

A photograph of a bridge over a river. The bridge has concrete piers and green steel trusses. Several white flood gauges are attached to the piers, showing water levels. The river is calm, and there are trees on the banks. The text is overlaid in yellow.

2025 Spring Flood Outlook February 20, 2025

Mary Lamm
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NWS Paducah





2025 Updates

- ~~Thursday, February 13~~
- Thursday, February 28
- Thursday, March 13

- A multi-month probabilistic outlook issued each spring
- Provides relative risk of flooding (current conditions compared to average conditions)
- Helps with long range planning decisions

Bottom Line Up Front:

- Mississippi and Local Tributaries: Minor flooding is possible. There is a normal to below normal flood risk.
- Minor and isolated moderate flooding is expected (50% chance or greater)
- Minor and isolated moderate to major flooding is possible (25% chance or greater)



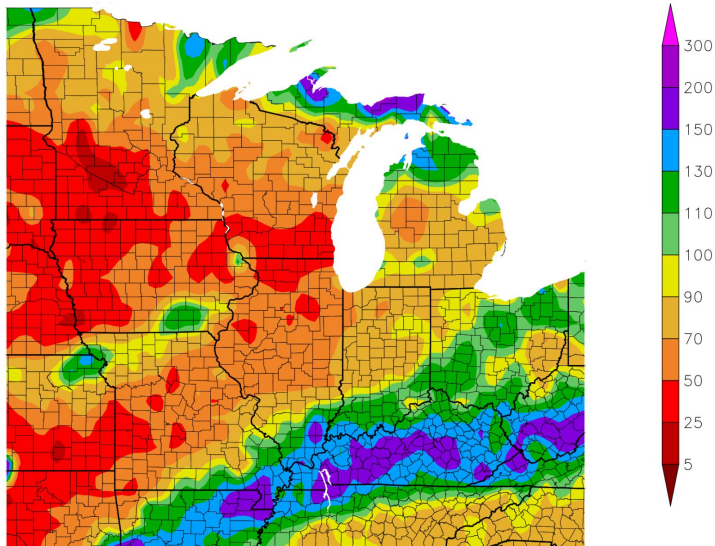
Factors we look at for spring flooding:

- Recent precipitation
- Snowpack
- Soil moisture
- Current flow in area rivers
- Future rainfall



Spring Flood Outlook 2025

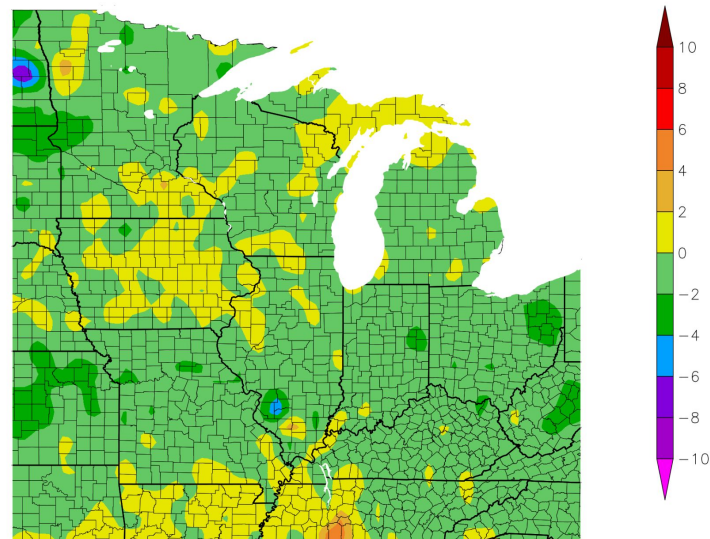
Percent of Normal Precipitation (%)
11/21/2024 – 2/18/2025



Generated 2/19/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
11/21/2024 – 2/18/2025



Generated 2/19/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

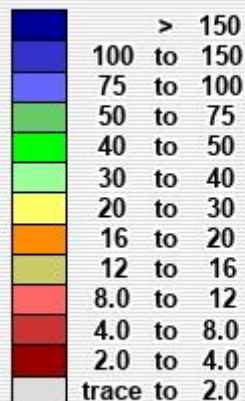
Precipitation has been above normal in our area but in the upper parts of the Mississippi Basin - below to much below normal. Temperatures have been near normal.

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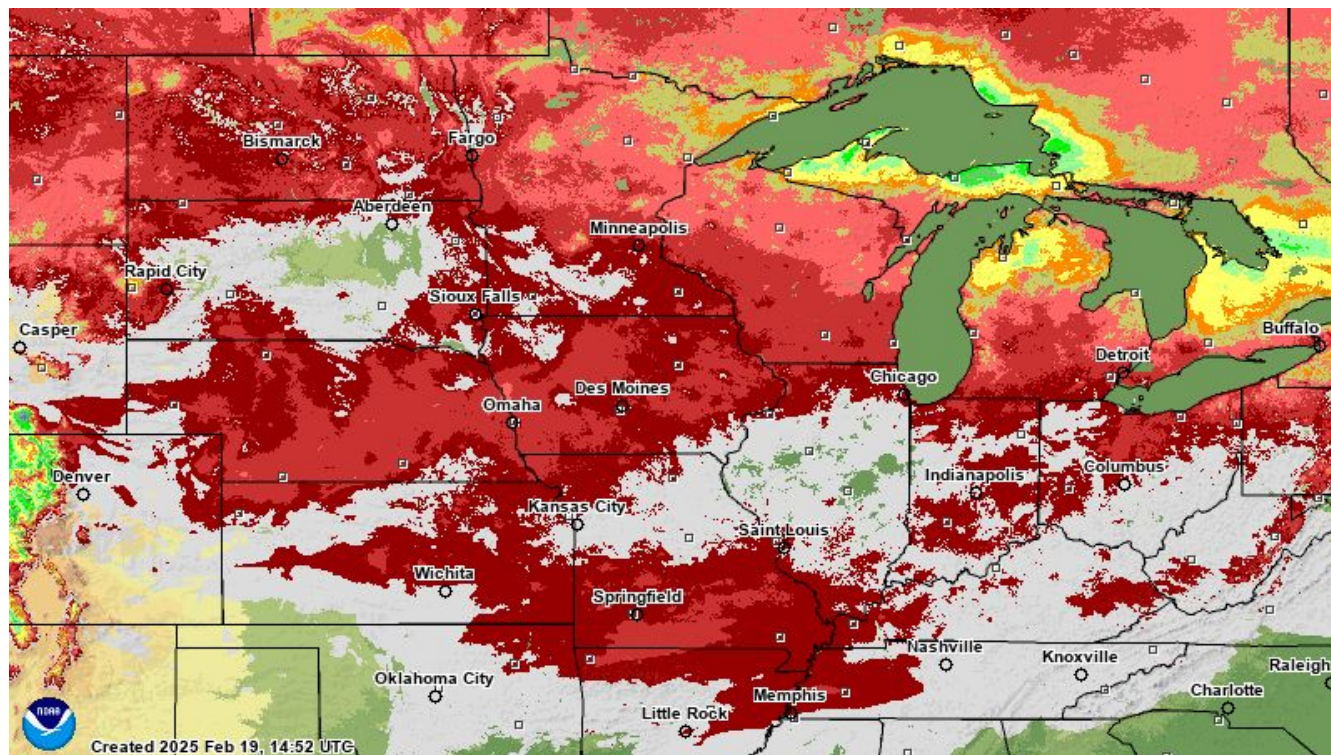


Wednesday,
February 19

Inches of depth

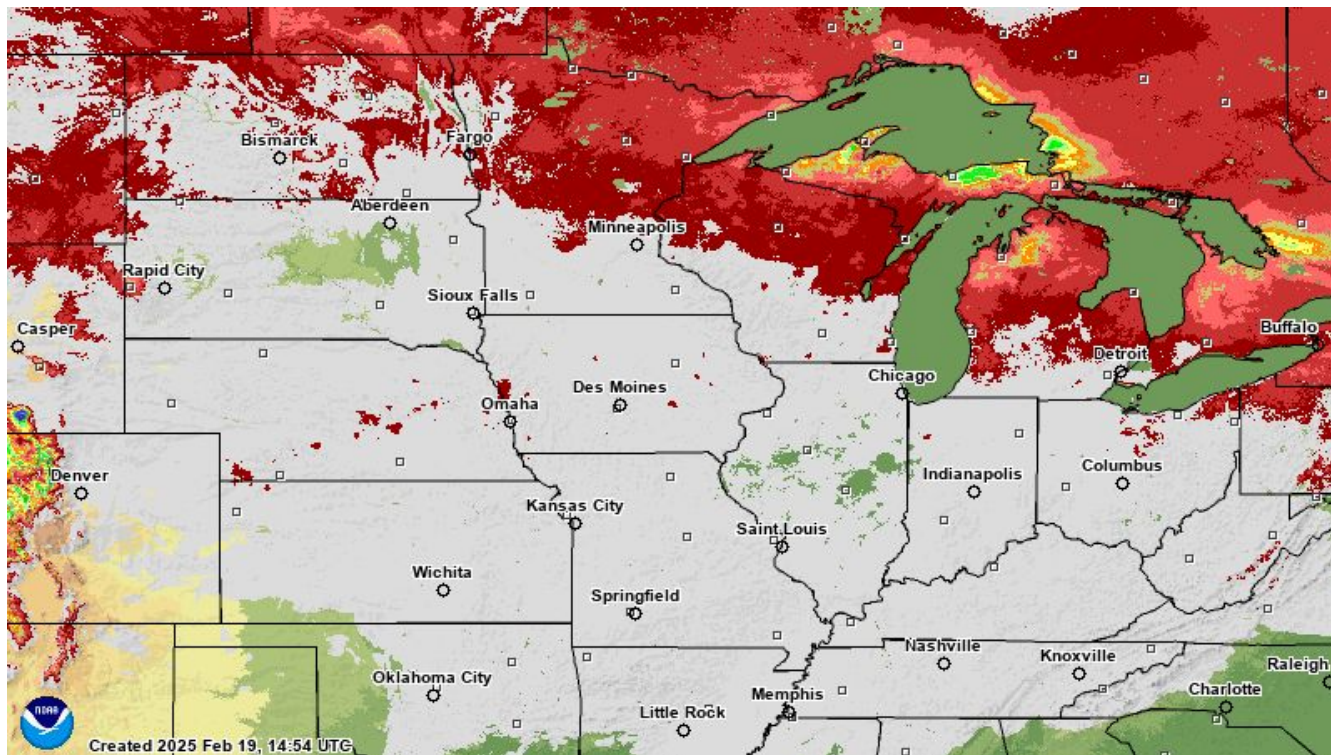
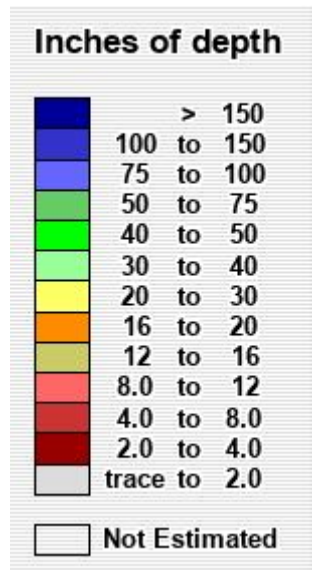


Not Estimated



Most areas saw 4 to 8 inches of snow across the region.

Wednesday,
February 19



It was a light and fluffy snow with less than 1 inch of water in the snowpack.

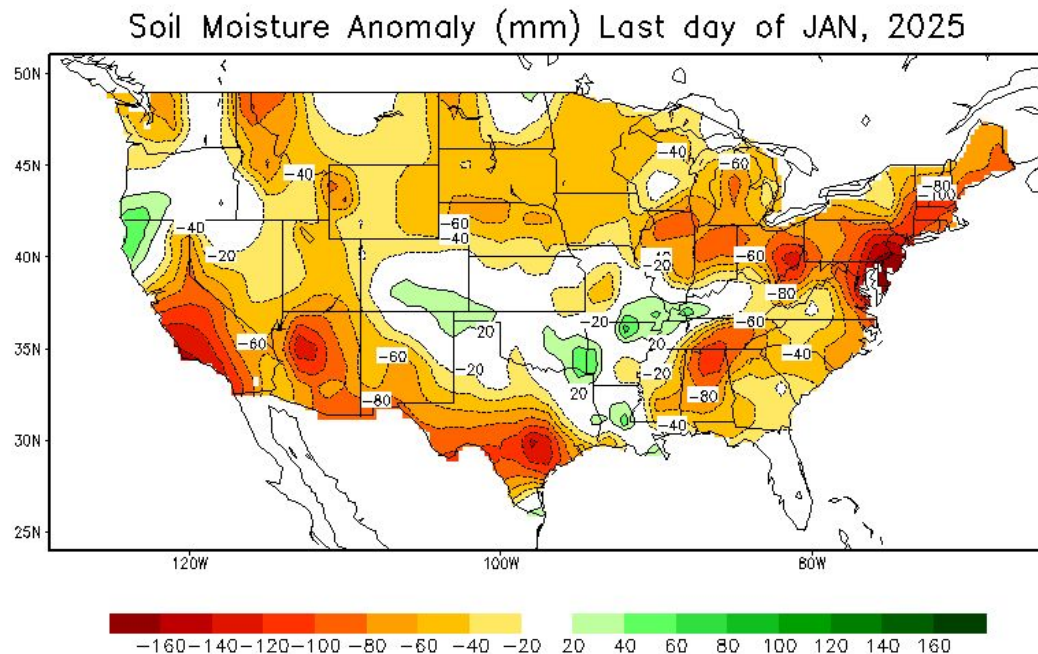
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Spring Flood Outlook 2025 - Soil Moisture Anomalies

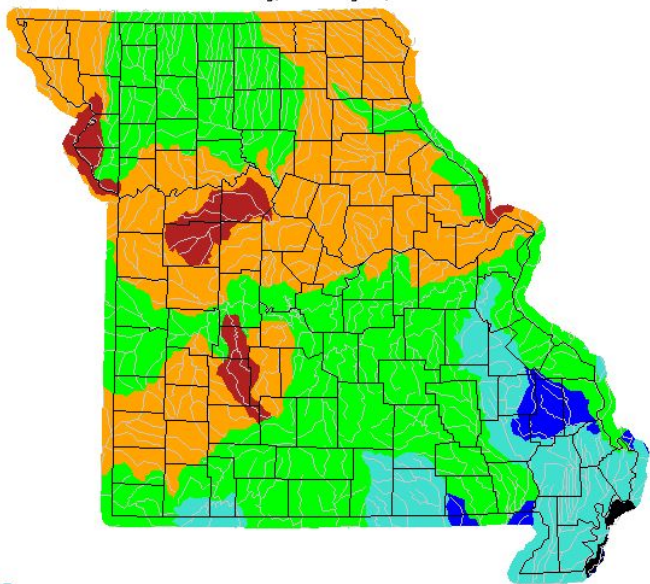
This does not take into account the heavy rain event across the Ohio Valley this past weekend.

Ohio and middle Mississippi Valley is wetter than normal and upper parts of the Mississippi Basin are drier.



Spring Flood Outlook 2025 - Current Streamflow

Tuesday, February 18, 2025



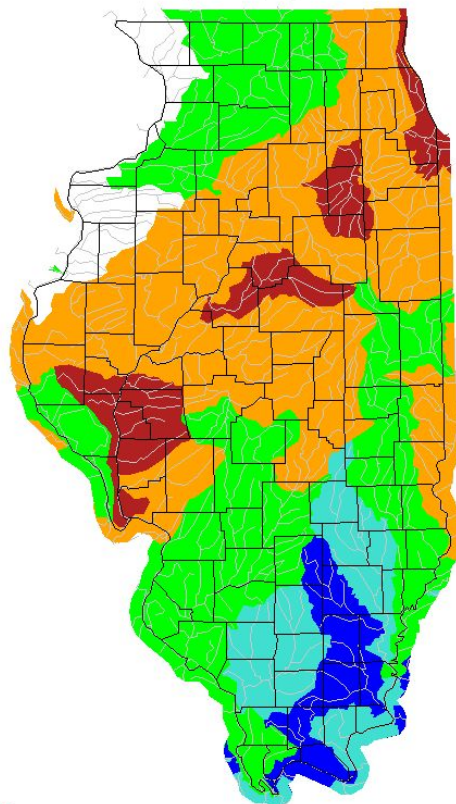
USGS

Explanation - Percentile classes

| | | | | | | | |
|-----|--------------------------|-----------------------|-----------------|-----------------------|--------------------------|------|------------|
| | | | | | | | |
| Low | <10 Much below normal | 10-24 Below normal | 25-75 Normal | 76-90 Above normal | >90 Much above normal | High | Not-ranked |

USGS

Tuesday, February 18, 2025

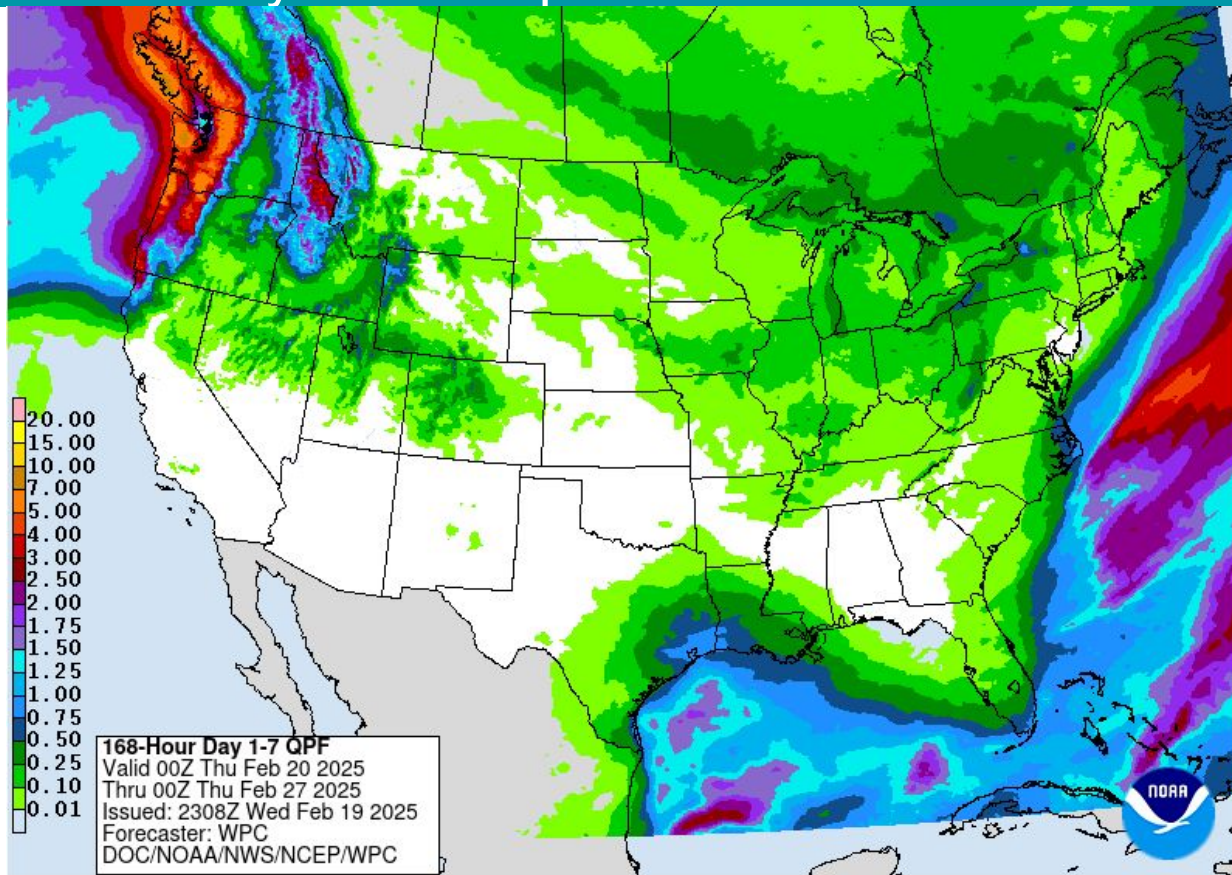


Higher streamflows in our area vs lower stream flow further north.

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Next 7 Days of Precipitation



Very little rainfall is expected over the next week.

Temperatures will moderate away from these frigid readings to more normal to above normal next week.

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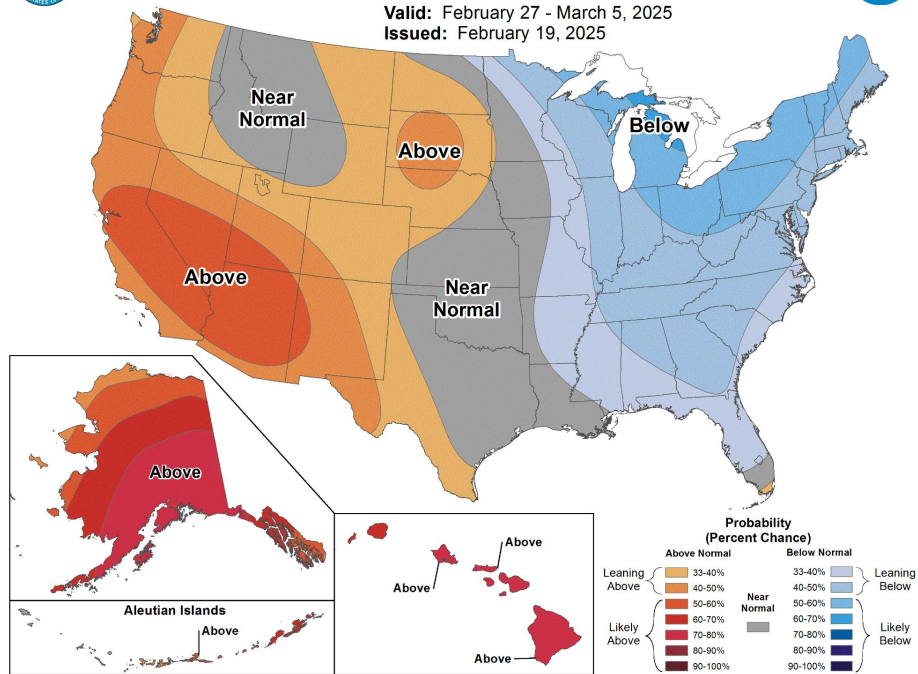
8-14 Day Outlook



8-14 Day Temperature Outlook

Valid: February 27 - March 5, 2025

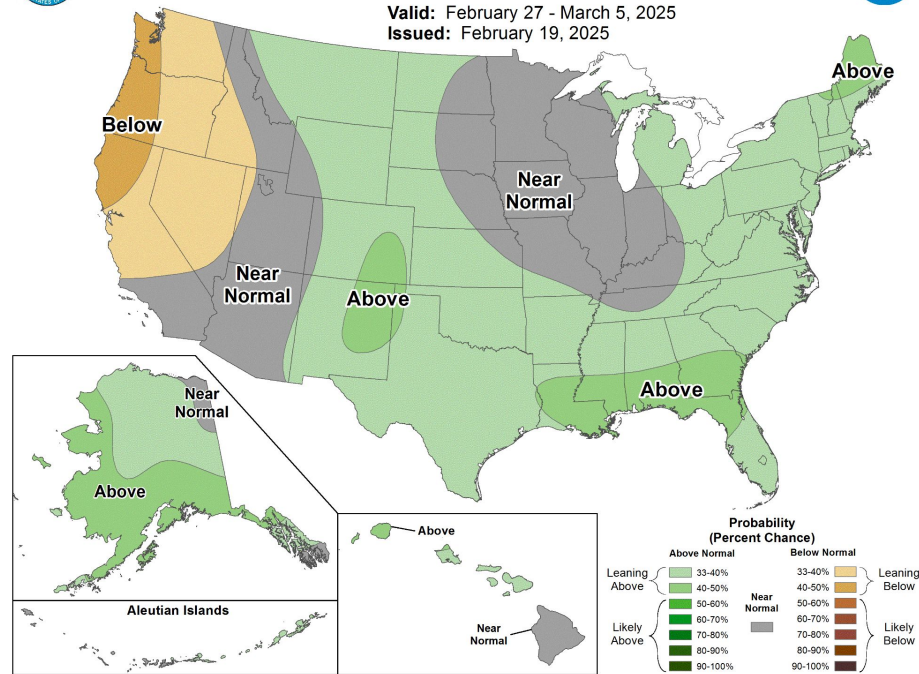
Issued: February 19, 2025



8-14 Day Precipitation Outlook

Valid: February 27 - March 5, 2025

Issued: February 19, 2025



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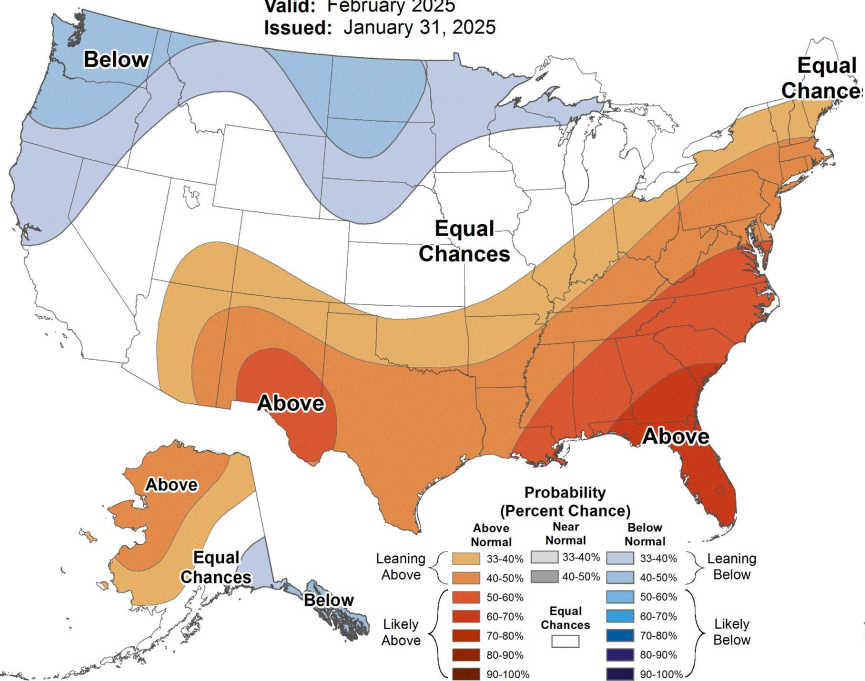


February Outlook (new outlooks issued too late for presentation)



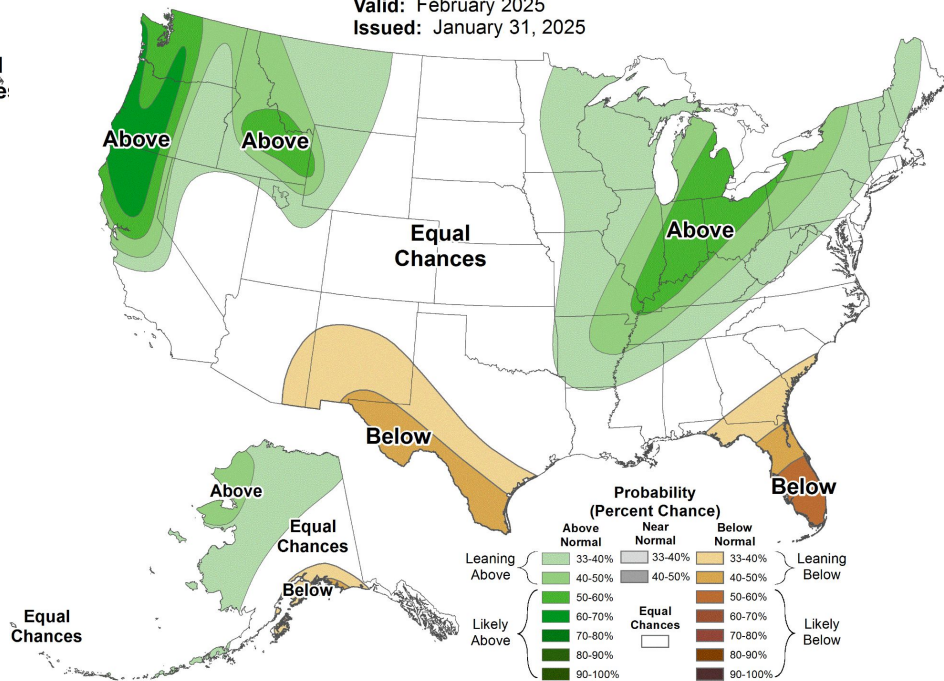
Monthly Temperature Outlook

Valid: February 2025
Issued: January 31, 2025



Monthly Precipitation Outlook

Valid: February 2025
Issued: January 31, 2025



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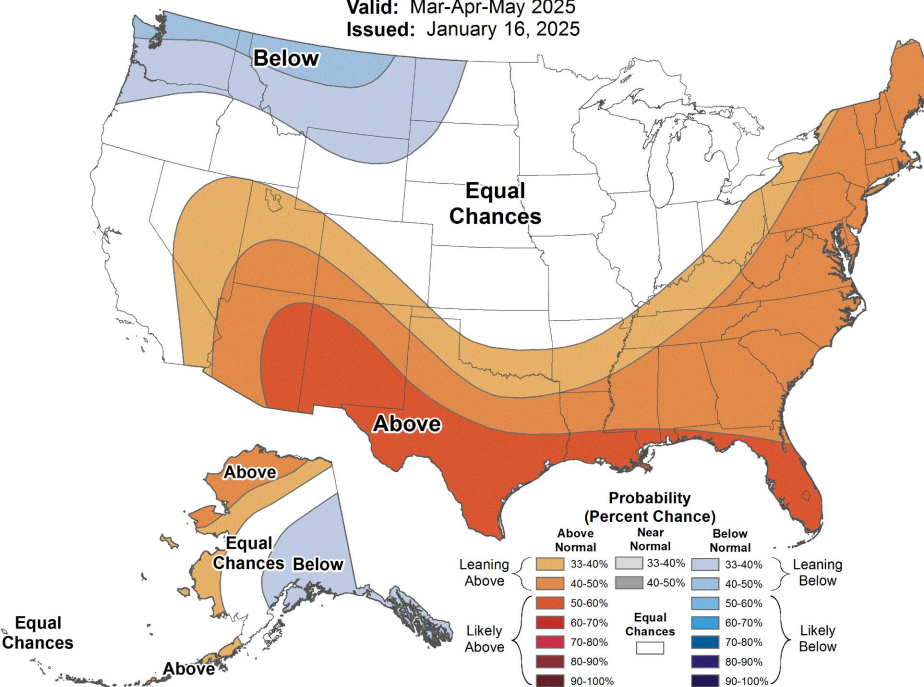


90-Day Outlook - Preliminary (March-May)



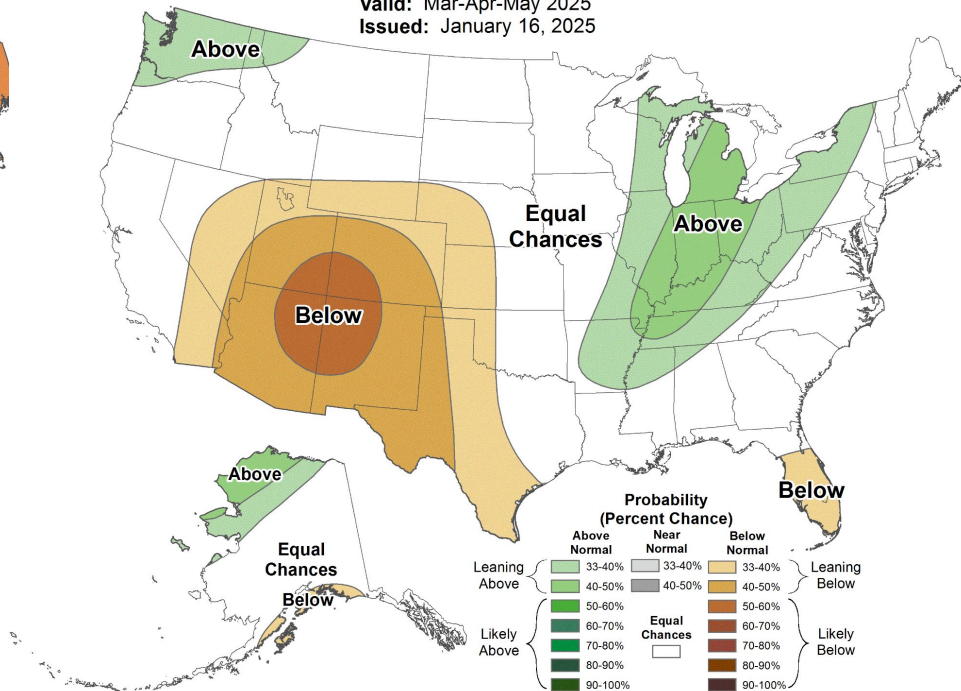
Seasonal Temperature Outlook

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



Seasonal Precipitation Outlook

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

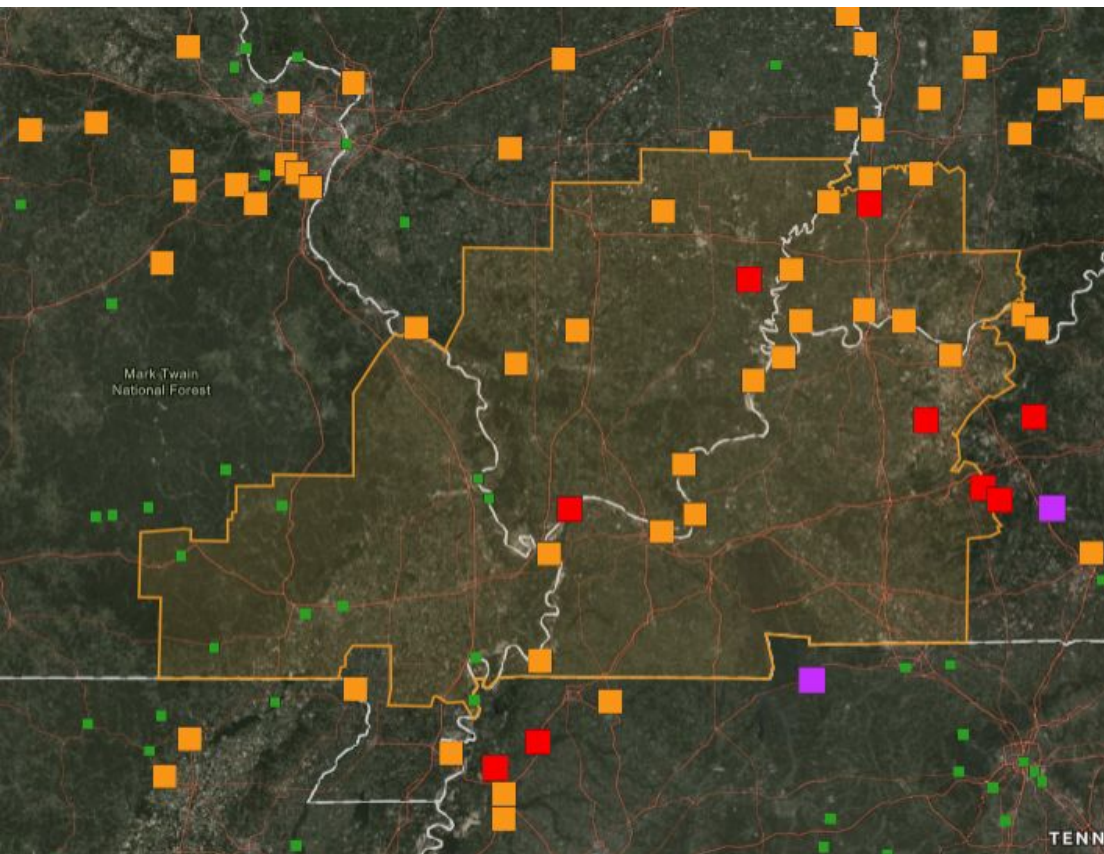


Preliminary outlook based heavily on La Nina spring which has been shown to be weakening.

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Spring Flood Outlook 2025 – 50%



50% chance or greater major flooding



50% chance or greater moderate flooding



50% chance or greater minor flooding

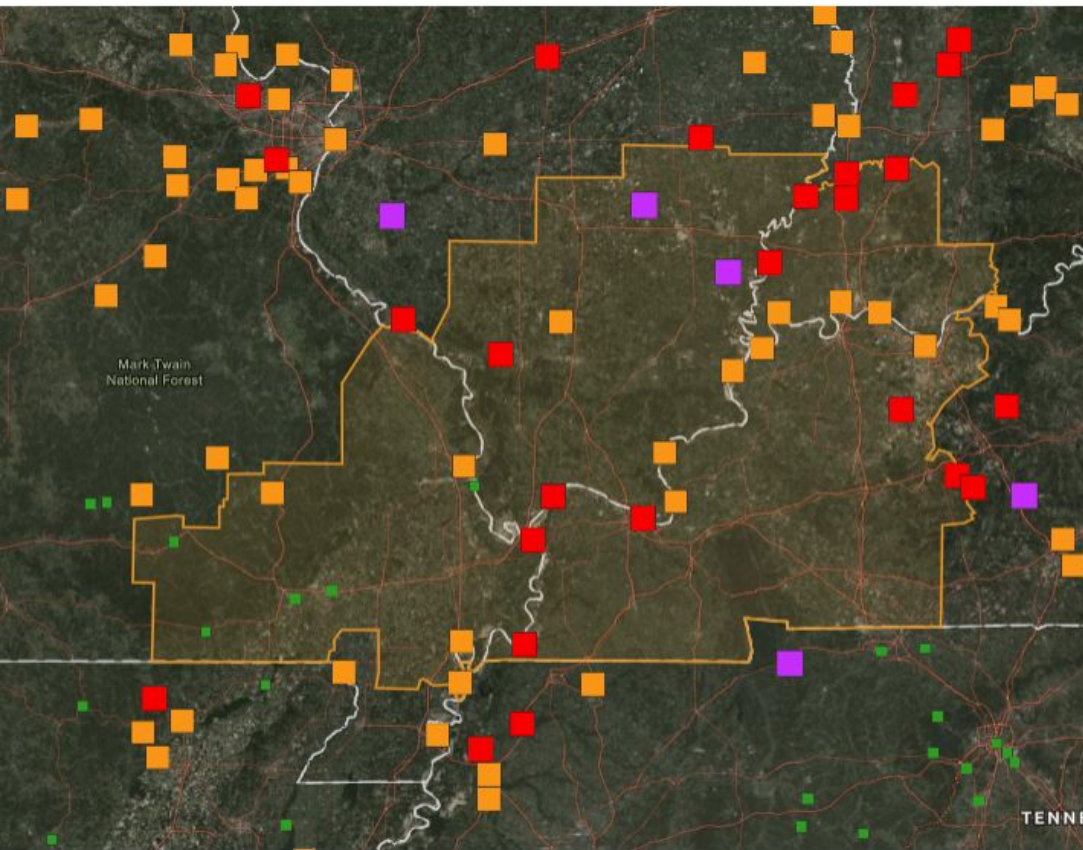


No flooding

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Spring Flood Outlook 2025 - 25%



25% chance or greater major flooding



25% chance or greater moderate flooding



25% chance or greater minor flooding



No flooding

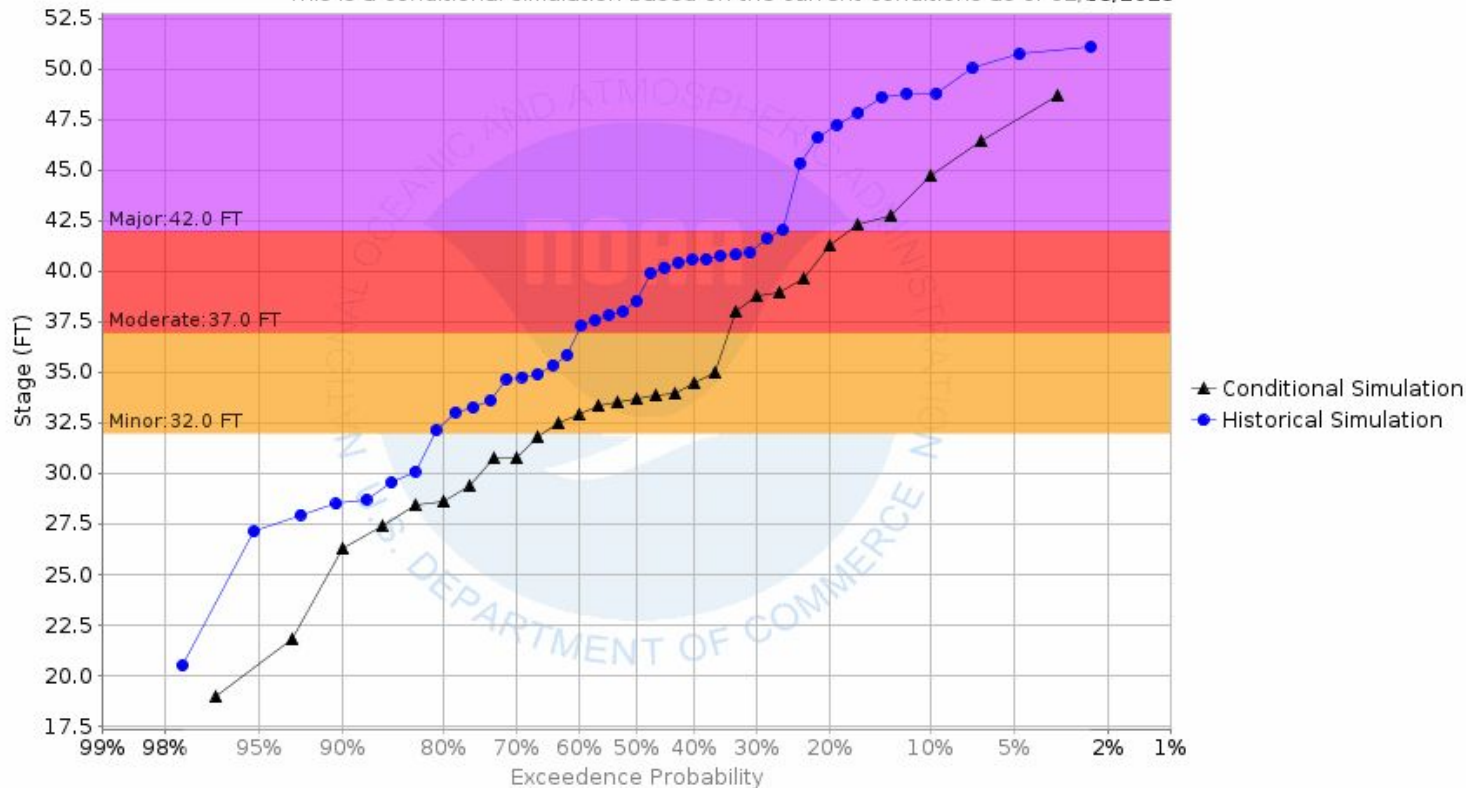
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Spring Flood Outlook 2025 – Mississippi River at Cape Girardeau, MO

Chance of Exceeding River Stage at CPGM7
Forecast for the period 02/18/2025 - 05/19/2025

This is a conditional simulation based on the current conditions as of 02/18/2025



The conditional simulation (for this year) is to the right of the historical simulation - less chance for flooding.

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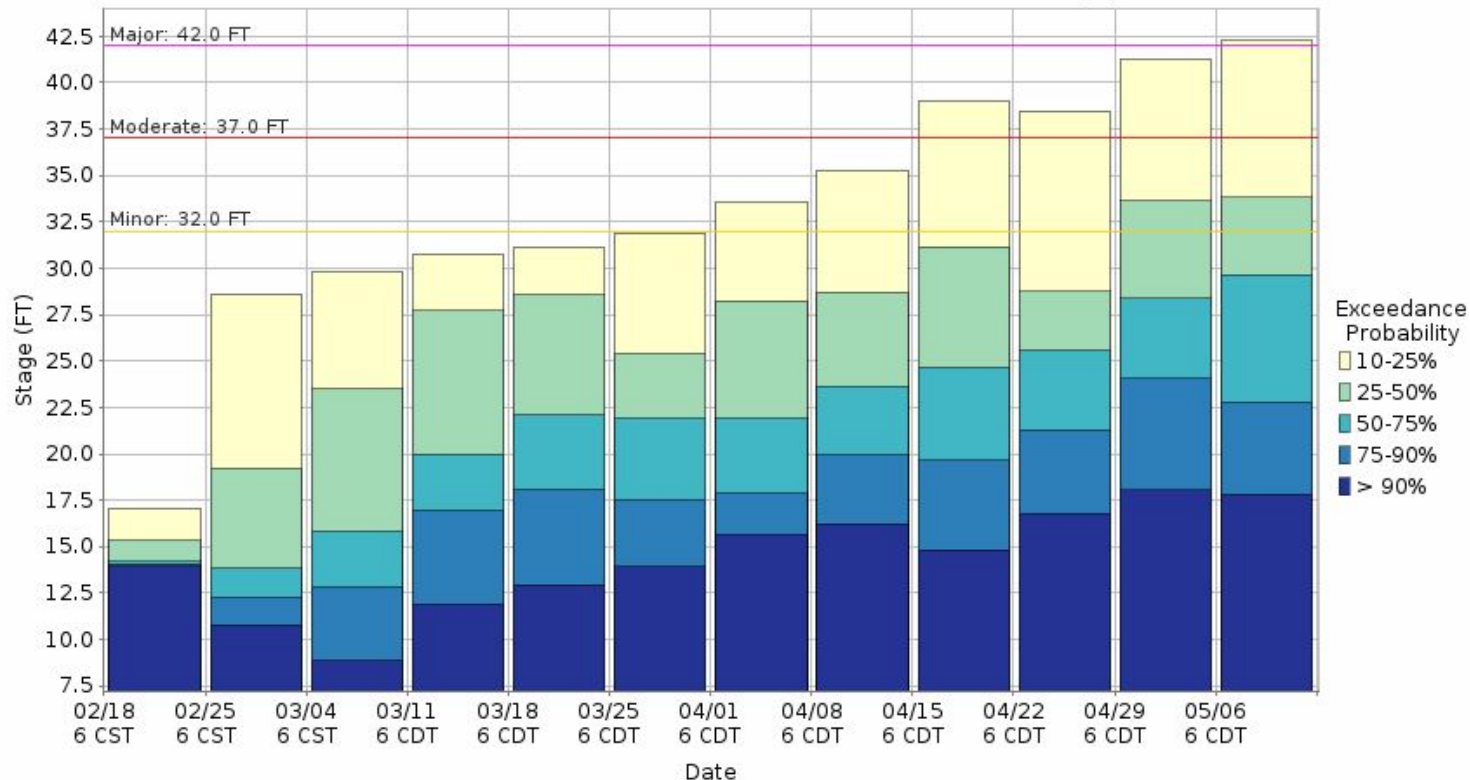


Spring Flood Outlook 2025 – Mississippi River at Cape Girardeau, MO

Weekly Chance of Exceeding River Stage at CPGM7

Forecast for the period 02/18/2025 - 05/19/2025

This is a conditional simulation based on the current conditions as of 02/18/2025



Our chance for flooding increases through the spring but it is a small chance.

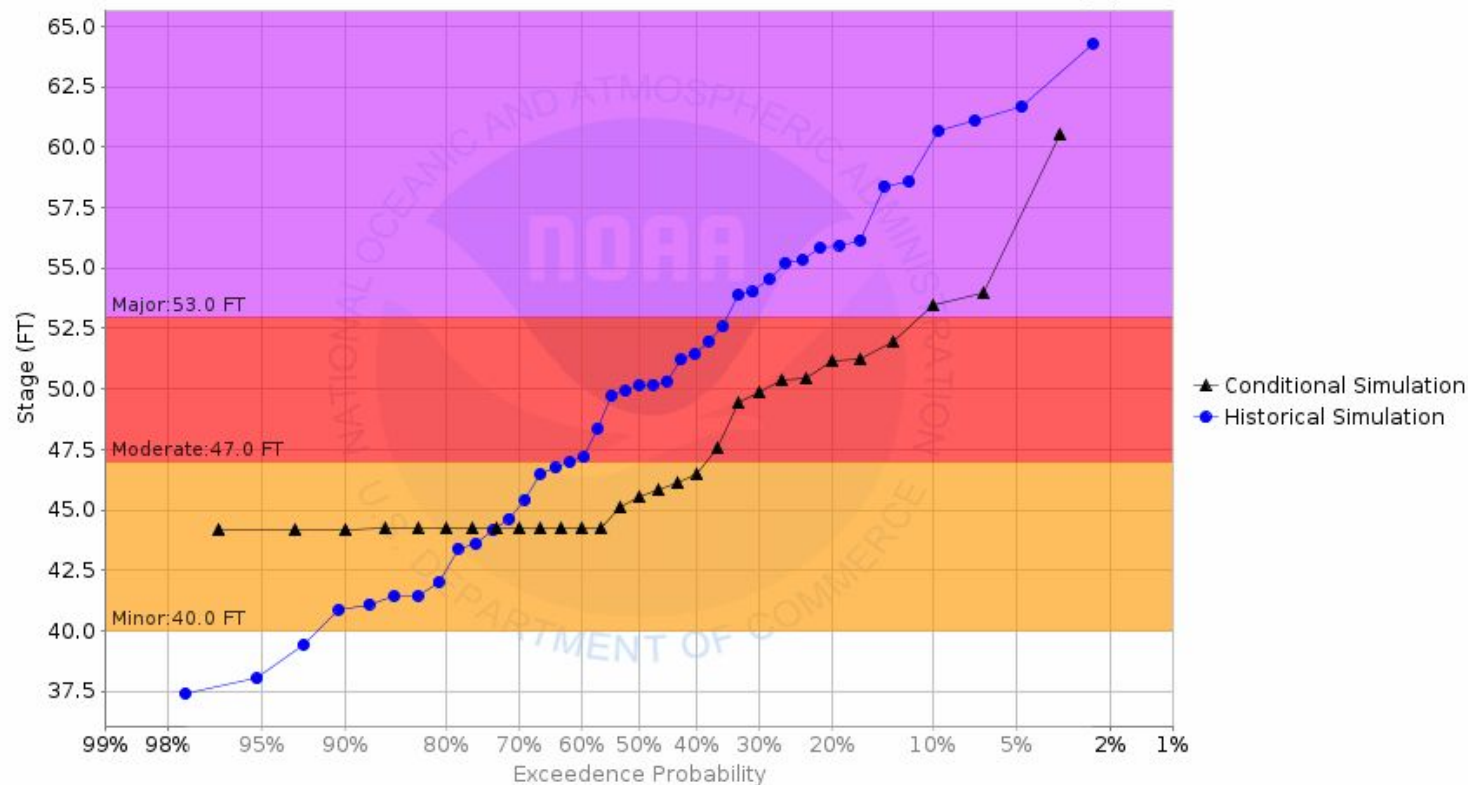
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Spring Flood Outlook 2025 – Ohio River at Cairo, IL

Chance of Exceeding River Stage at CIR12
Forecast for the period 02/18/2025 - 05/19/2025

This is a conditional simulation based on the current conditions as of 02/18/2025



The flat line shows the river is already flooding but the overall outlook for the next 90 days is for a below normal chance for flooding.

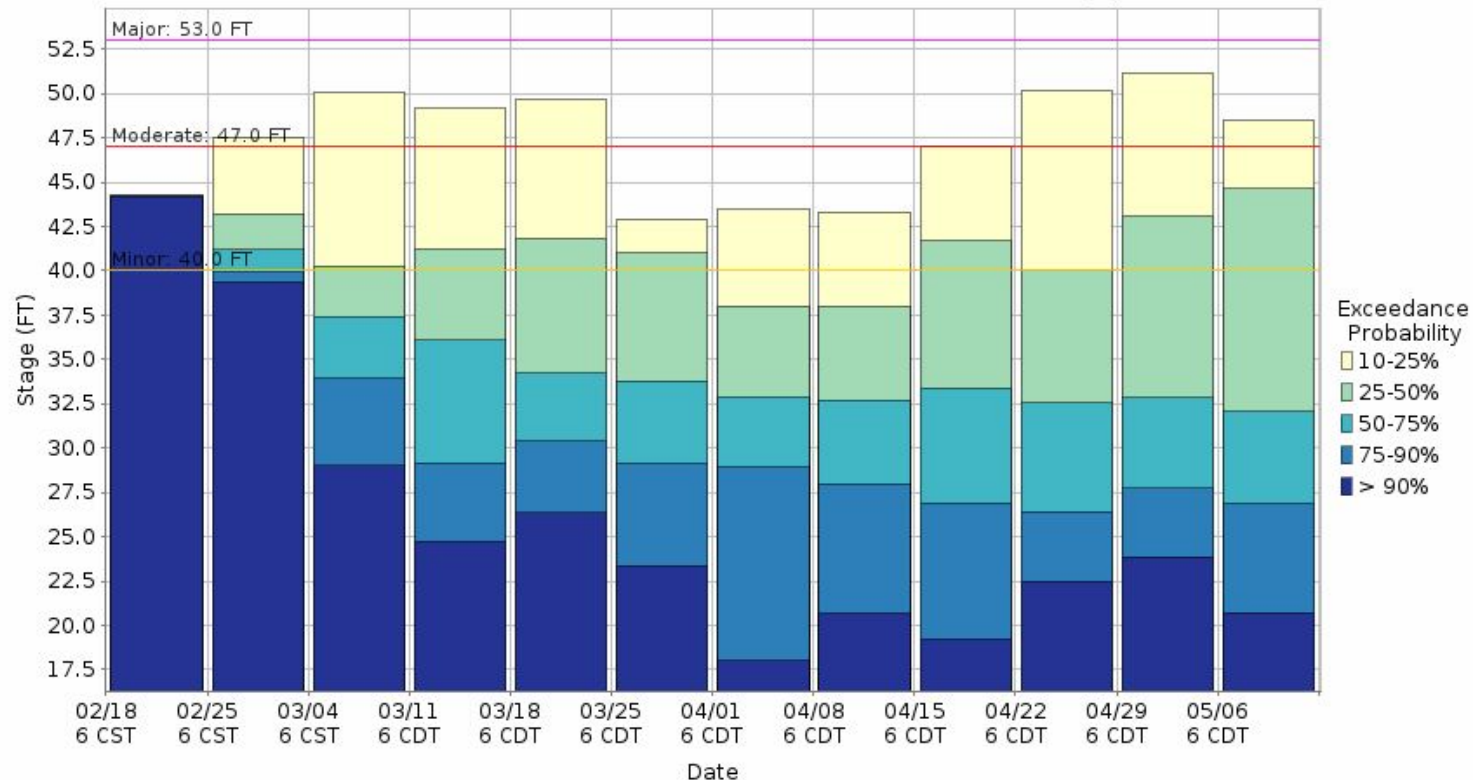
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Spring Flood Outlook 2025 – Ohio River at Cairo, IL

Weekly Chance of Exceeding River Stage at CIRI2
Forecast for the period 02/18/2025 - 05/19/2025

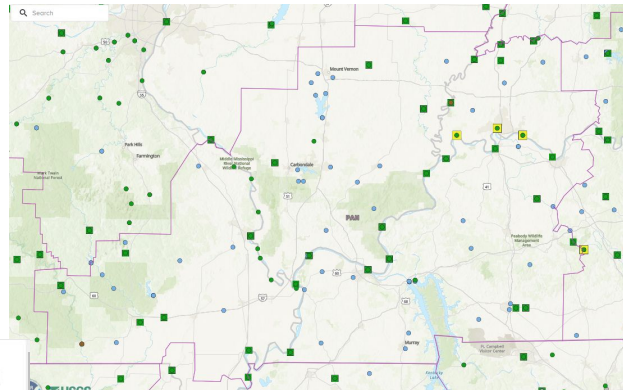
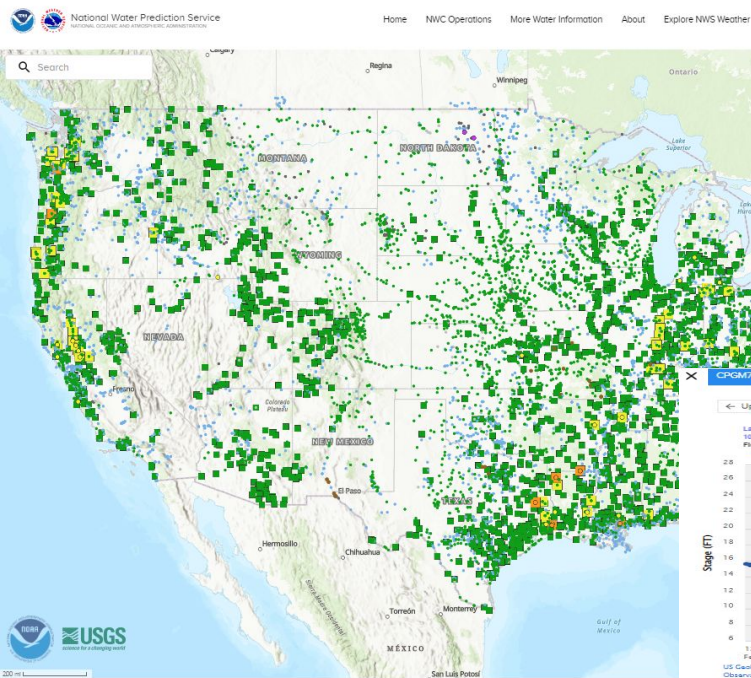
This is a conditional simulation based on the current conditions as of 02/18/2025



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National Water Prediction Service - Replaced AHPS May 2024



If you have any questions about the new website, please contact me at mary.lamm@noaa.gov

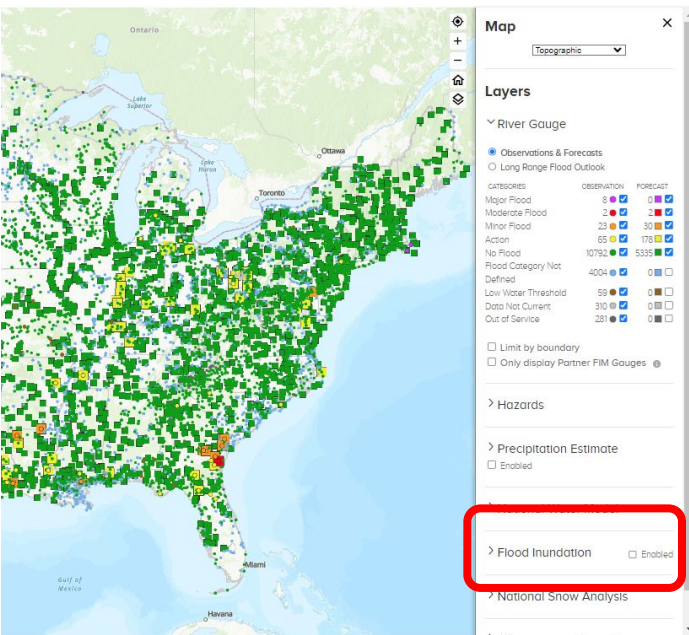
<https://water.noaa.gov>

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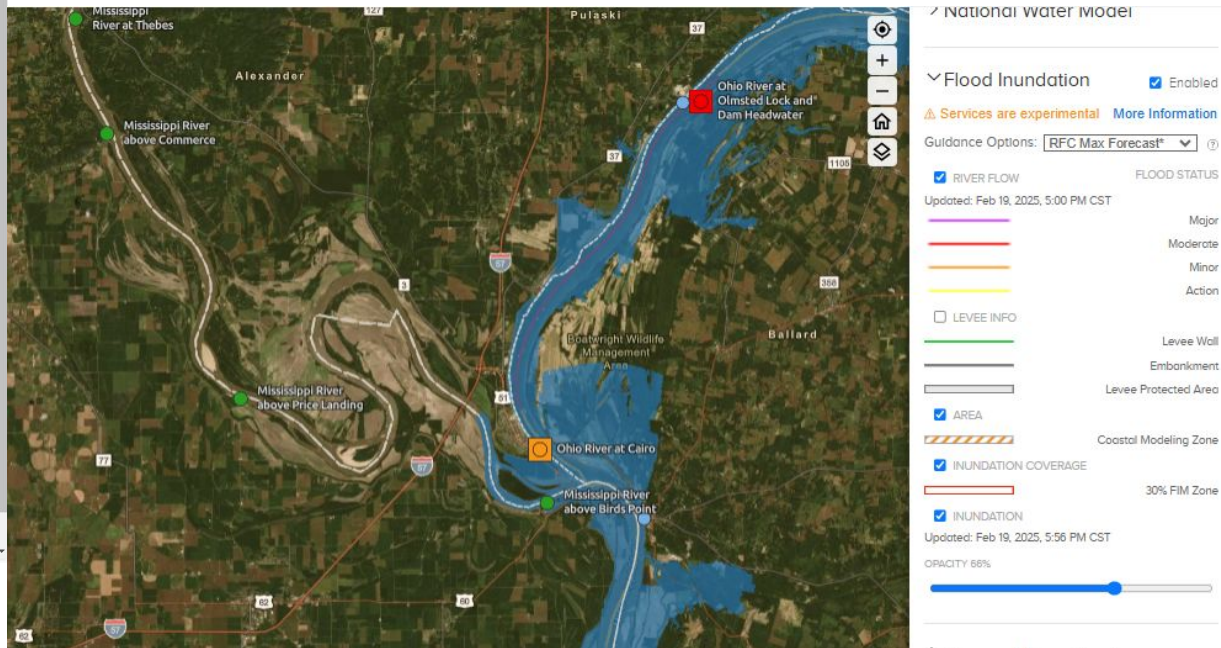
Flood Inundation Mapping Services - Went live September 2024

More Information About Explore NWS Weather



Check “Enabled” and then click the side arrow to expand the menu.

There are 3 types of dynamic FIM available. Please excuse the levee layer. It is a mess but is being worked on.



Please send me any questions you have!

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Questions???

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Spring Flood Outlook 2025

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