5 / <5	<5 / <5
Milwaukee River - Cedarburg	14 / 38	<5 / 9
Root River - Franklin	20 / 26	<5 / <5
Root River Canal	15 / 22	<5 / 5
Root River - Racine	<5 / 9	<5 / <5
Fox River - Waukesha	8 / 16	<5 / 7
Fox River - New Munster	22 / 51	7 / 22



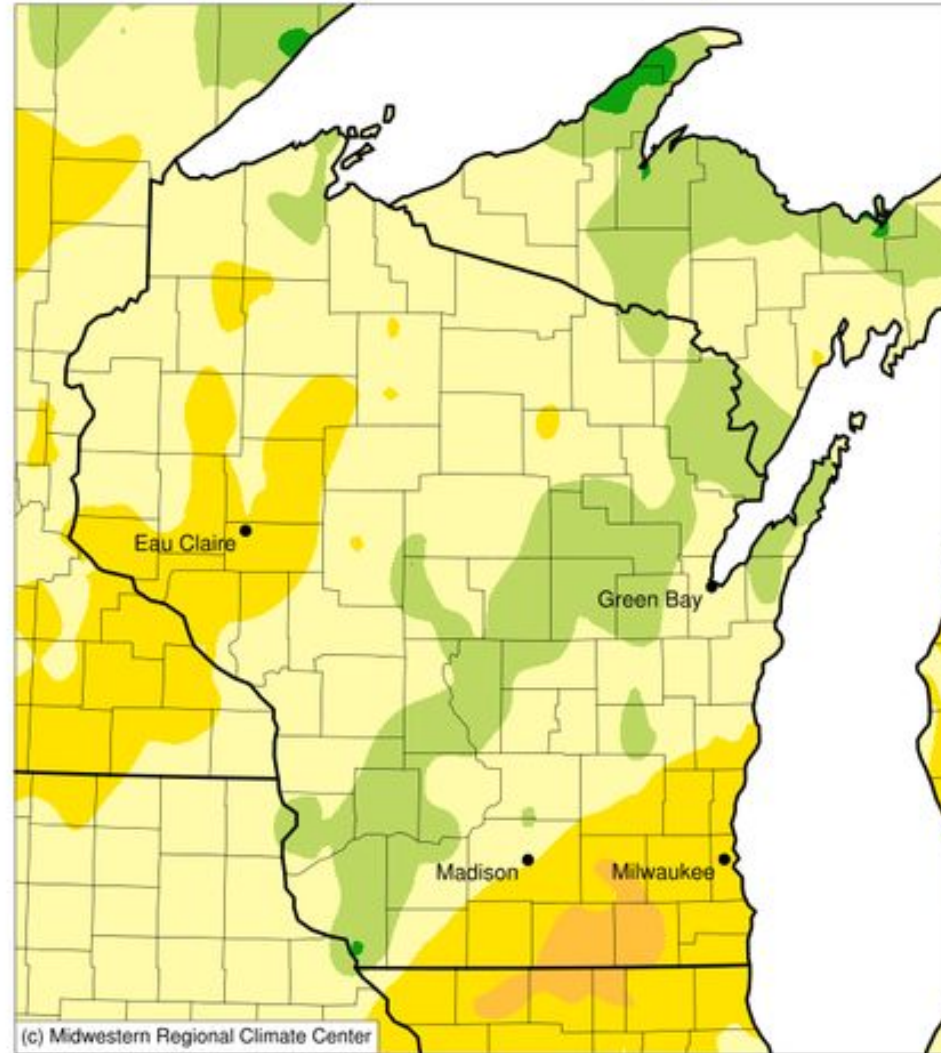


Precipitation

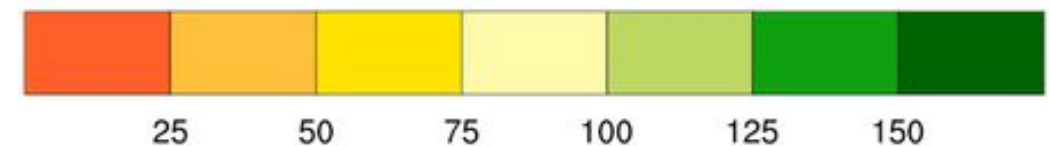
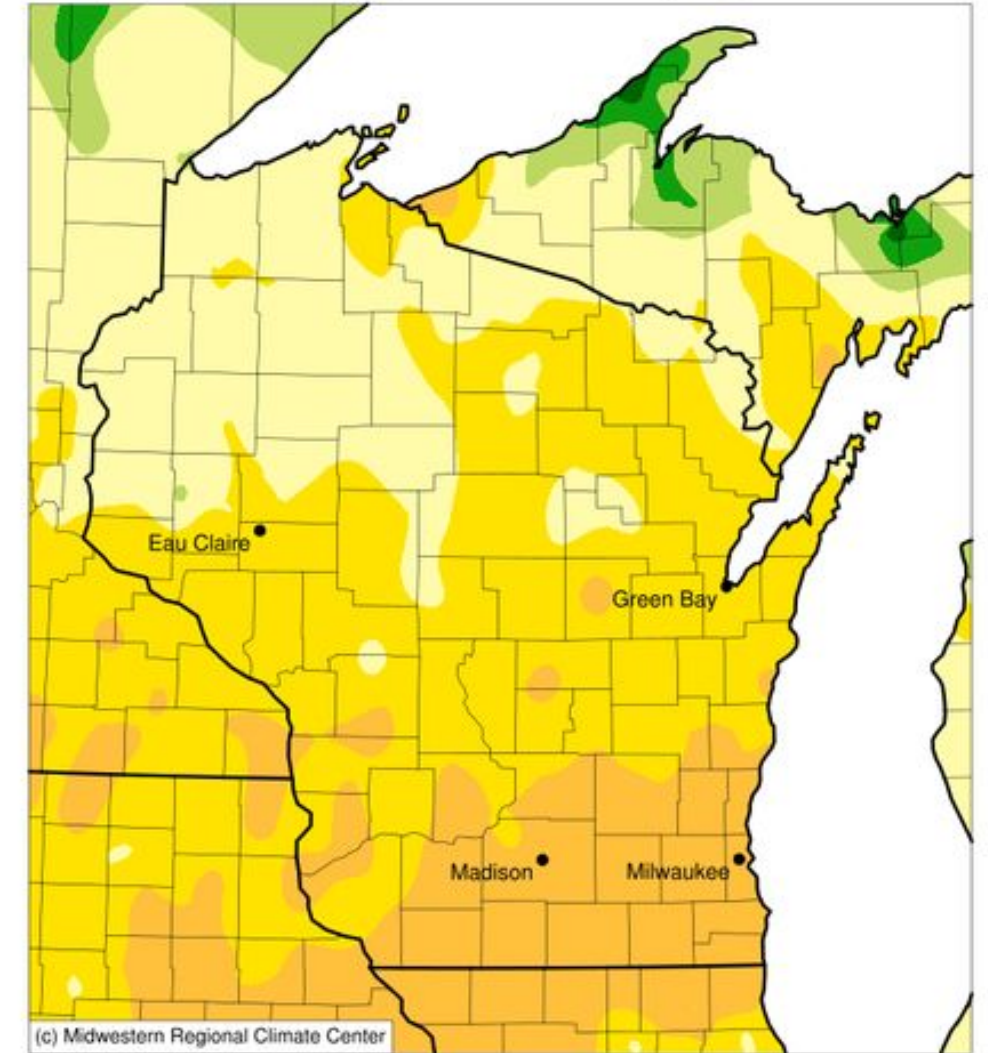
February 27, 2025
1:00 PM

- Since Oct 1, precipitation is 75-125% of normal in central and SW Wisconsin and 25 to 75% of normal in south-central and SE Wisconsin.
- Since Dec 1, precipitation is 25-50% of normal across much of southern WI, which is 1.5 to 3.5 inches below normal.

Accumulated Precipitation: Percent of 1991-2020 Normals
October 01, 2024 to February 25, 2025



Accumulated Precipitation: Percent of 1991-2020 Normals
December 01, 2024 to February 25, 2025





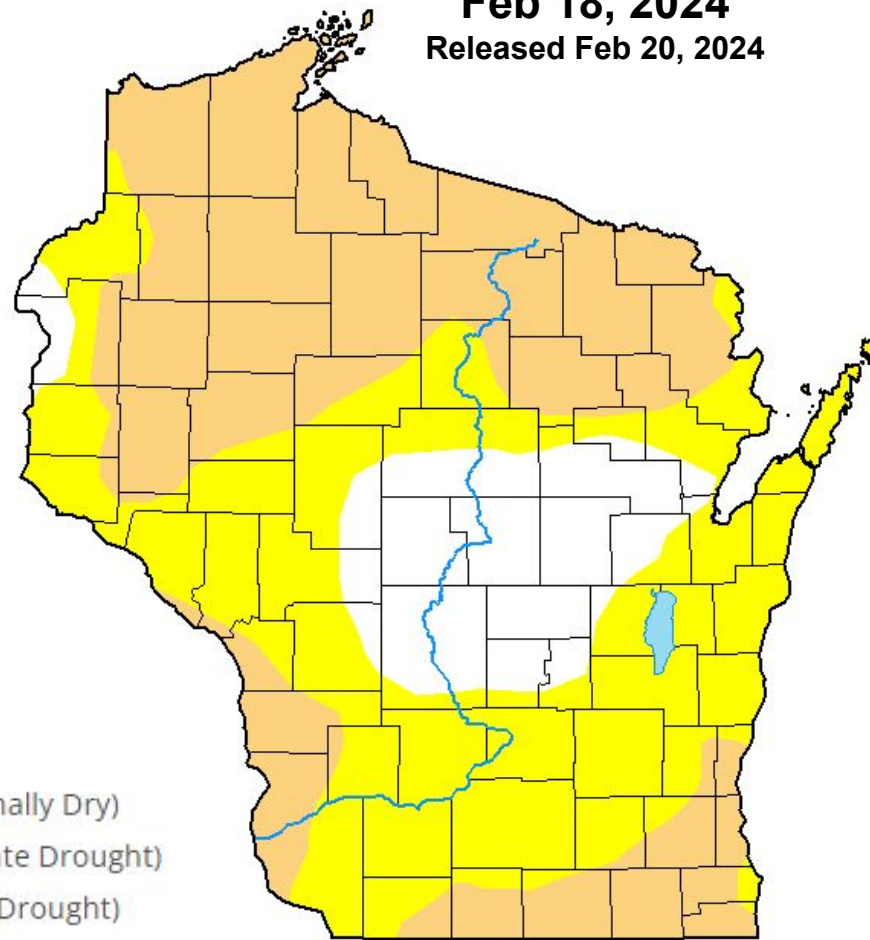
Current Conditions

February 27, 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 (not shown)
- Soil moisture in the 10-30th percentile in southeast Wisconsin and 30-70th (near normal) elsewhere across southern WI
- Some room in the soils to absorb moisture

U.S. Drought Monitor Wisconsin

Feb 18, 2024
Released Feb 20, 2024



Intensity

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



droughtmonitor.unl.edu

Climate Prediction Center Calculated Soil Moisture 2/25/25

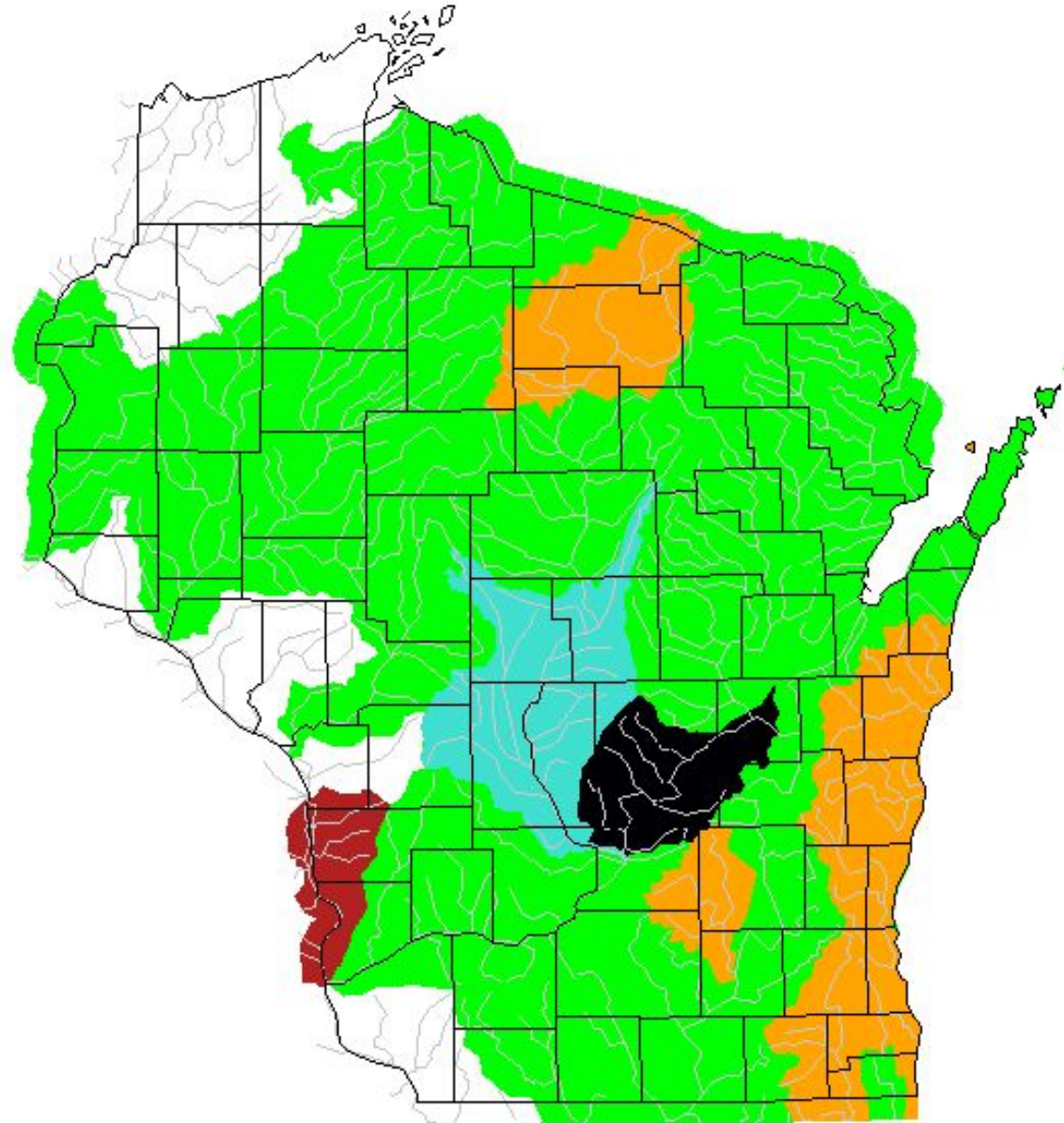




Current Conditions

February 27, 2025
1:00 PM

Tuesday, February 25, 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 10-24th percentile in southeast WI and the 25-75th percentile across most of the rest of southern Wisconsin
- Some room in the rivers to contain additional rainfall and melting snow





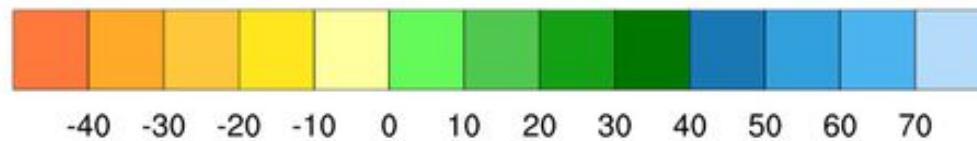
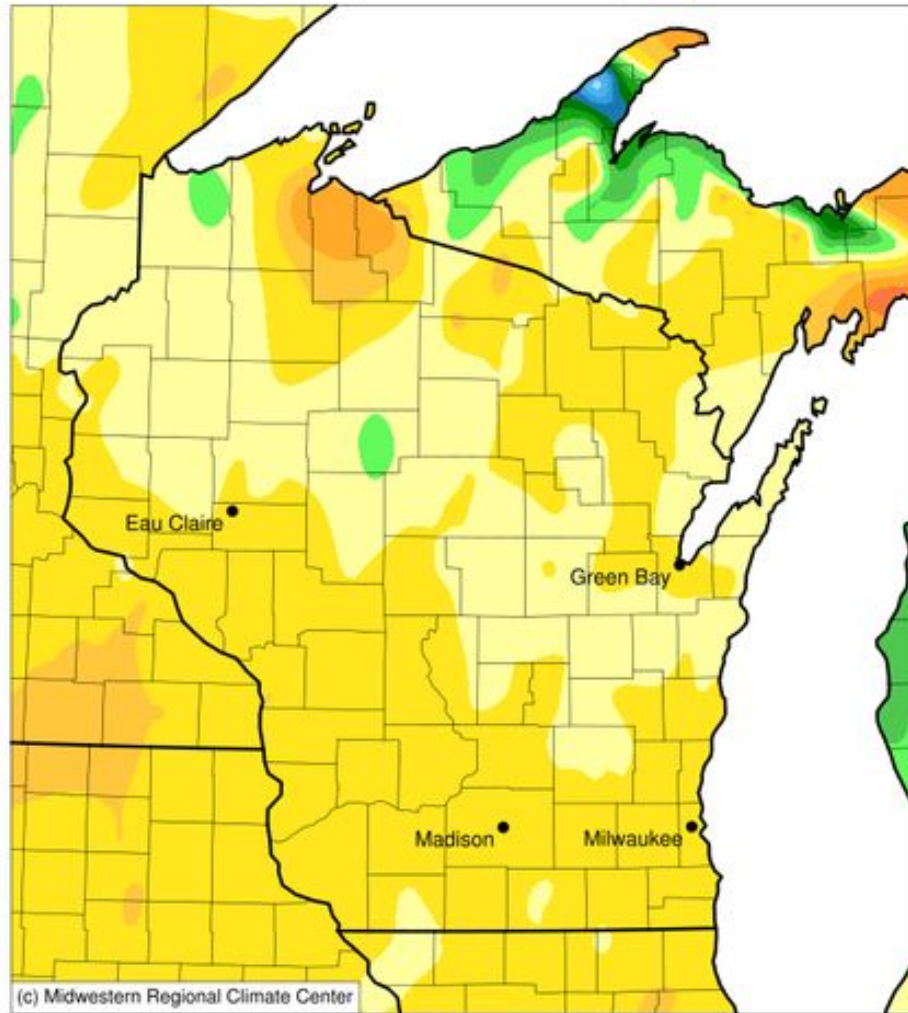
Snowfall

February 27, 2025
1:00 PM

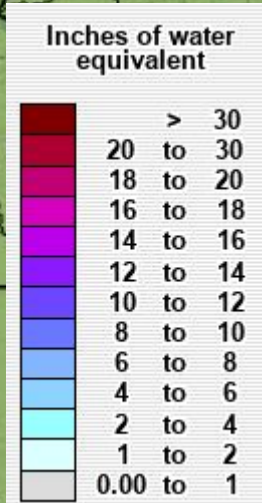
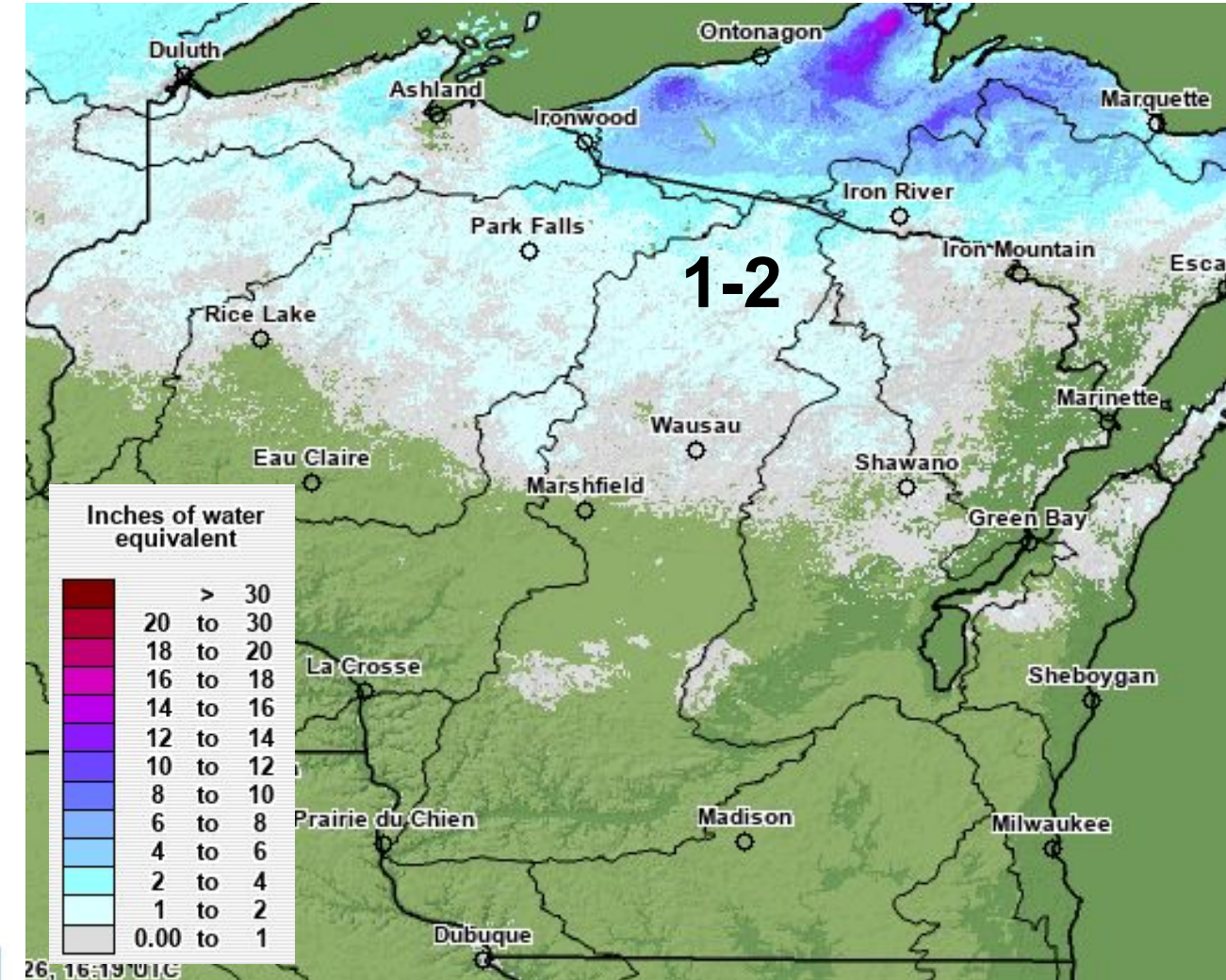
- Winter snowfall is 10 to 20 inches below average across southern Wisconsin.
- Current snow pack moisture is below average. Average for southern Wisconsin is around 0.5 to 1 inch this time of year.

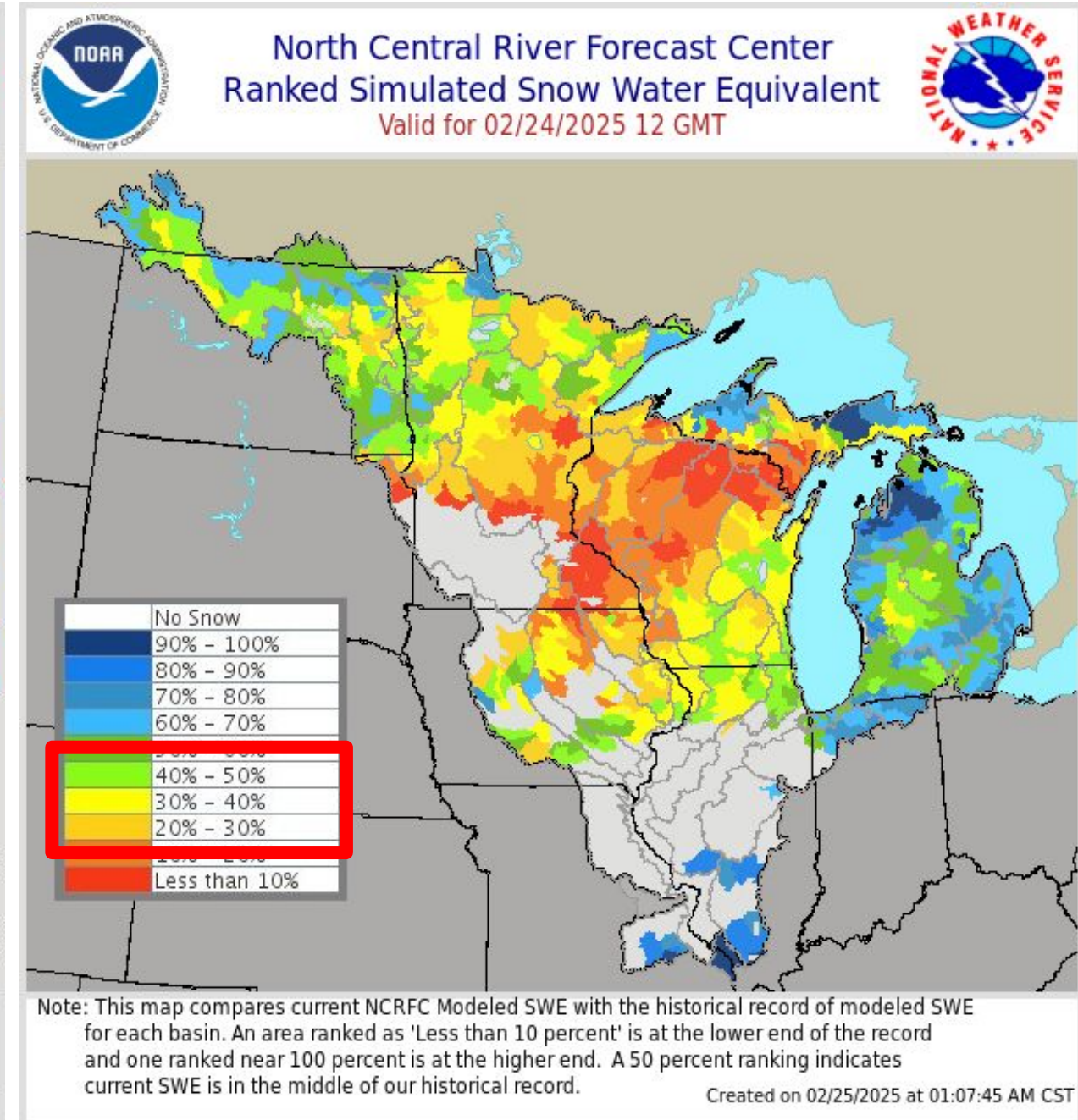
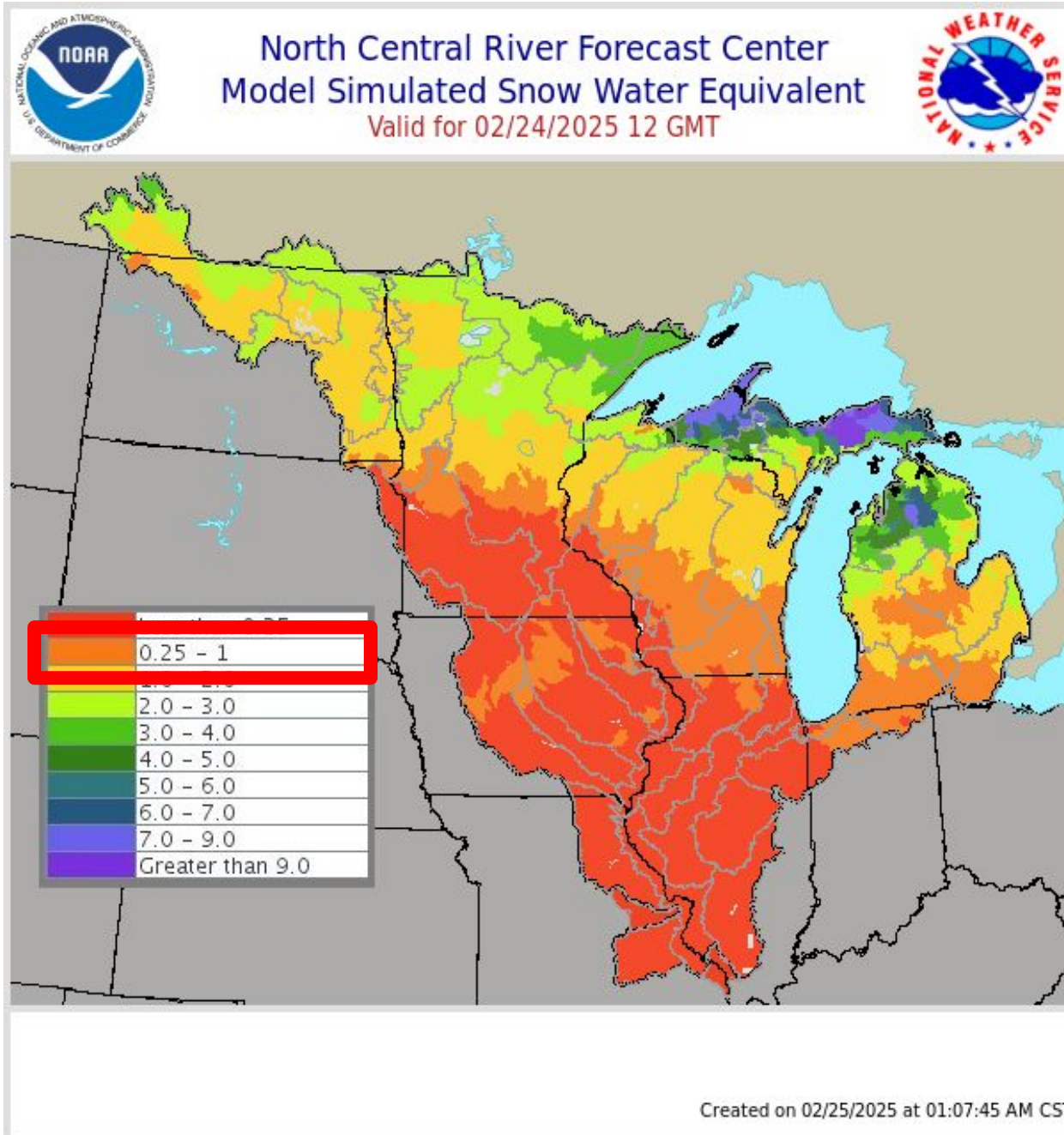
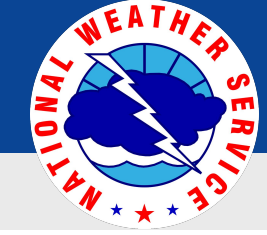
Accumulated Snowfall (in): Departure from 1991-2020 Normals

December 01, 2024 to February 25, 2025



Snow Water Equivalent (inches) 2/25/25

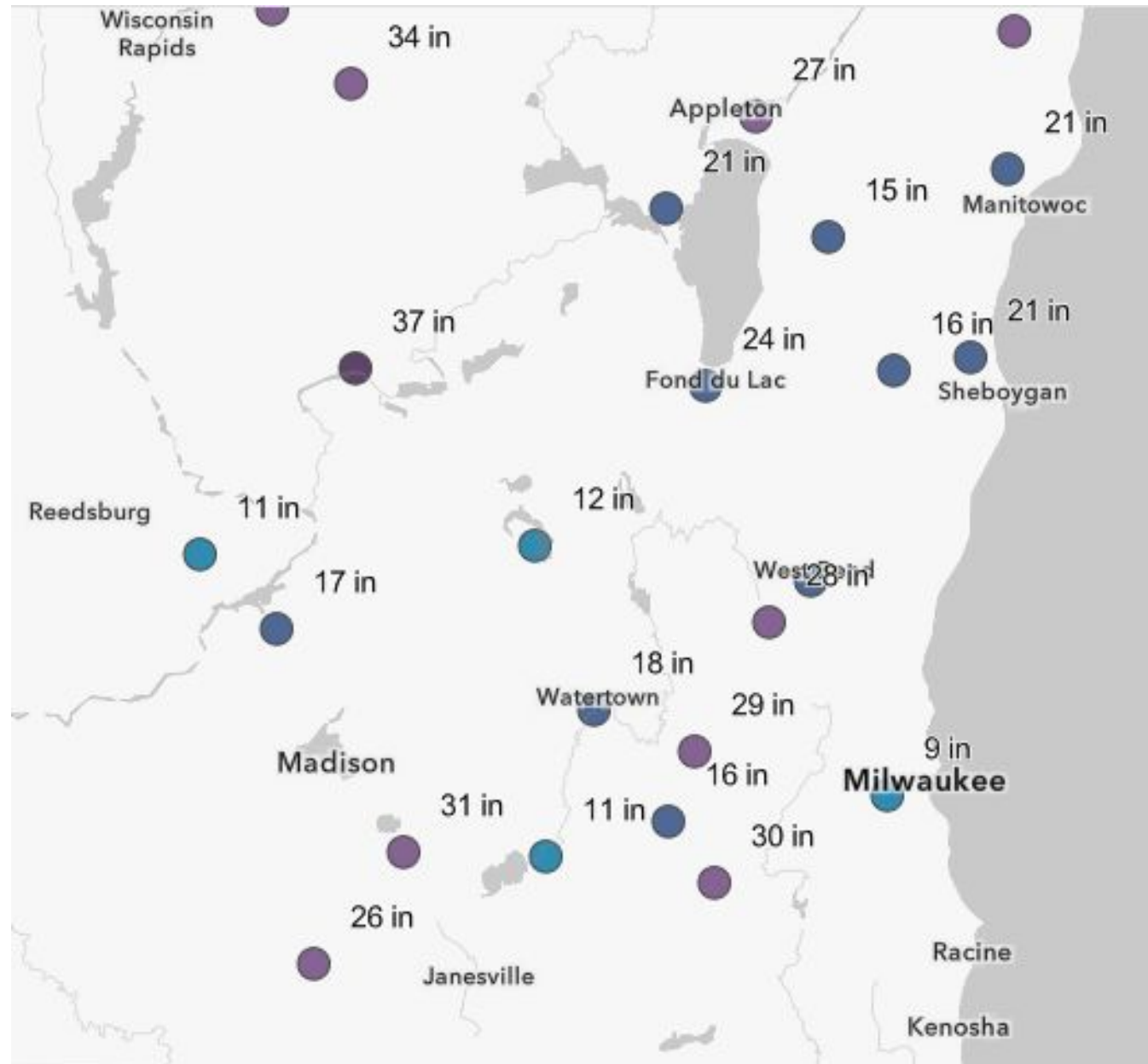




- There was ~0.5 inches of water in the snowpack that melted 2/24-2/25
- This was the 20-50th percentile (below average) for this time of year



Frost Depth - 2/25/25

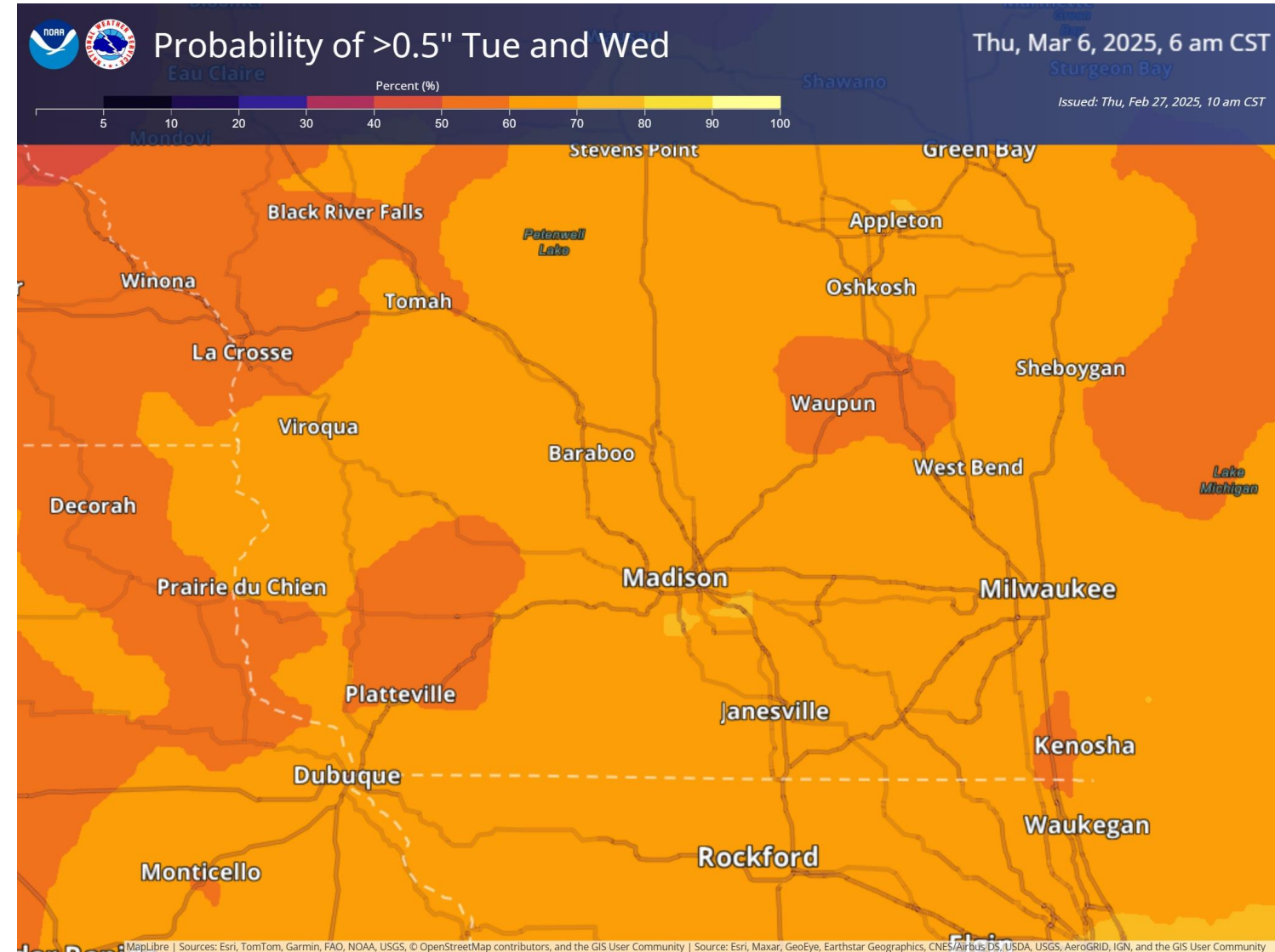
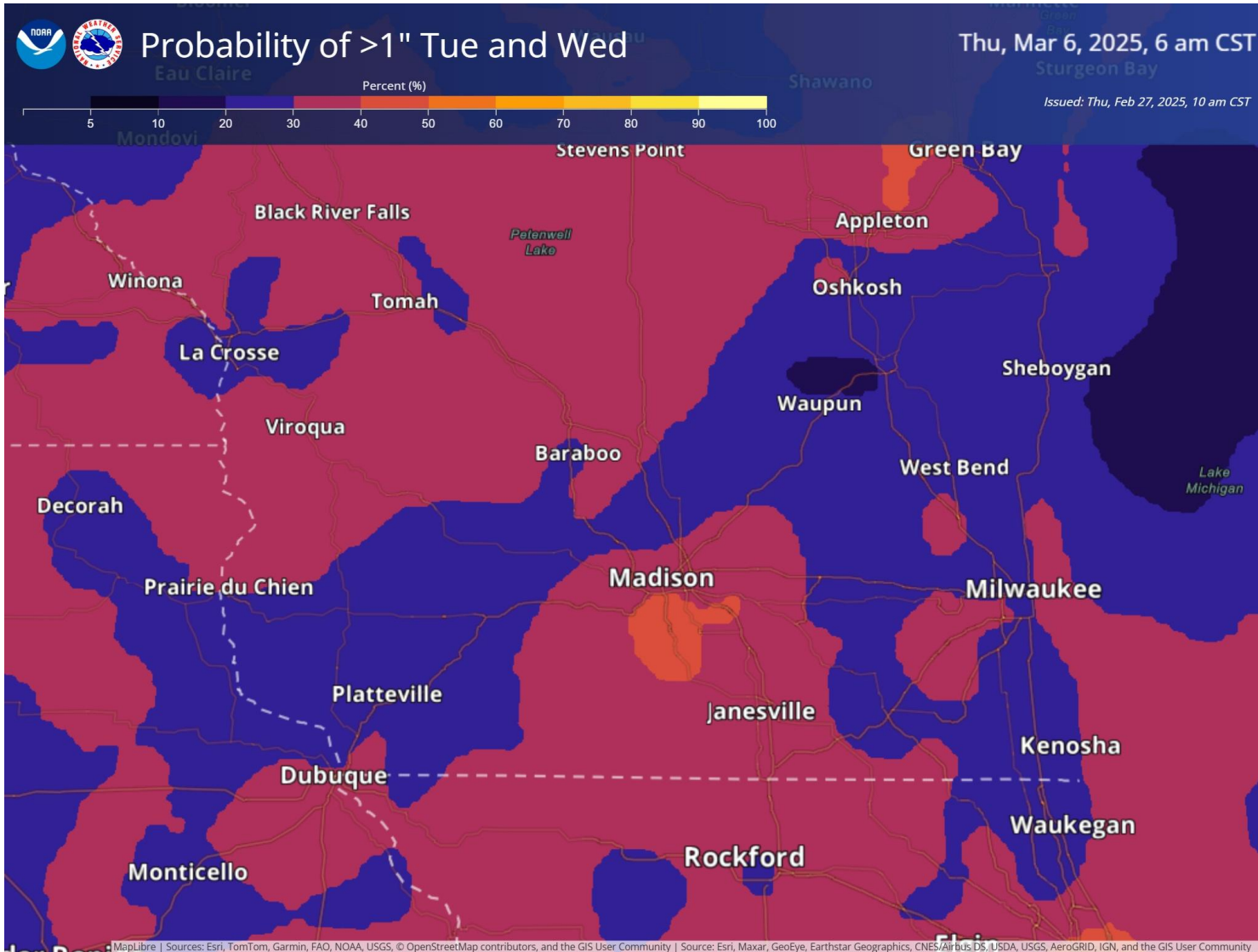


- Frost depth of 10 to 30 inches
- Deeper than average
- Currently at peak depth
- Less infiltration into soils while the ground is frozen



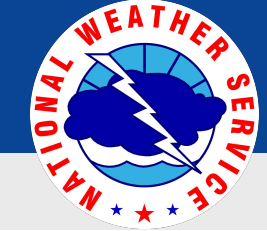
Week Outlook

February 27, 2025
1:00 PM



- A system may impact the midwest next week, still uncertainty how much rain vs snow and amounts
- Time frame to watch for river rises, ice jams, and water ponding in flat and low lying area.





Week 2 Outlook

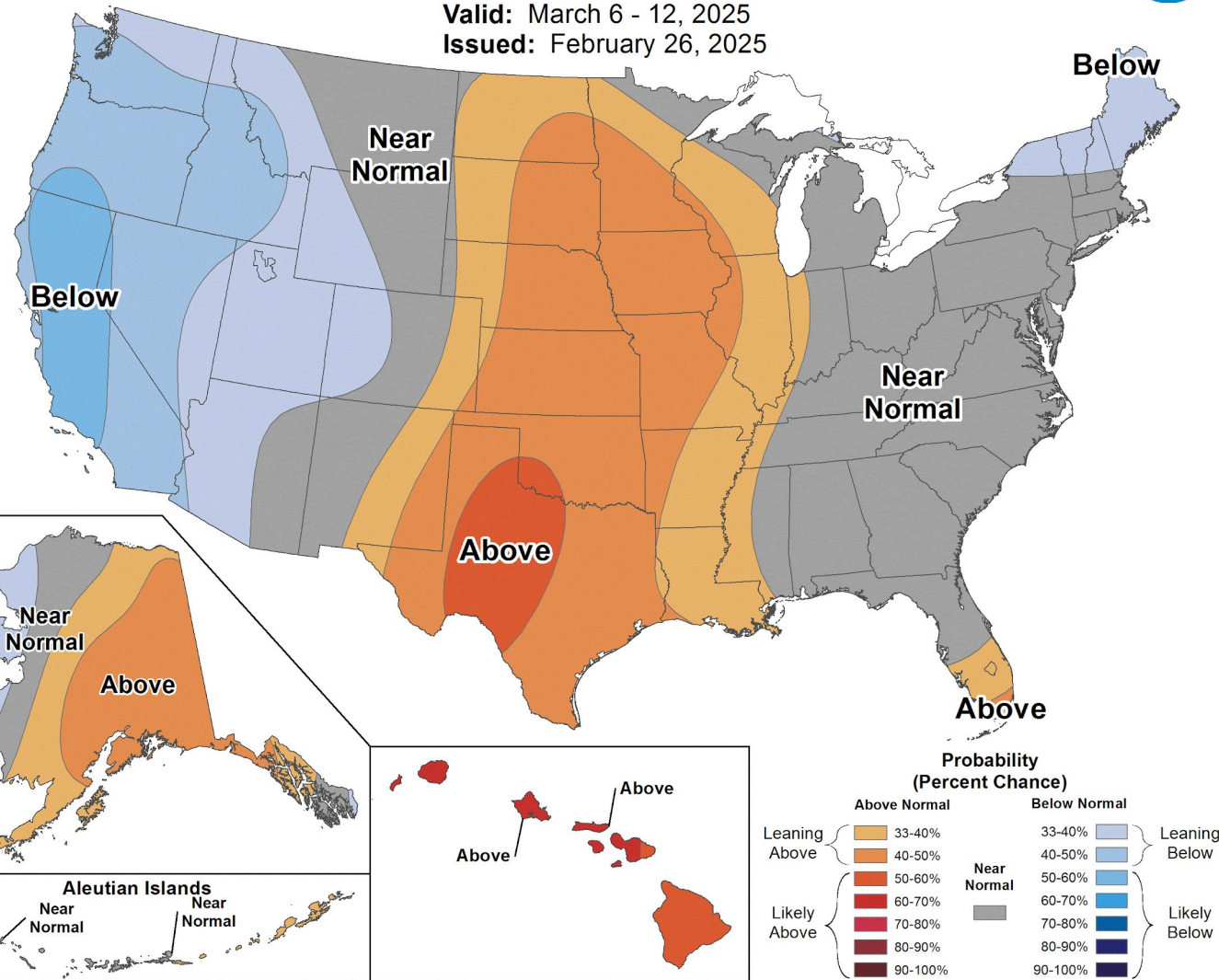
February 27, 2025
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8-14 Day Temperature Outlook



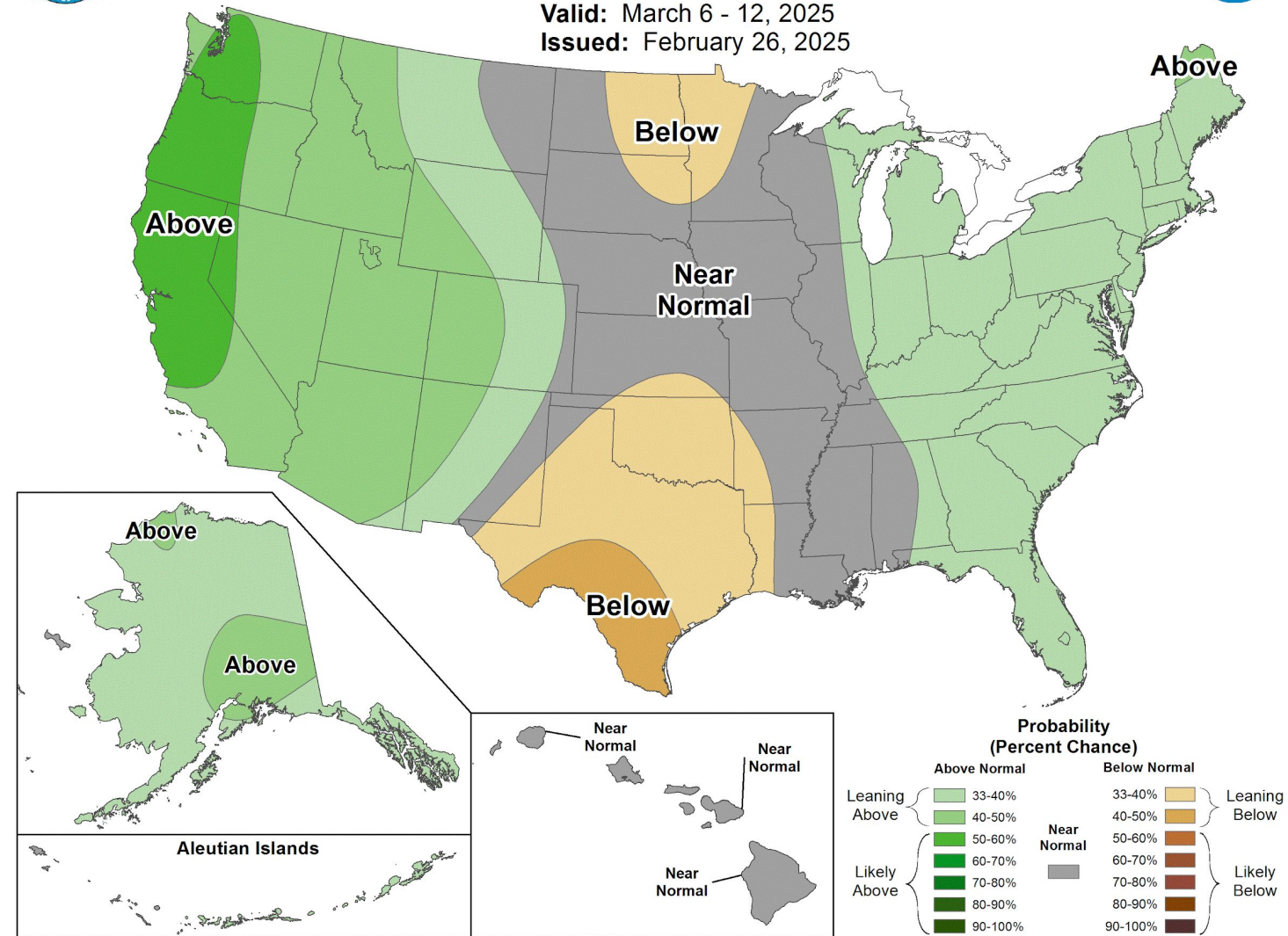
Valid: March 6 - 12, 2025
Issued: February 26, 2025



8-14 Day Precipitation Outlook



Valid: March 6 - 12, 2025
Issued: February 26, 2025



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





Extended Outlook

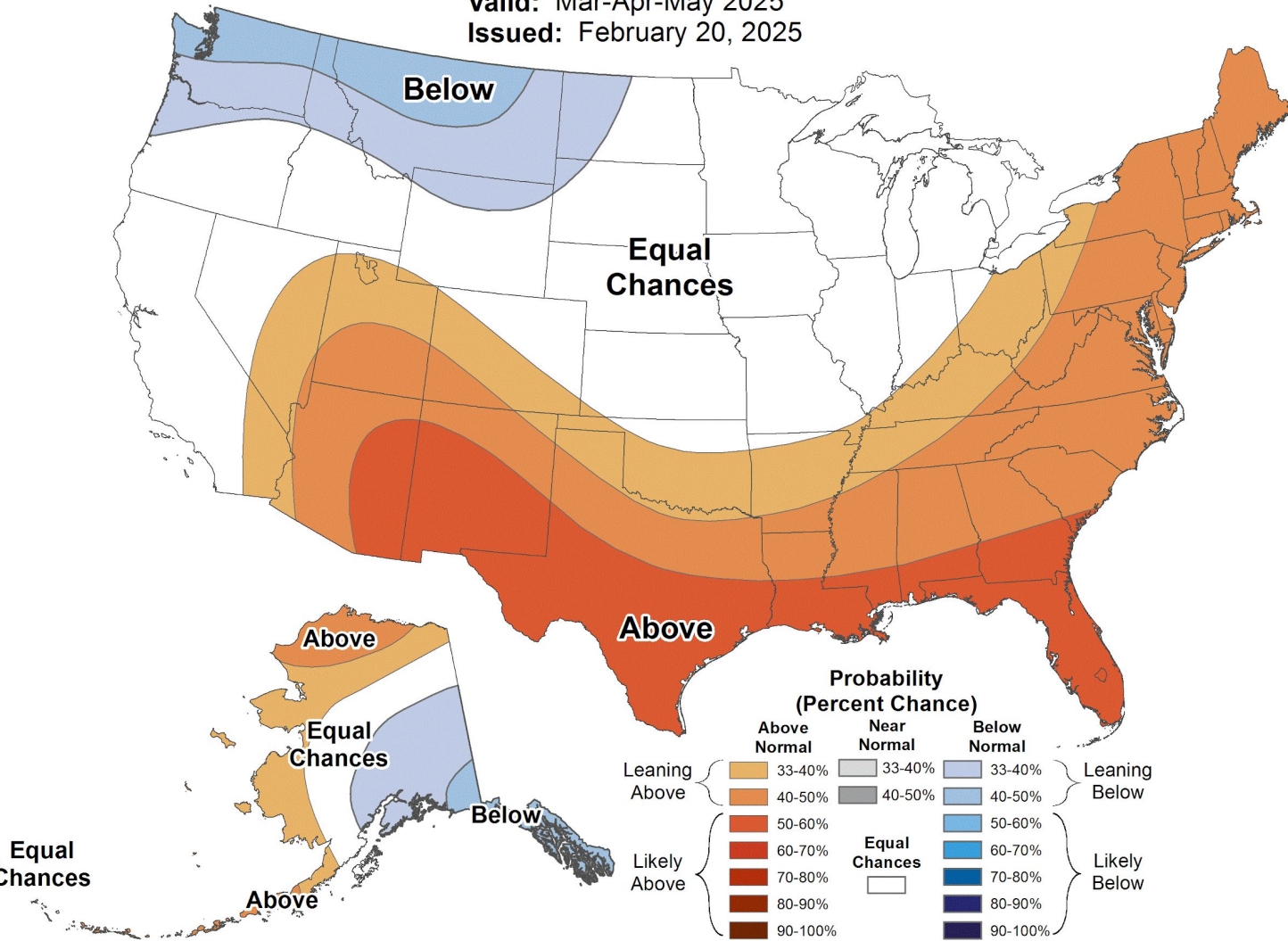
February 27, 2025
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Seasonal Temperature Outlook



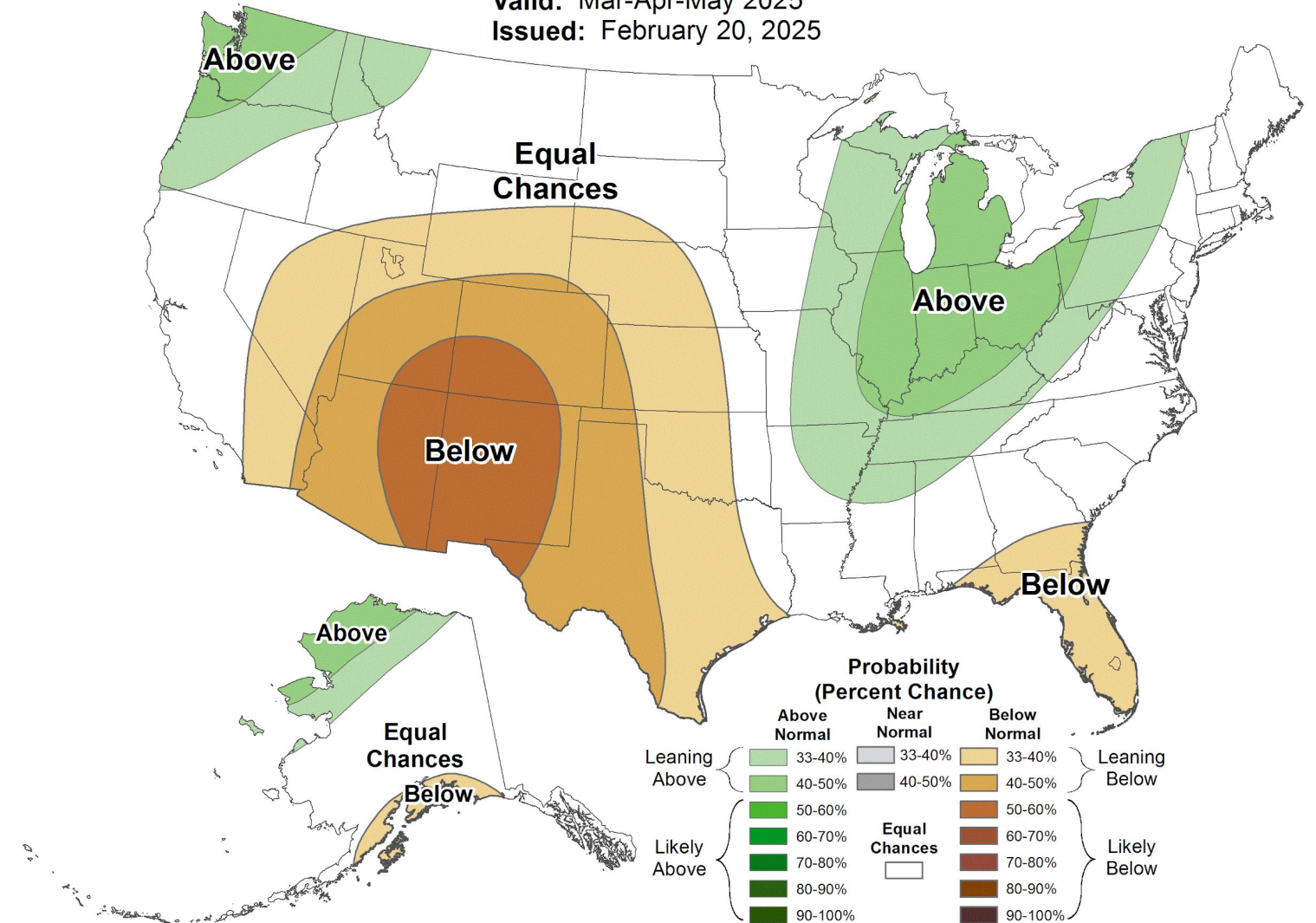
Valid: Mar-Apr-May 2025
Issued: February 20, 2025



Seasonal Precipitation Outlook



Valid: Mar-Apr-May 2025
Issued: February 20, 2025



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





River Forecast Website

February 27, 2025
1:00 PM

water.noaa.gov/wfo/mkx

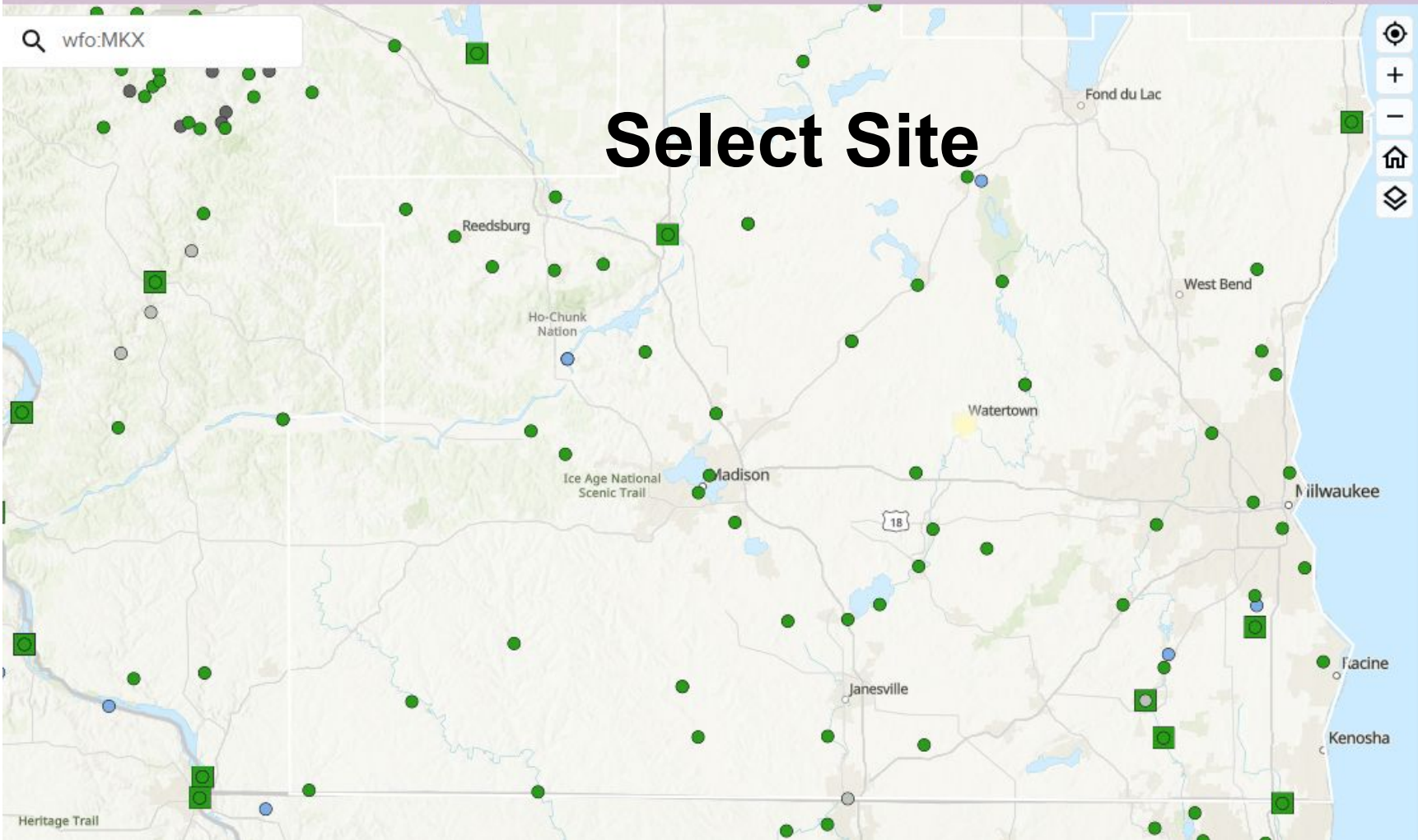


Home NWC Operations More Water Information About Explore NWS Weather

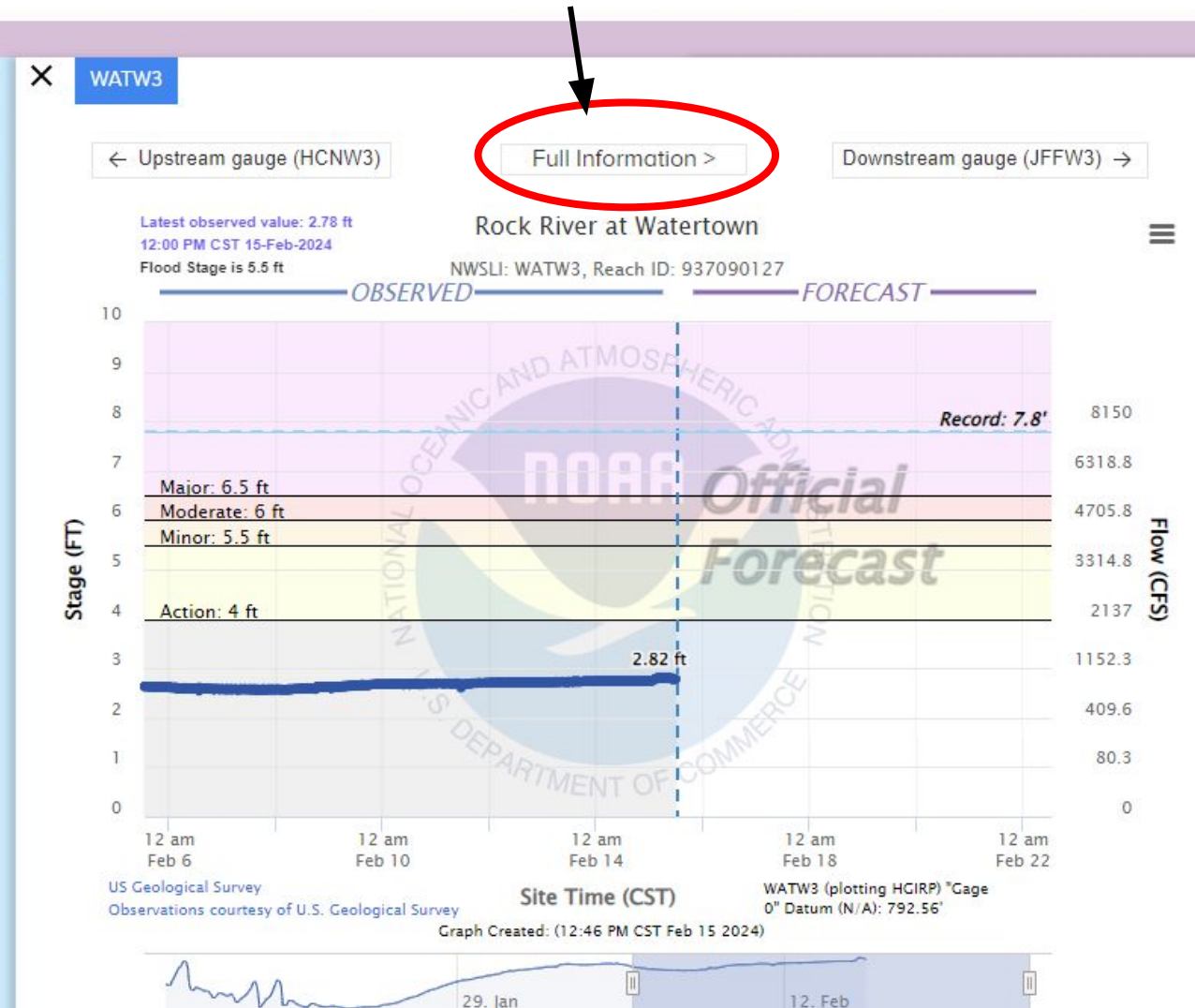


National Observations / Milwaukee/Sullivan, WI

Small Craft Advisory



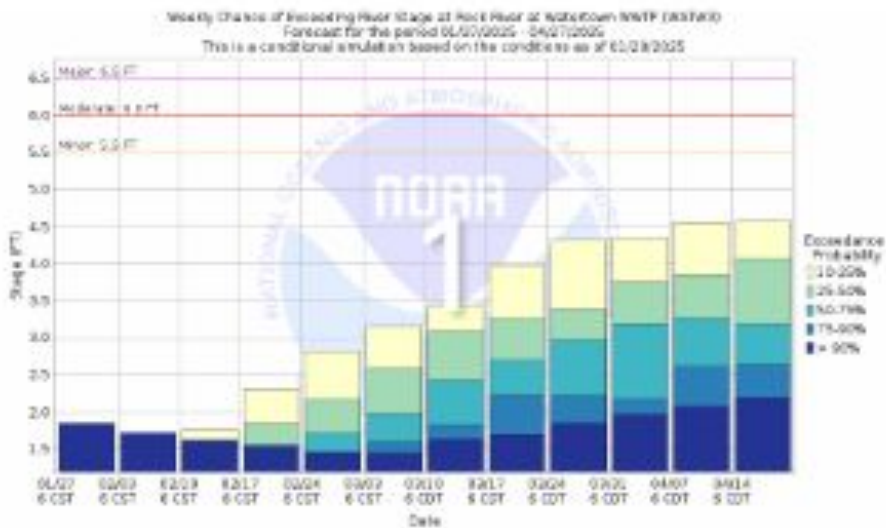
Select Full Information



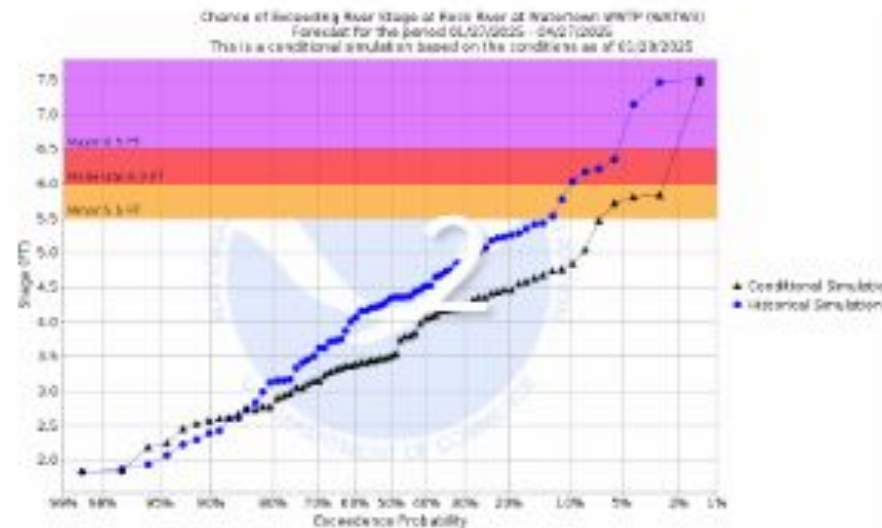


Scroll down to section titled Probability Information

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 27, 2025
1:00 PM

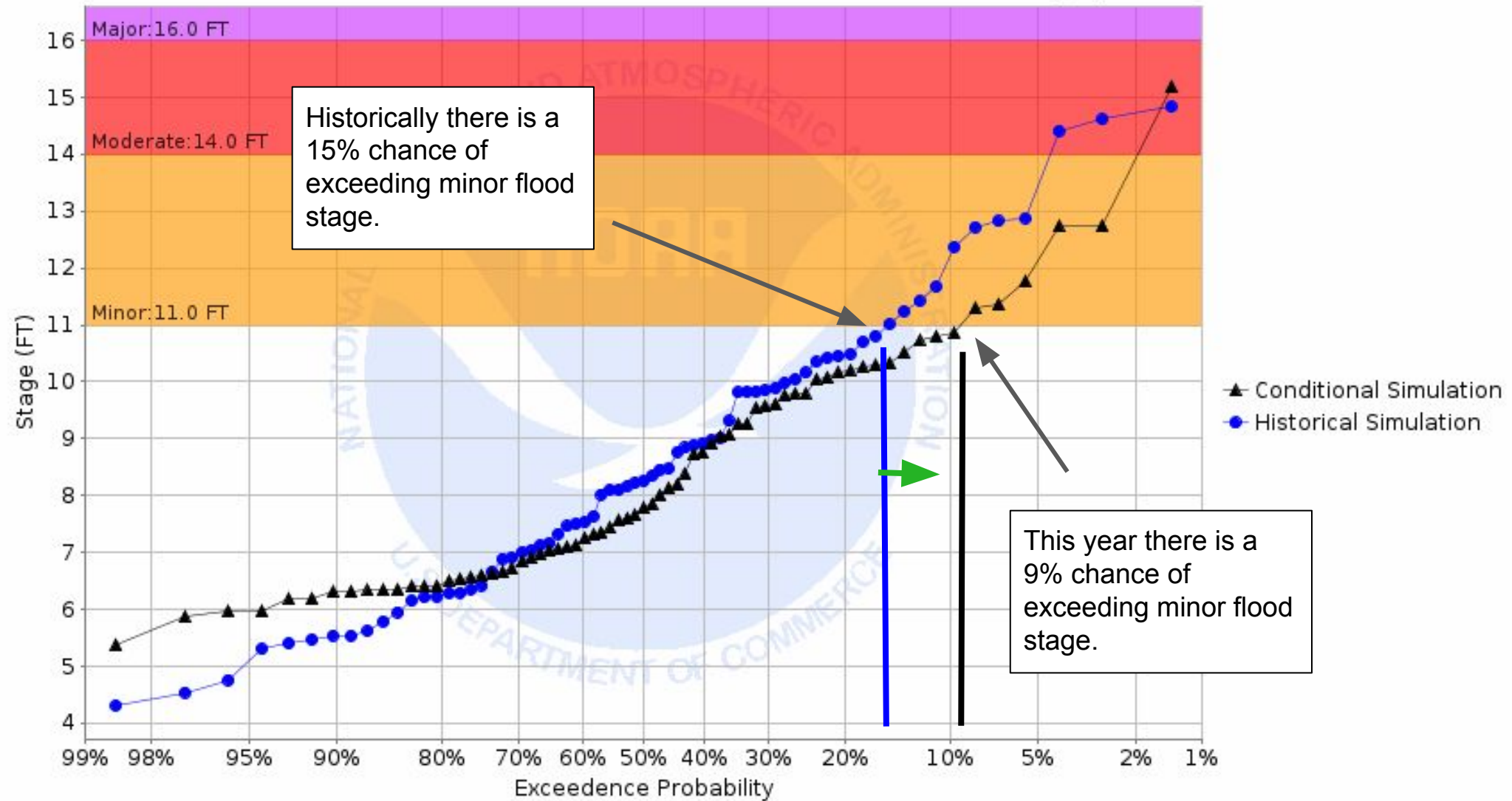
The outlook is for a 3 Month time period.

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 East Branch Pecatonica River at Blanchardville 2S (BCHW3)
Forecast for the period 03/03/2025 - 06/01/2025
This is a conditional simulation based on the conditions as of 02/24/2025





Interpreting the Probability Graphics

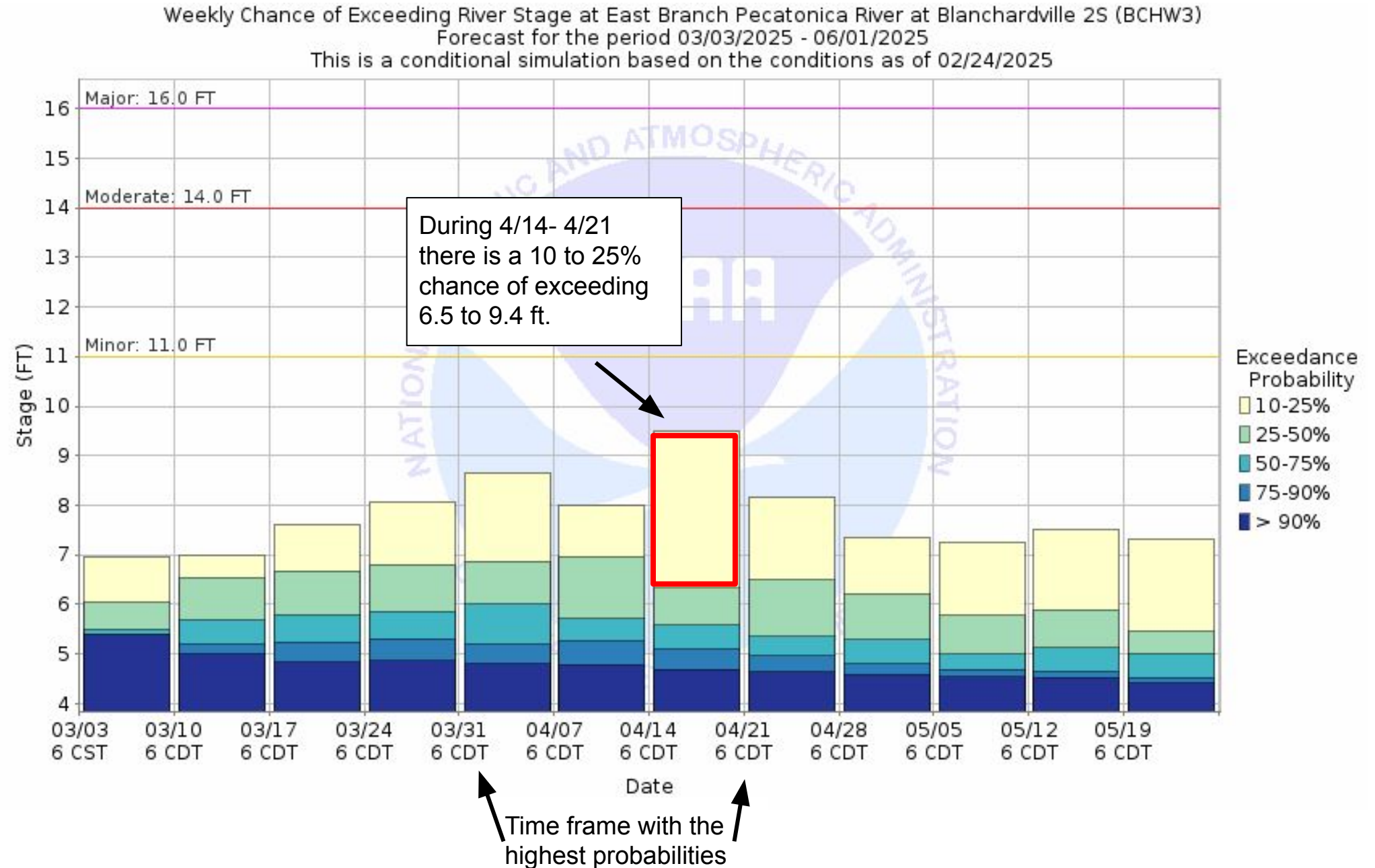
February 27, 2025
1:00 PM

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.





Interpreting the Probability Graphics

February 27, 2025
1:00 PM



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.

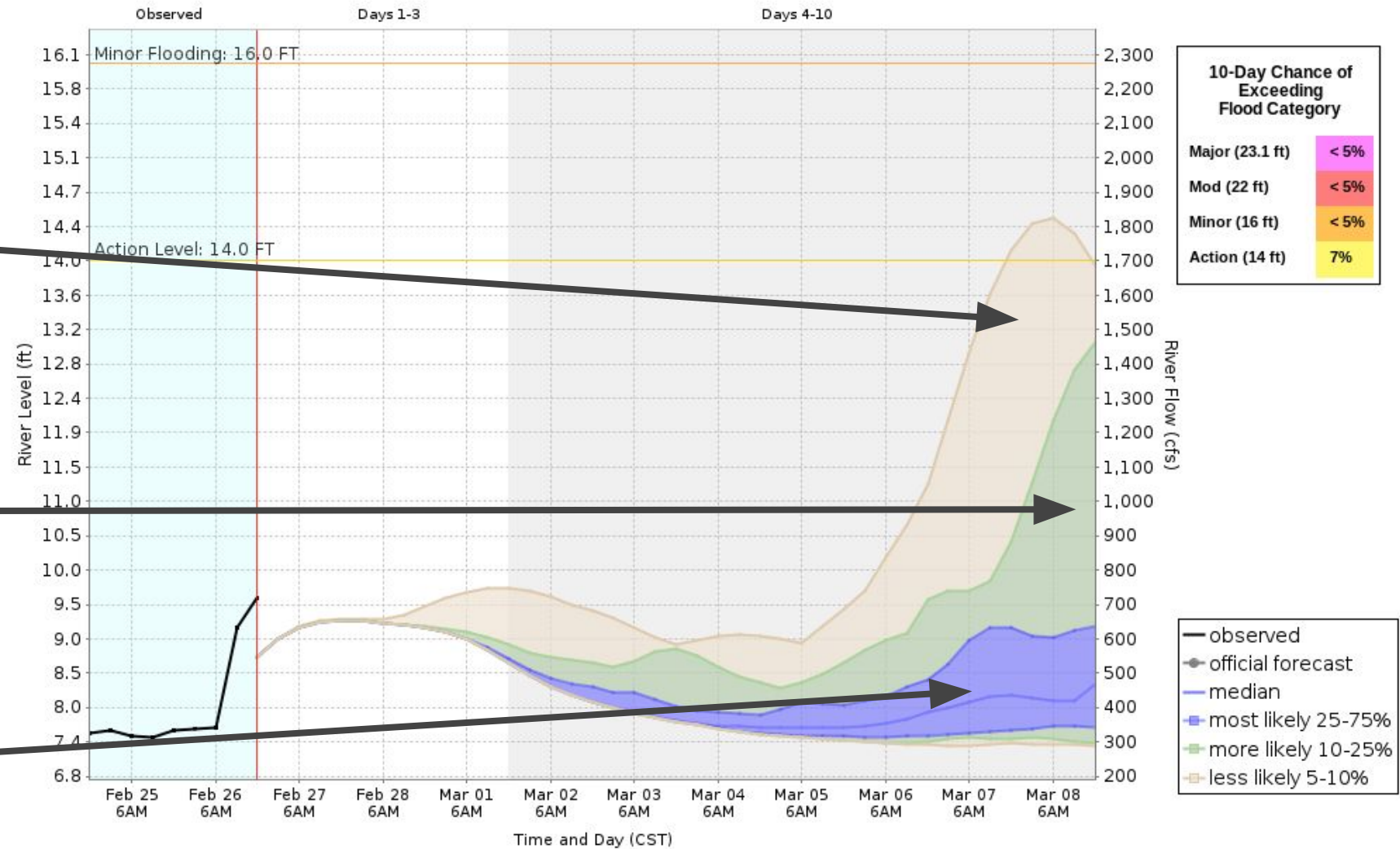
~80% of forecasts are within the blue and green ranges. ~10% of forecasts are above and ~10% are below the green range.

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

HEFS - 10 Day River Level Probabilities

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

Feb 27 - Mar 09, 2025
Baraboo River at Baraboo (BABW3)



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 26 2025
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 with any questions or comments.

Additional update: March 13, 2025