

2025 Spring Flood Outlook

March 6, 2025

USACE St. Louis District
Flood Preparedness Meeting
East Alton, IL

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National Weather Service
St. Louis, MO

NWS St. Louis



Spring Flood Outlook 2025

Bottom Line Up Front:

- **Significant (moderate or major) flooding is not likely anywhere.**
- **Mississippi River:** Minor flooding unlikely anywhere along the Mississippi River except at Chester. This is a well below average risk.
- **Missouri River:** Minor flooding unlikely from Jefferson City to St. Charles. This is a well below average risk.
- **Illinois River:** Minor flooding likely by early May (below normal risk).
- **Local tributaries:** Near to below average flood risk, with flooding unlikely in most locations.

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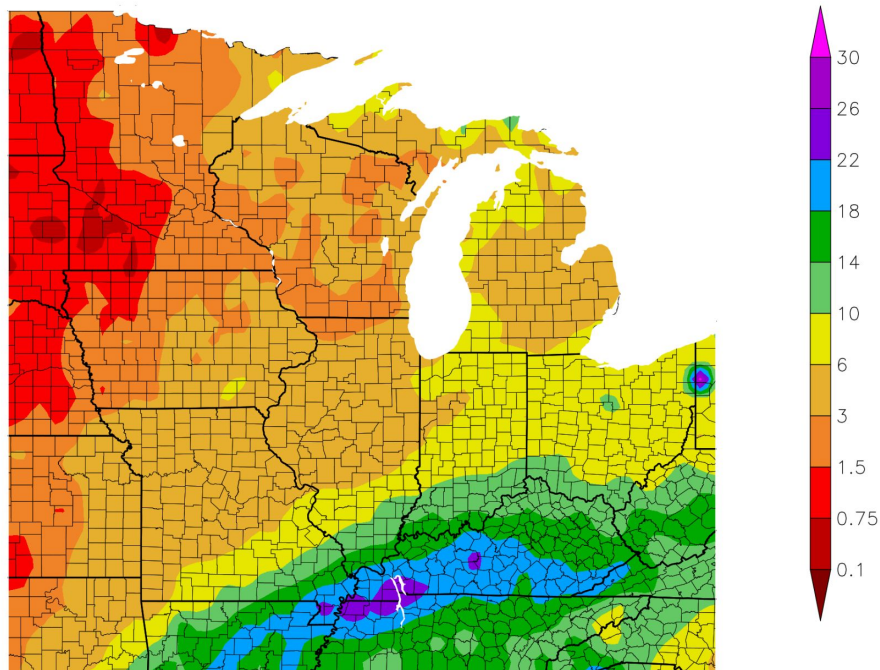


Factors we look at for spring flooding:

- Precipitation in major river basins
- Snowpack in major river basins
- Soil moisture in area basins
- Current flow in area rivers

Spring Flood Outlook 2025

Precipitation (in)
12/6/2024 – 3/5/2025



Generated 3/6/2025 at HPRCC using provisional data.

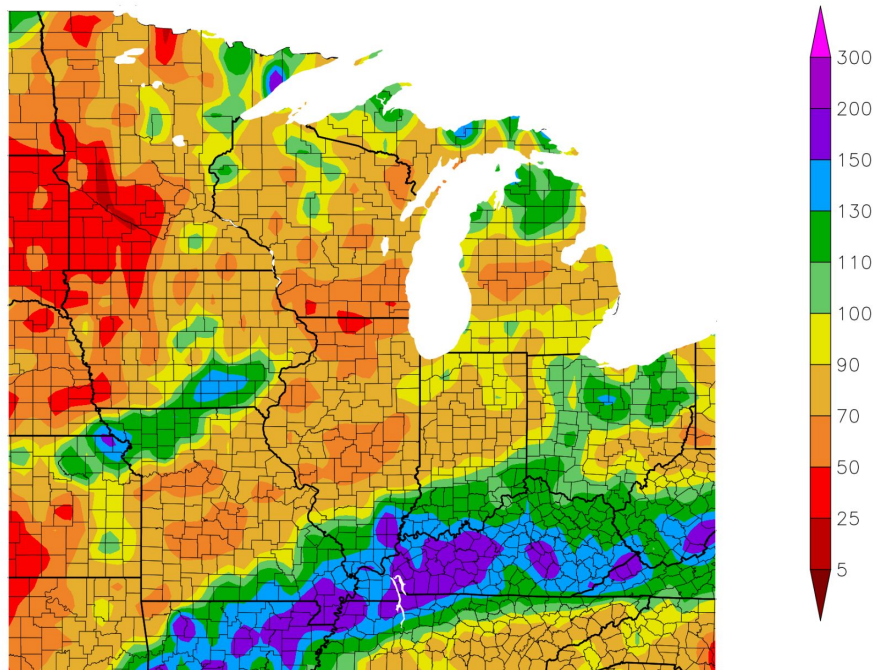
NOAA Regional Climate Centers

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Spring Flood Outlook 2025

Percent of Normal Precipitation (%)
12/6/2024 – 3/5/2025



Generated 3/6/2025 at HPRCC using provisional data.

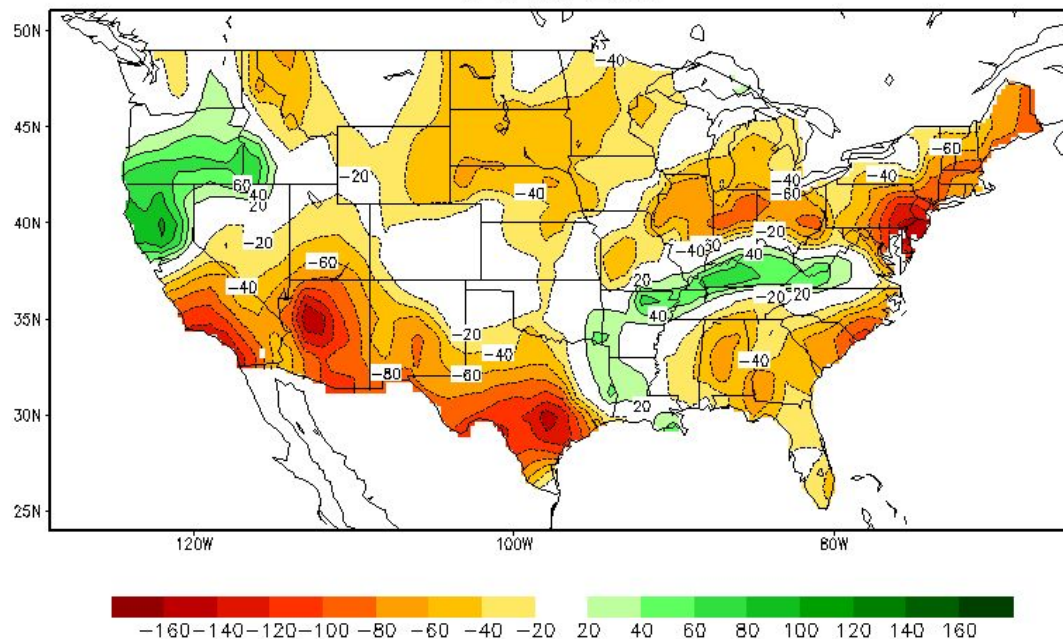
NOAA Regional Climate Centers

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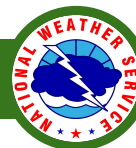


Spring Flood Outlook 2023 - Soil Moisture Percentiles

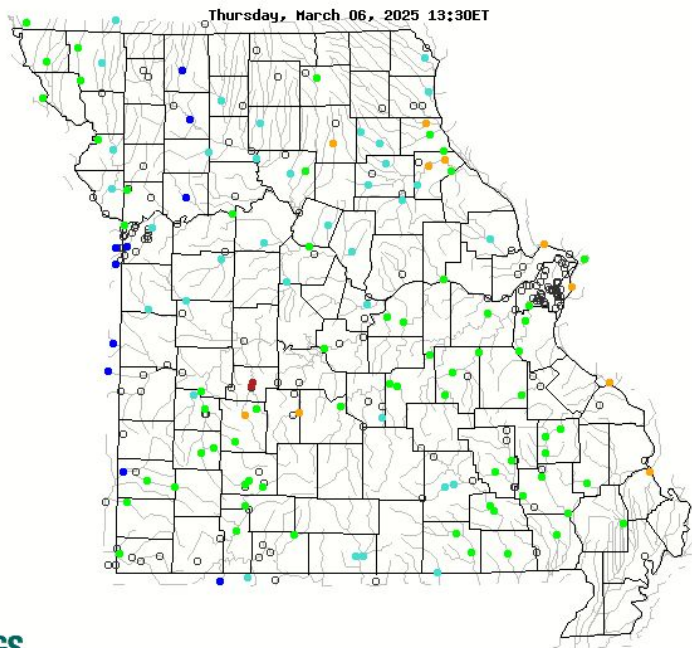
Calculated Soil Moisture Anomaly (mm)
MAR 05, 2025



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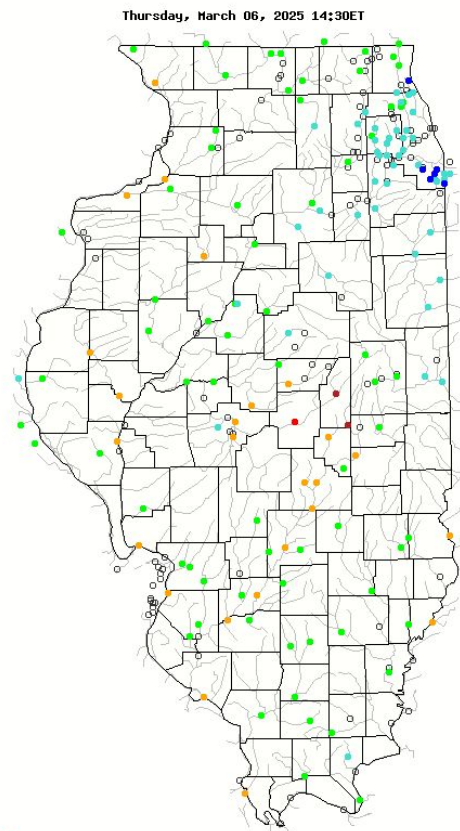
Spring Flood Outlook 2023 - Streamflow



USGS

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		

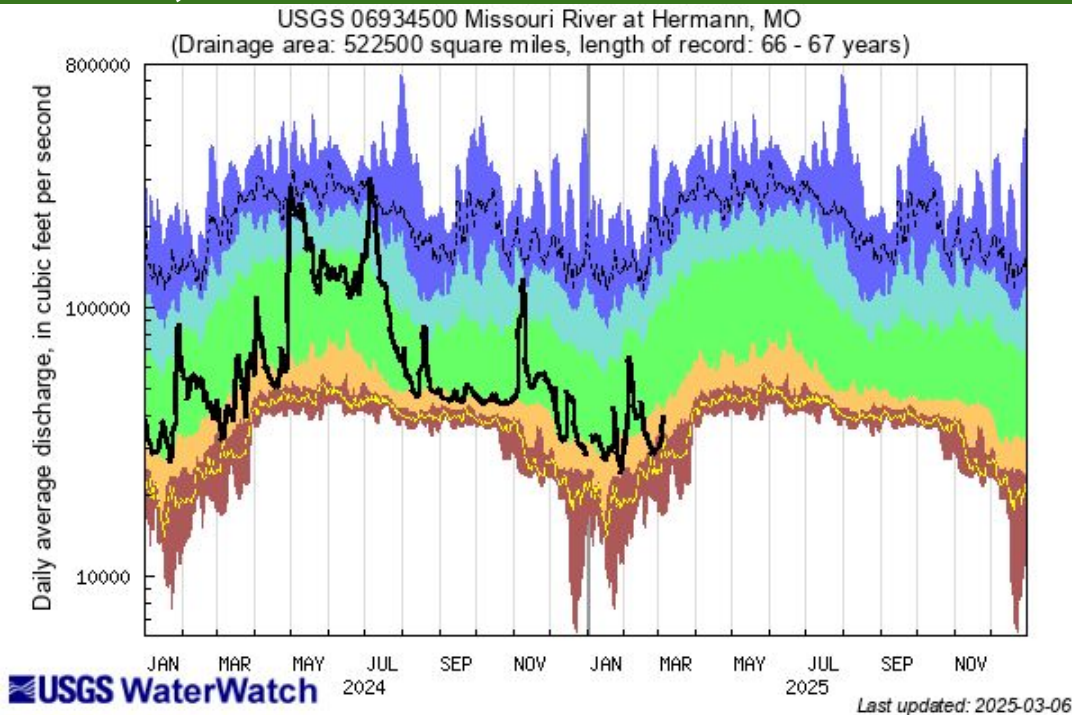
USGS

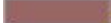







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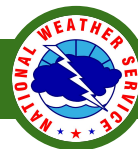


Missouri River at Hermann, MO

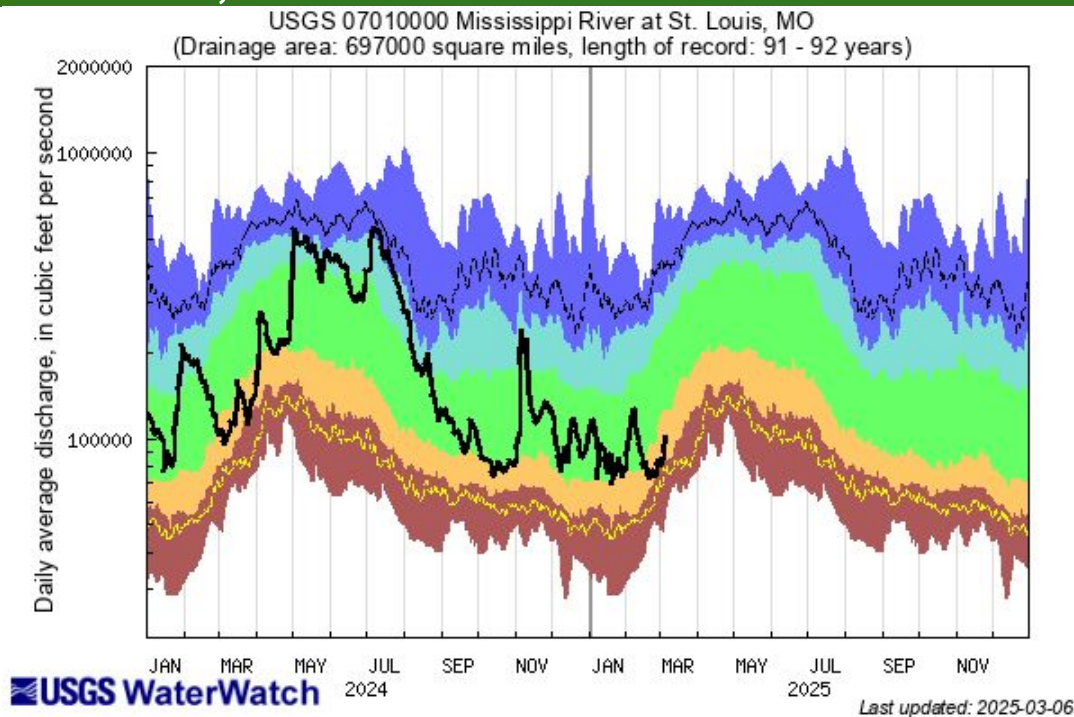








Explanation - Percentile classes						Flow
						
lowest-10th percentile	5	10-24	25-75	76-90	95 90th percentile-highest	
Much below Normal	Below normal	Normal	Above normal	Much above normal		

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Mississippi River at St. Louis, MO

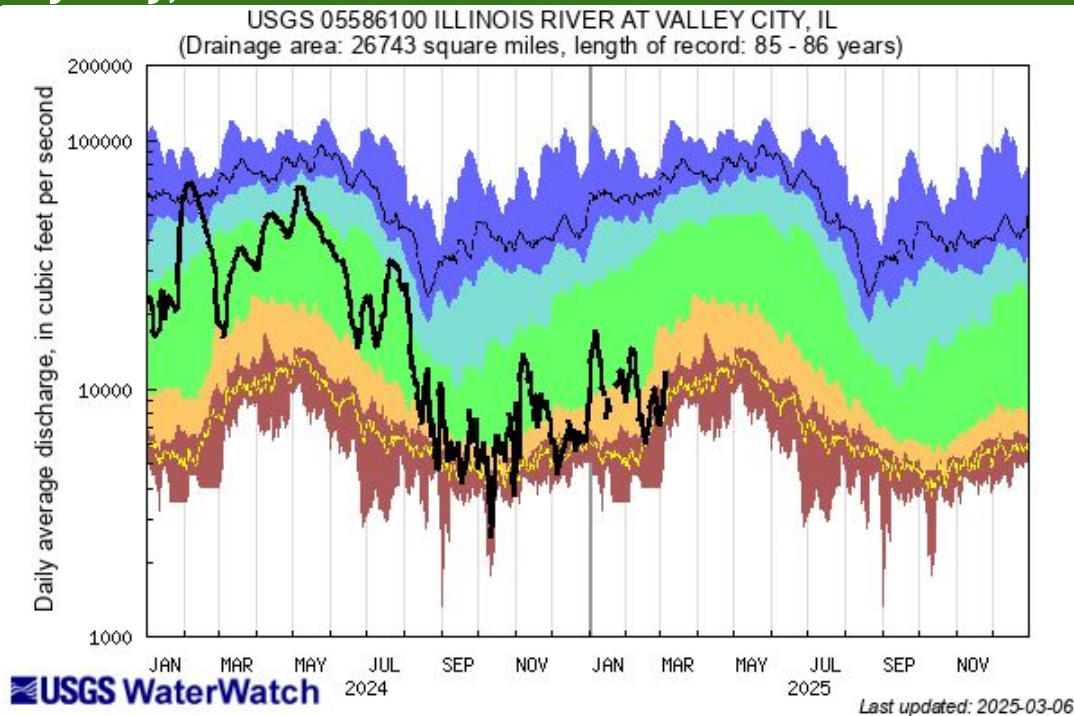


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NWS St. Louis

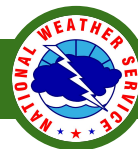


Illinois River at Valley City, IL

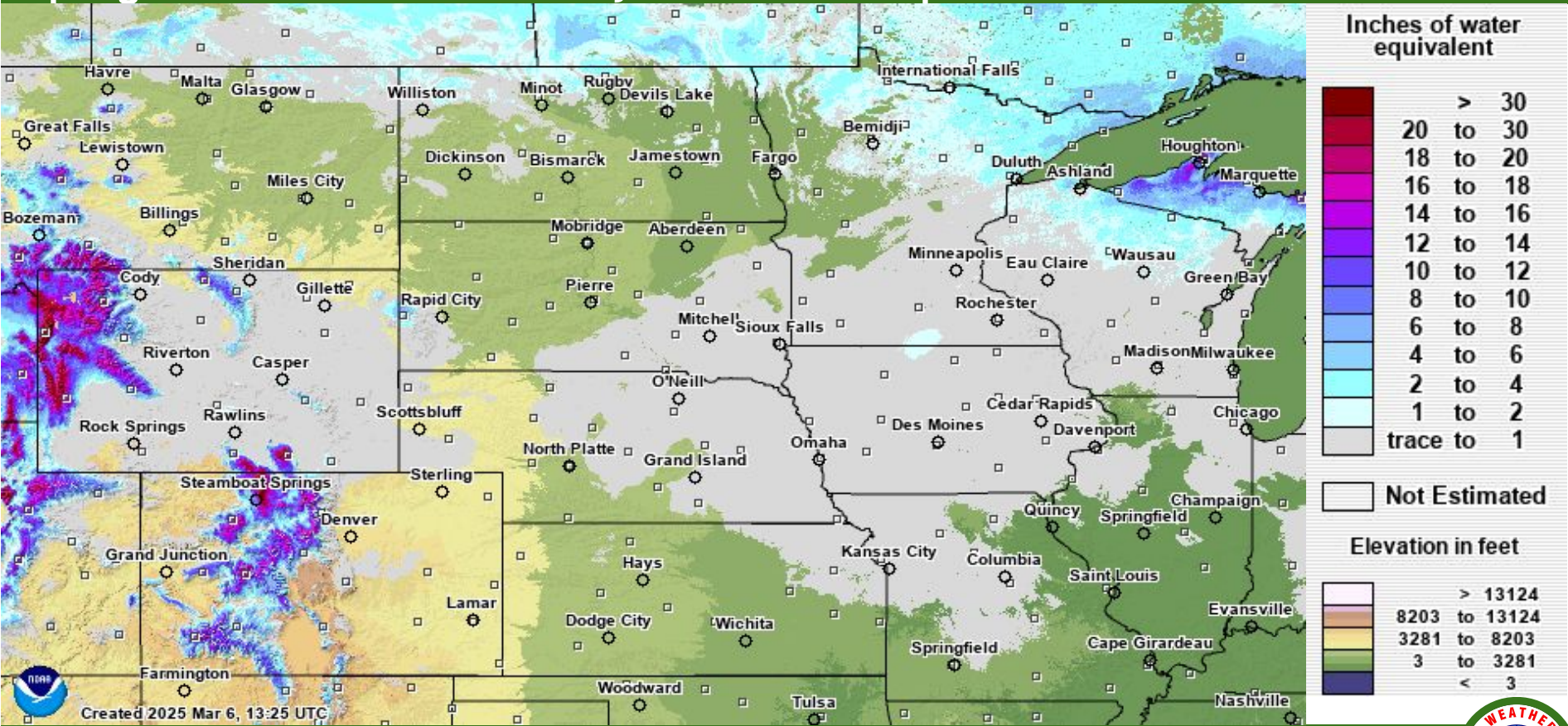


Explanation - Percentile classes							Flow
	-----				-----		
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	
Much below Normal		Below normal	Normal	Above normal	Much above normal		

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Spring Flood Outlook 2025 - Today's Snow Water Equivalent



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6-10 Day Temperature Outlook

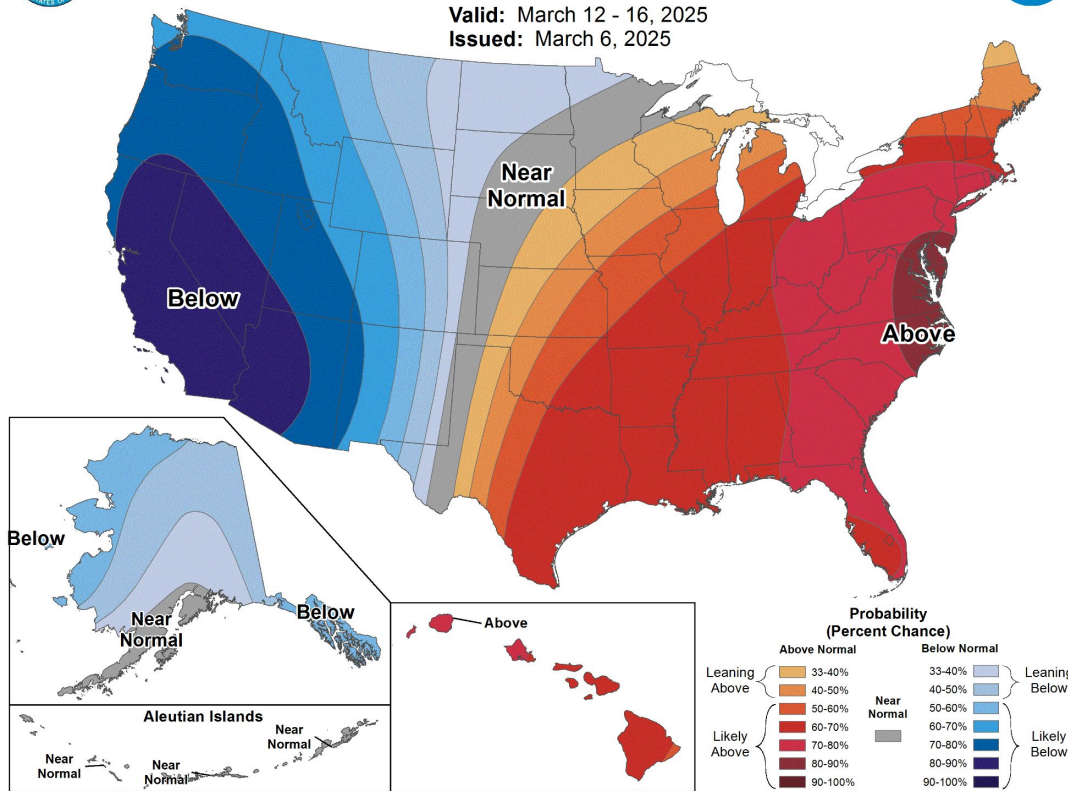


6-10 Day Temperature Outlook



Valid: March 12 - 16, 2025

Issued: March 6, 2025



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6-10 Day Precipitation Outlook

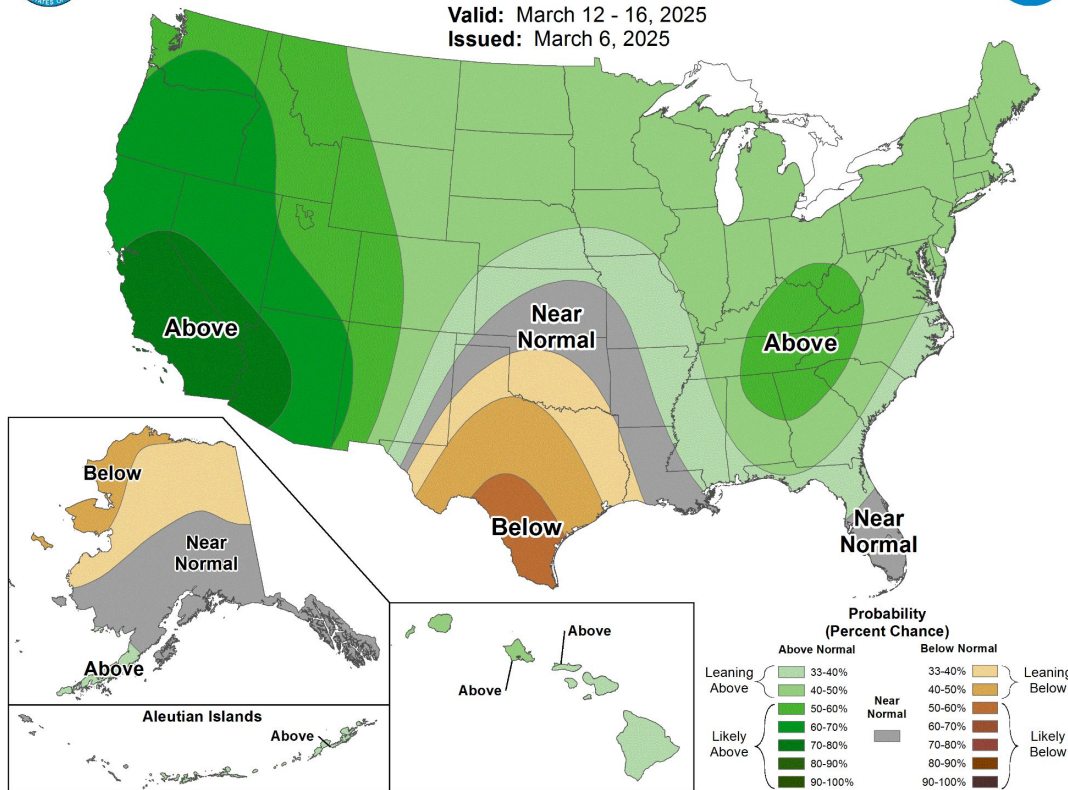


6-10 Day Precipitation Outlook



Valid: March 12 - 16, 2025

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8-14 Day Temperature Outlook

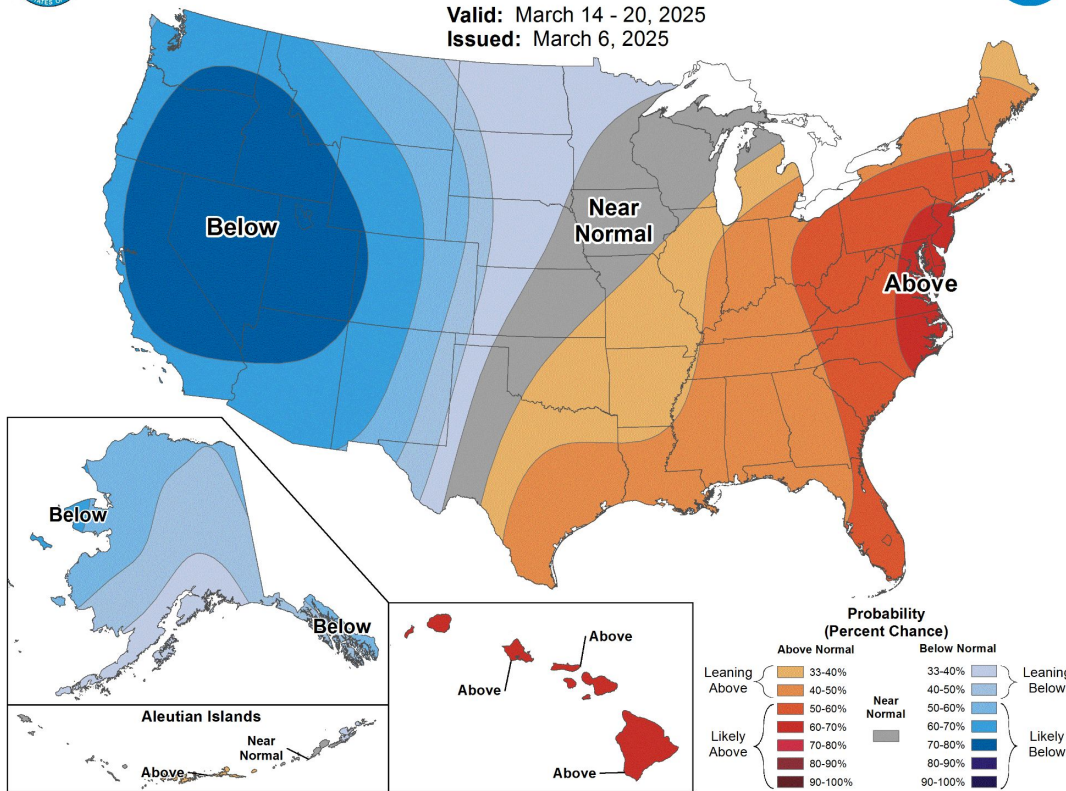


8-14 Day Temperature Outlook



Valid: March 14 - 20, 2025

Issued: March 6, 2025



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8-14 Day Precipitation Outlook

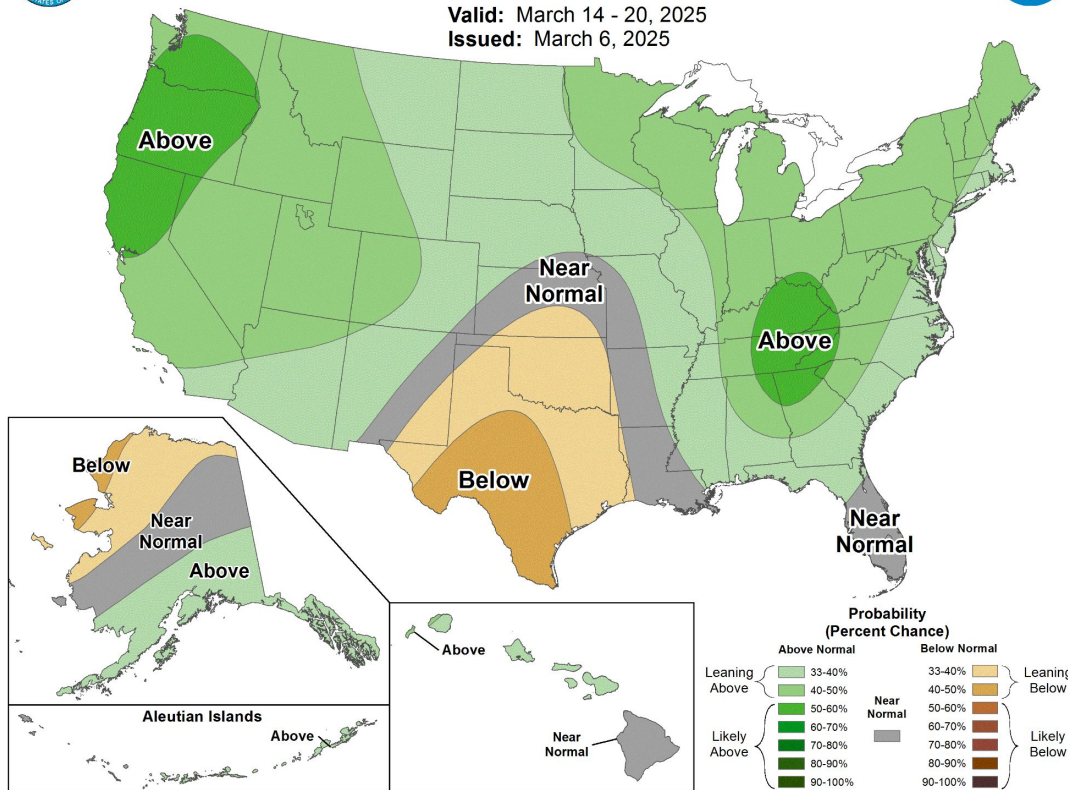


8-14 Day Precipitation Outlook



Valid: March 14 - 20, 2025

Issued: March 6, 2025



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March Temperature Outlook

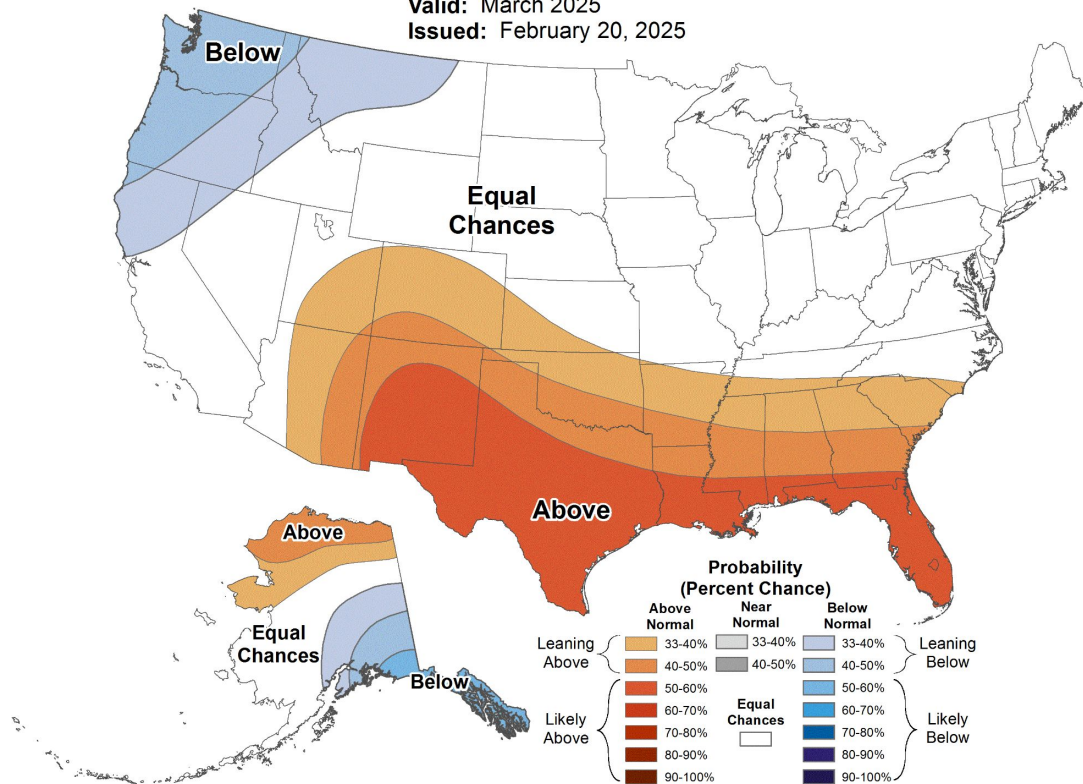


Monthly Temperature Outlook

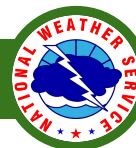


Valid: March 2025

Issued: February 20, 2025



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March Precipitation Outlook

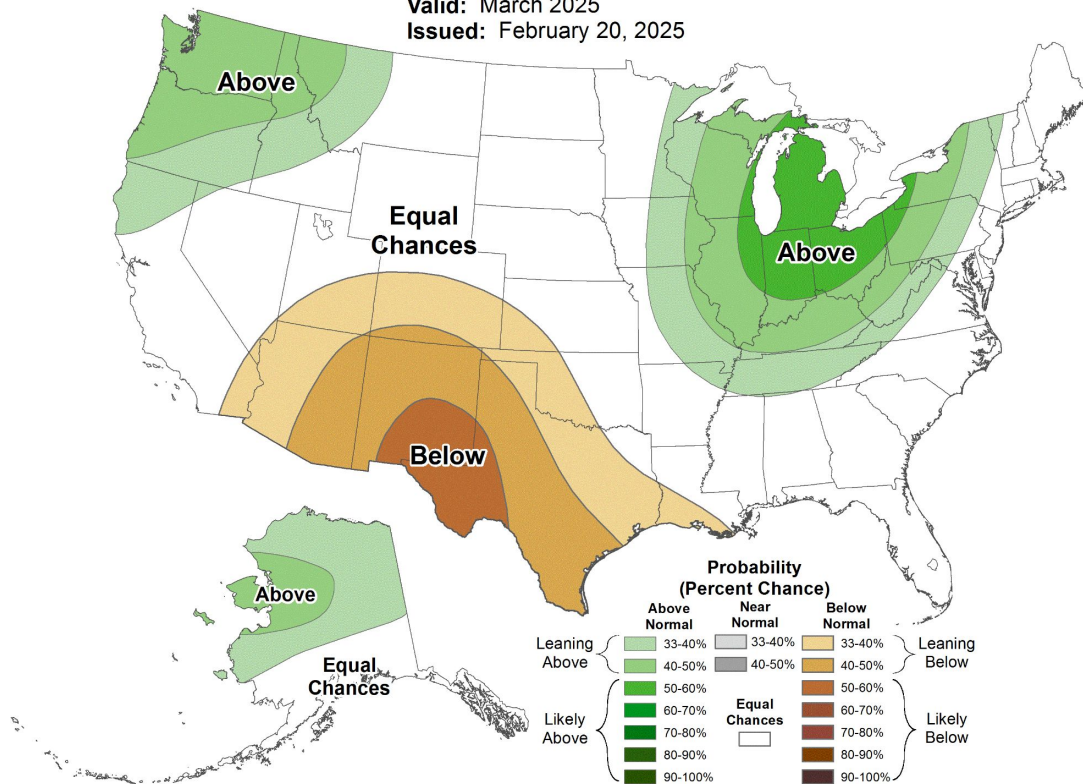


Monthly Precipitation Outlook

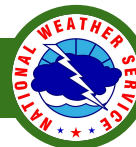


Valid: March 2025

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90-Day Temperature Outlook (March-May)

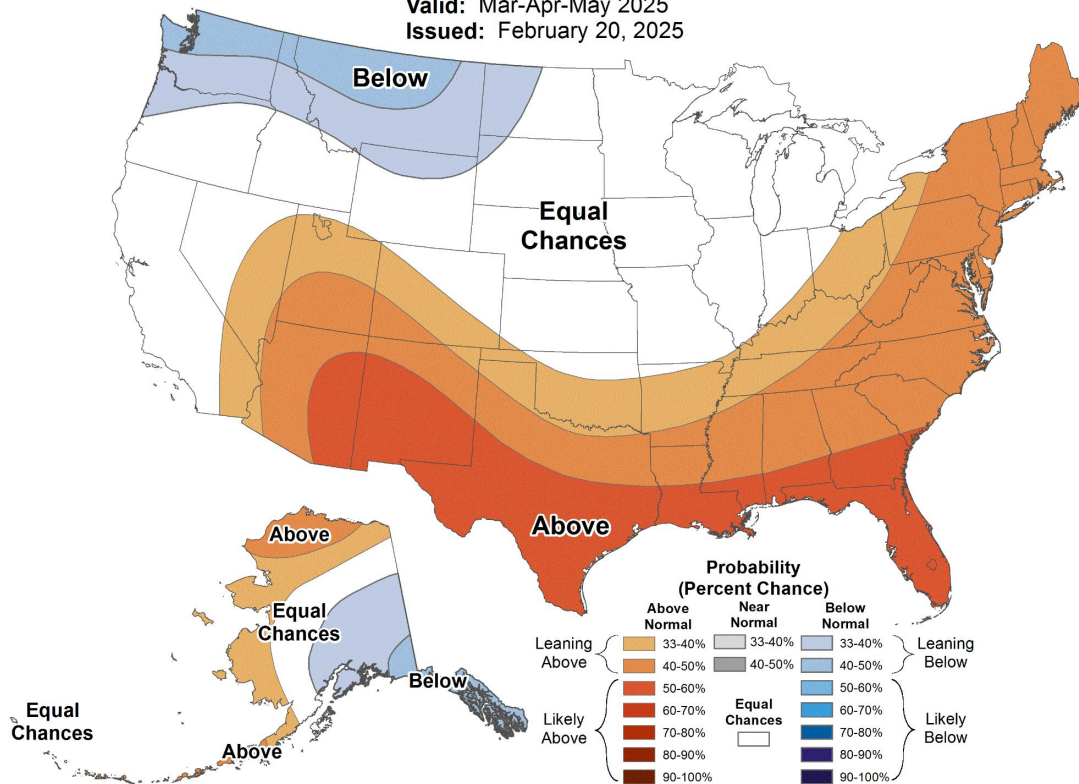


Seasonal Temperature Outlook



Valid: Mar-Apr-May 2025

Issued: February 20, 2025



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90-Day Precipitation Outlook (March-May)

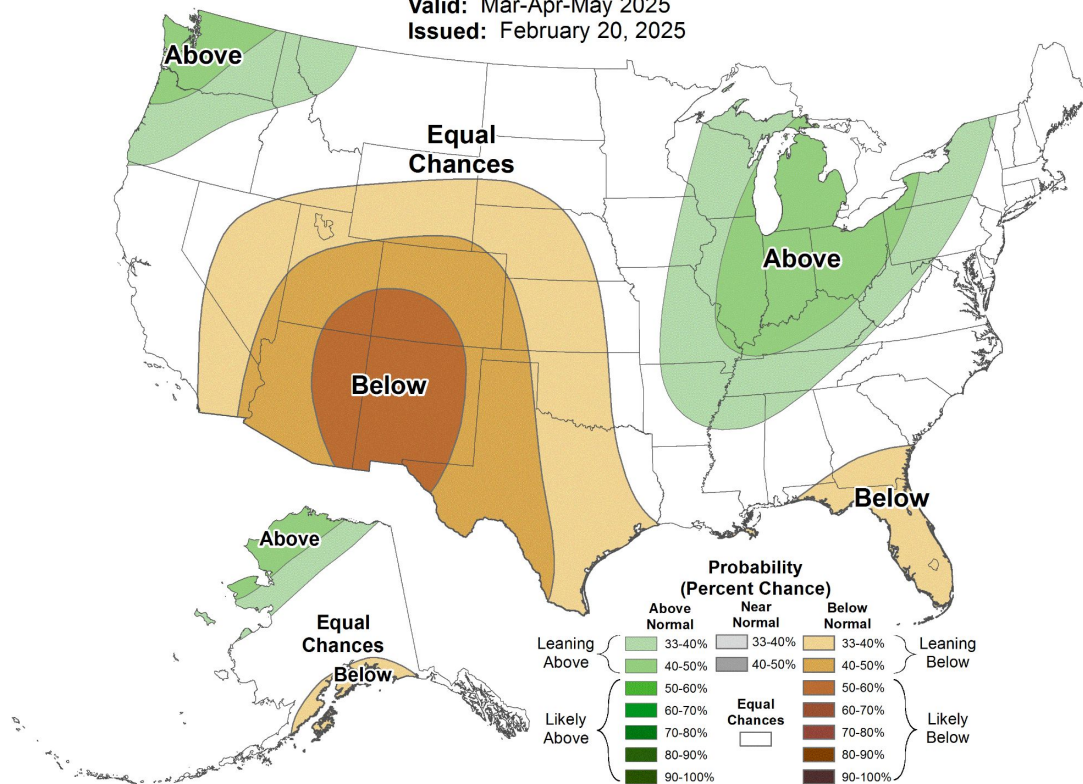


Seasonal Precipitation Outlook



Valid: Mar-Apr-May 2025

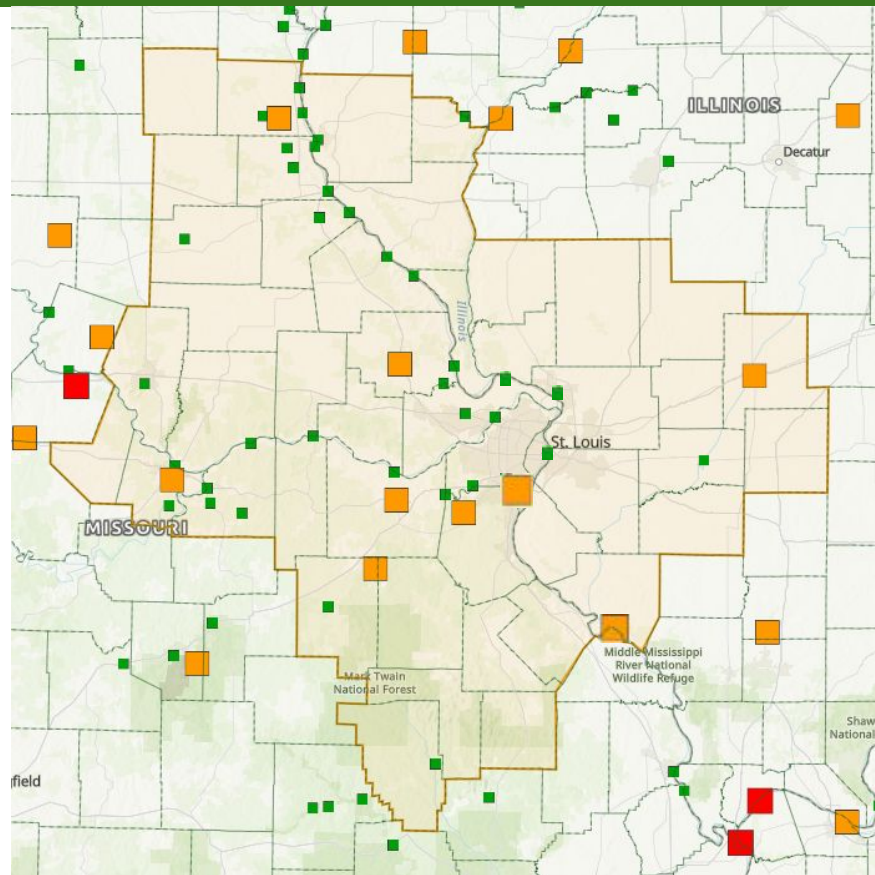
Issued: February 20, 2025



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Spring Flood Outlook 2025



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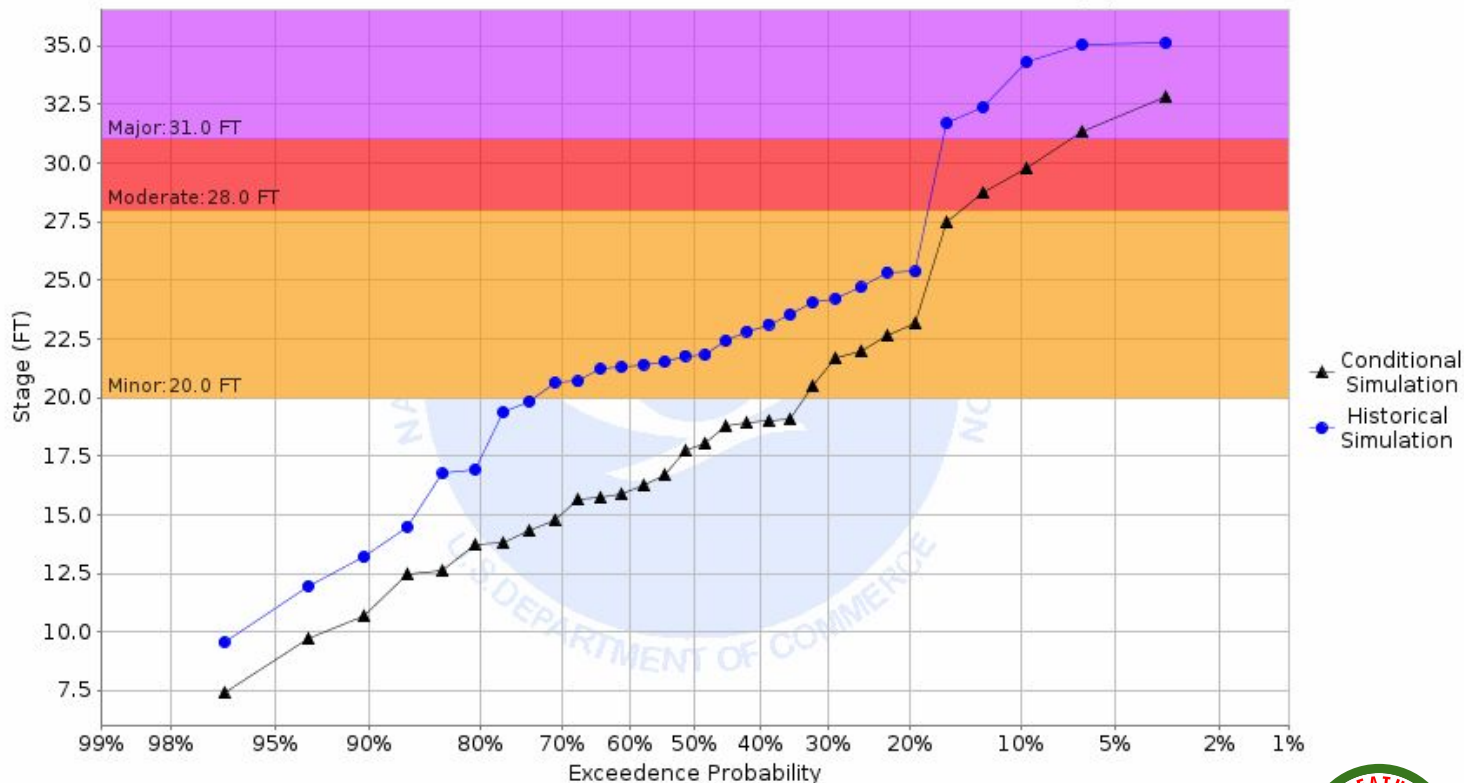
Spring Flood Outlook 2025 - Missouri River at Washington, MO

Chance of Exceeding River Stage on the MISSOURI R at WASHINGTON MO

Forecast for the period 03/01/2025 - 05/30/2025

This is a conditional simulation based on the current conditions as of 02/24/2025

- The chance of exceeding minor flood stage is 33%, which is 41% below the historical average.
- The chance of exceeding moderate flood stage is 15%, 3% below the historical average.



NWS St. Louis

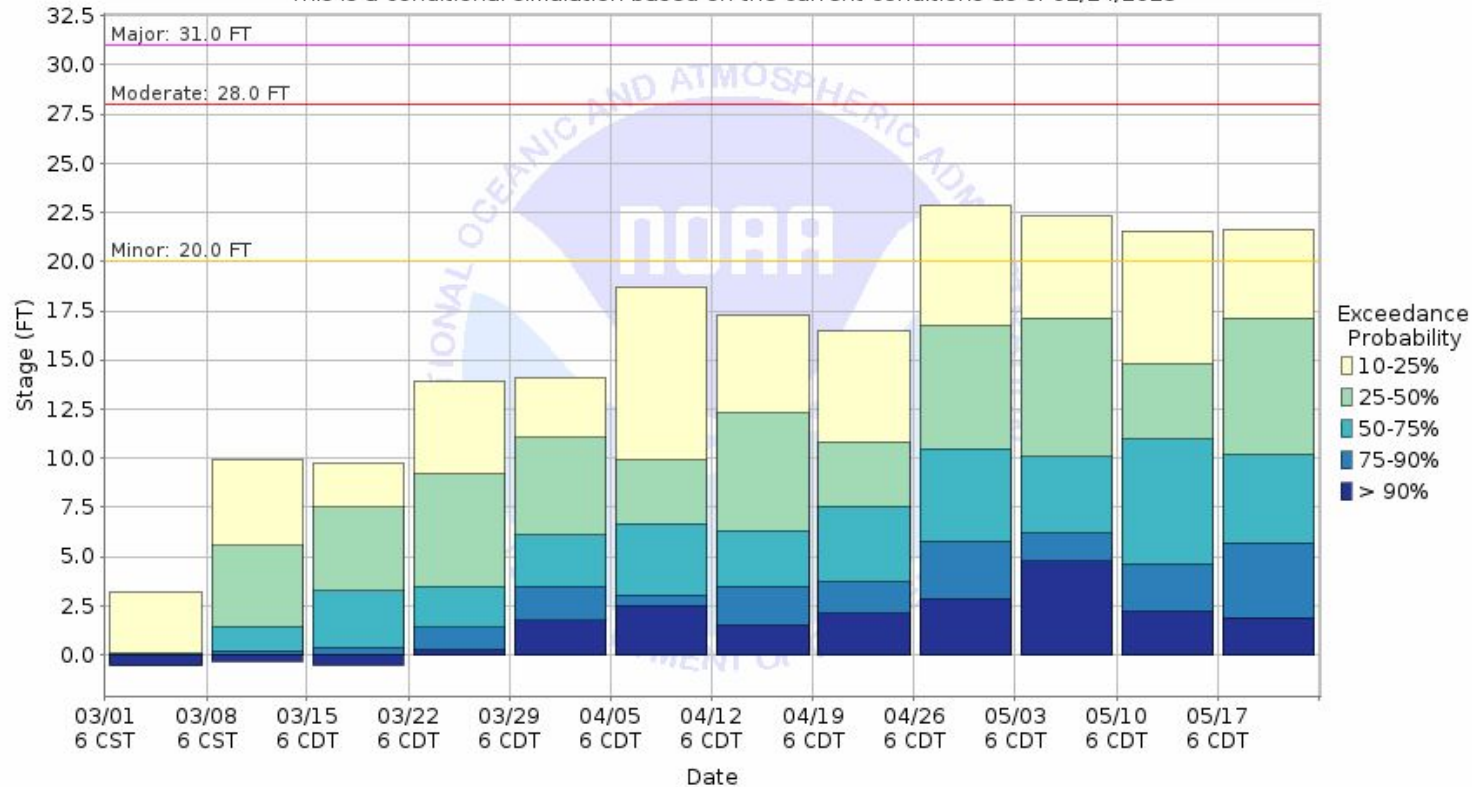


Spring Flood Outlook 2025 - Missouri River at Washington, MO

Weekly Chance of Exceeding River Stage on the MISSOURI R at WASHINGTON MO

Forecast for the period 03/01/2025 - 05/24/2025

This is a conditional simulation based on the current conditions as of 02/24/2025



NWS St. Louis



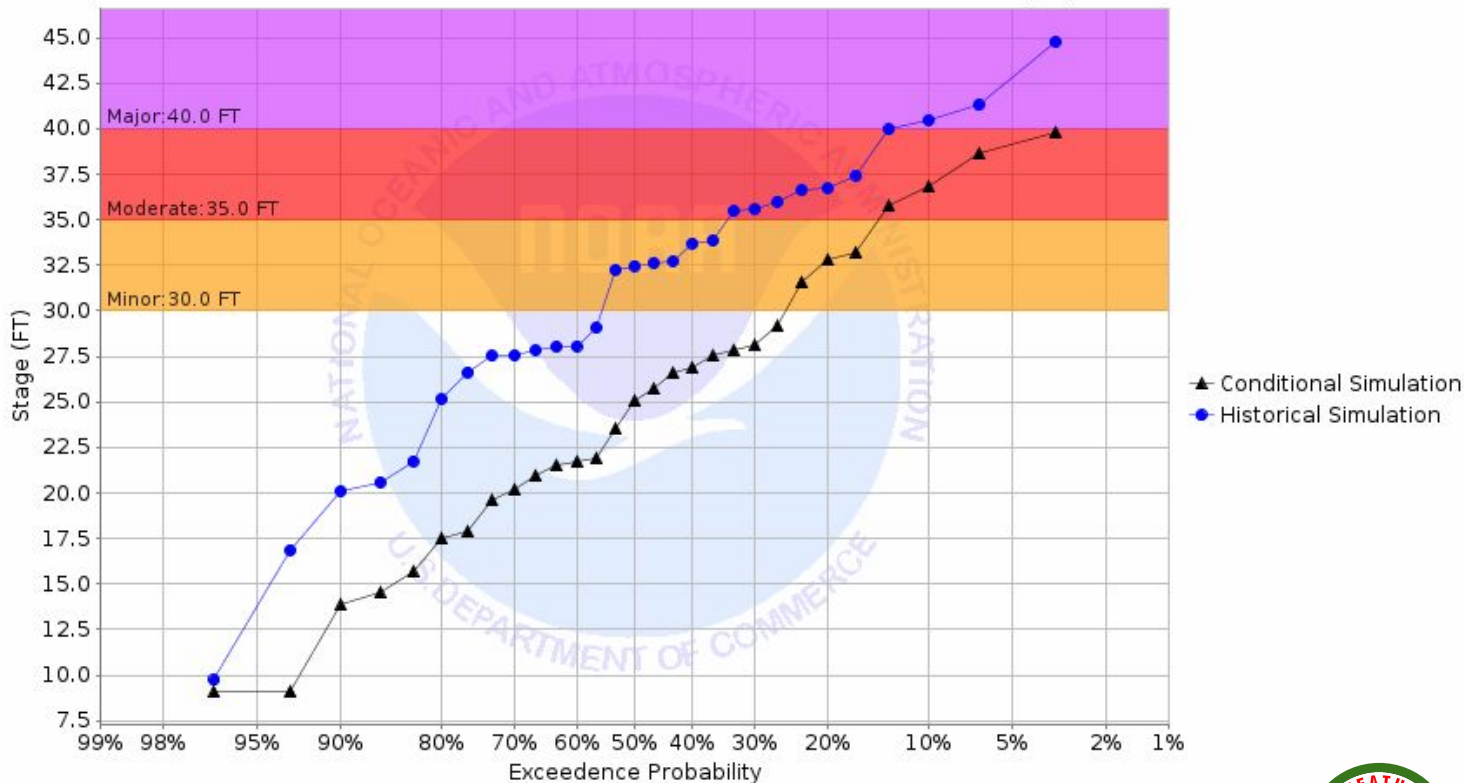
Spring Flood Outlook 2025 - Mississippi River at St. Louis, MO

Chance of Exceeding River Stage at Mississippi River at St Louis (Eads Bridge) (EADM7)

Forecast for the period 03/03/2025 - 06/01/2025

This is a conditional simulation based on the conditions as of 02/24/2025

- Similar to much of the upper Mississippi, the probability of minor flooding is 26%, 30% below the historical average.
- For significant (moderate or major) flooding, the chance is 14%, 20% below normal.



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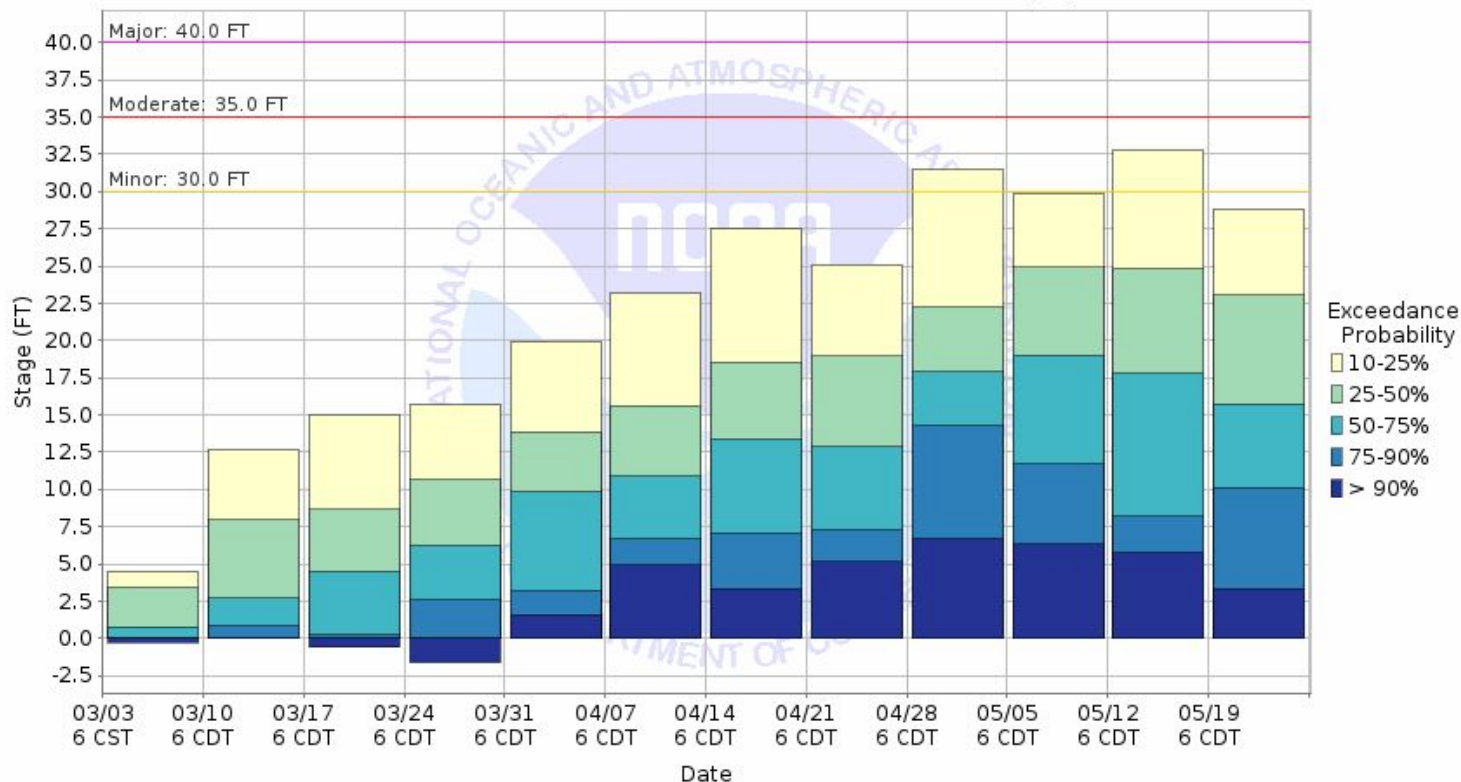


Spring Flood Outlook 2025 - Mississippi River at St. Louis, MO

Weekly Chance of Exceeding River Stage at Mississippi River at St Louis (Eads Bridge) (EADM7)

Forecast for the period 03/03/2025 - 06/01/2025

This is a conditional simulation based on the conditions as of 02/24/2025



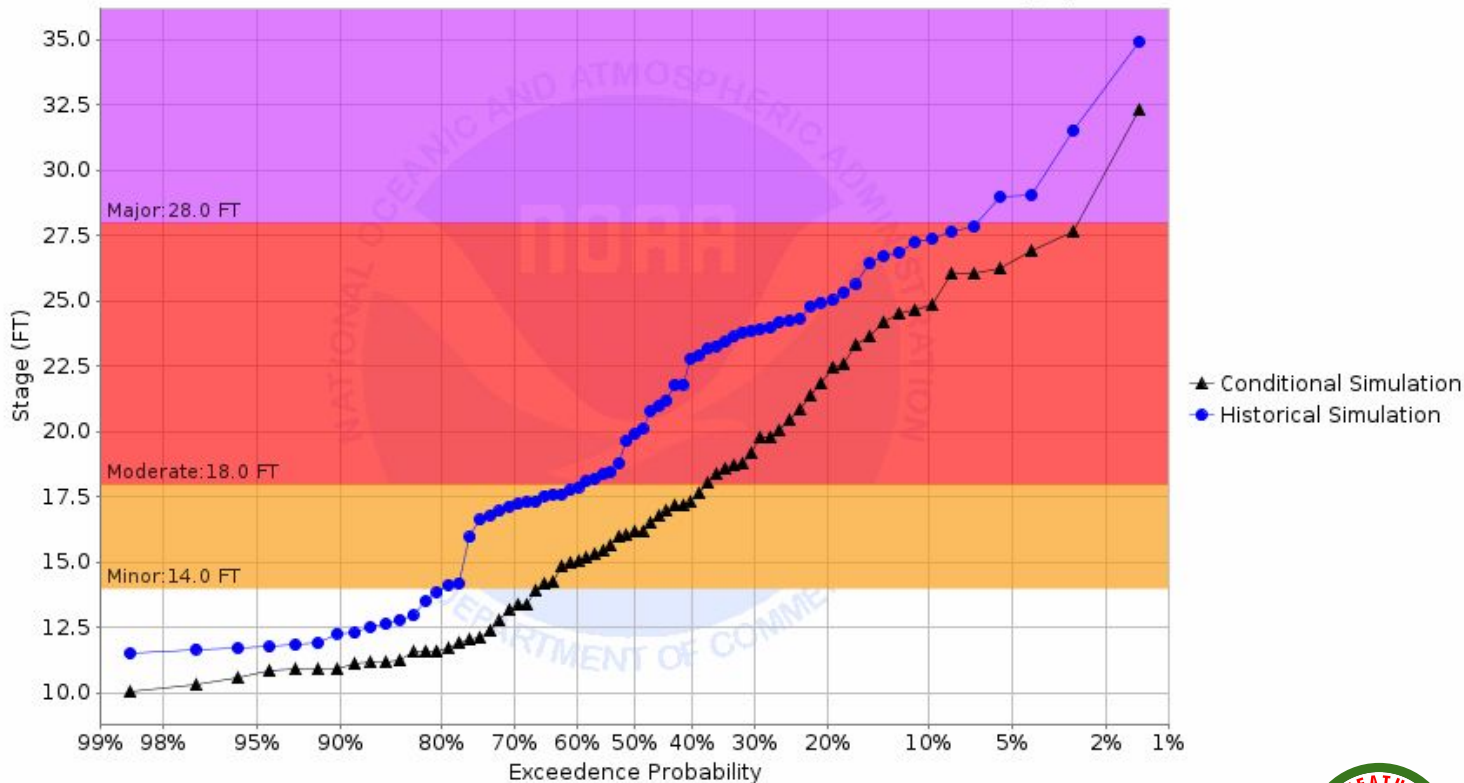
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Spring Flood Outlook 2025 - Illinois River at Beardstown, IL

Chance of Exceeding River Stage at Illinois River at Beardstown (BEA12)
Forecast for the period 03/03/2025 - 06/01/2025
This is a conditional simulation based on the conditions as of 02/24/2025

- Minor Flooding at Meredosia and Valley City is similar to Beardstown's moderate flood threshold. The likelihood of moderate flooding this spring is 38%, 21% below the historical average.
- Chances of significant flooding are also well below the historical averages.



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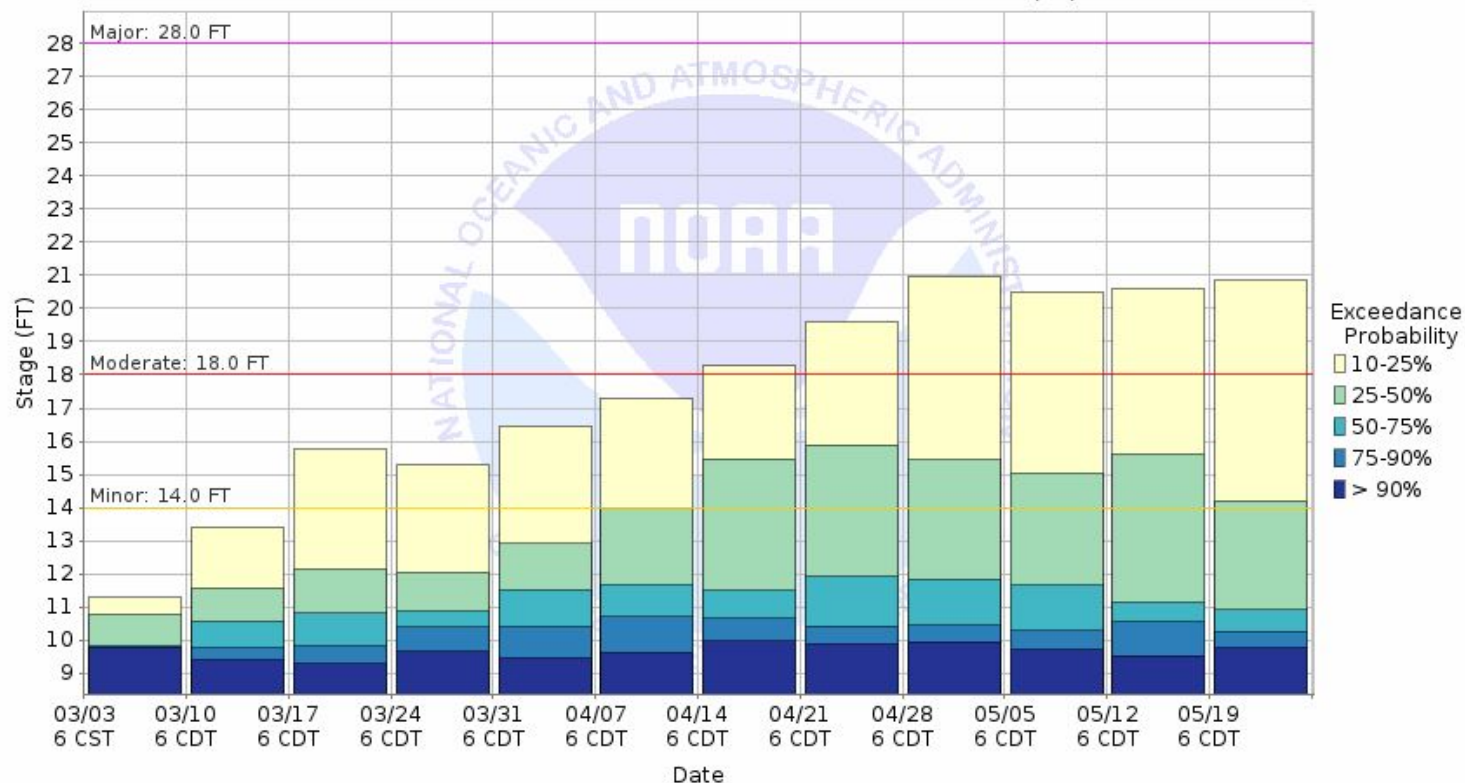


Spring Flood Outlook 2025 - Illinois River at Beardstown, IL

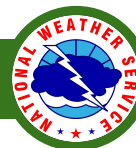
Weekly Chance of Exceeding River Stage at Illinois River at Beardstown (BEA12)

Forecast for the period 03/03/2025 - 06/01/2025

This is a conditional simulation based on the conditions as of 02/24/2025



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Near Term River Probabilities - Hydrologic Ensemble Forecast Service (HEFS)

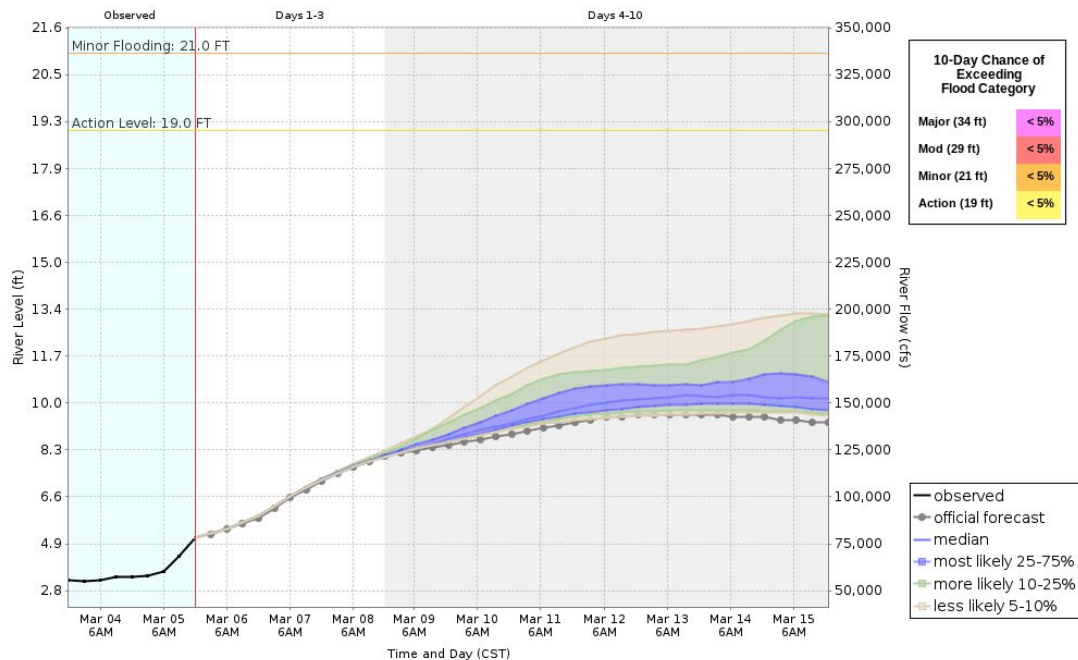
HEFS - 10 Day River Level Probabilities

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



Mar 06 - Mar 16, 2025

Mississippi River at Alton 2SE - Melvin Price L&D (ALNI2)

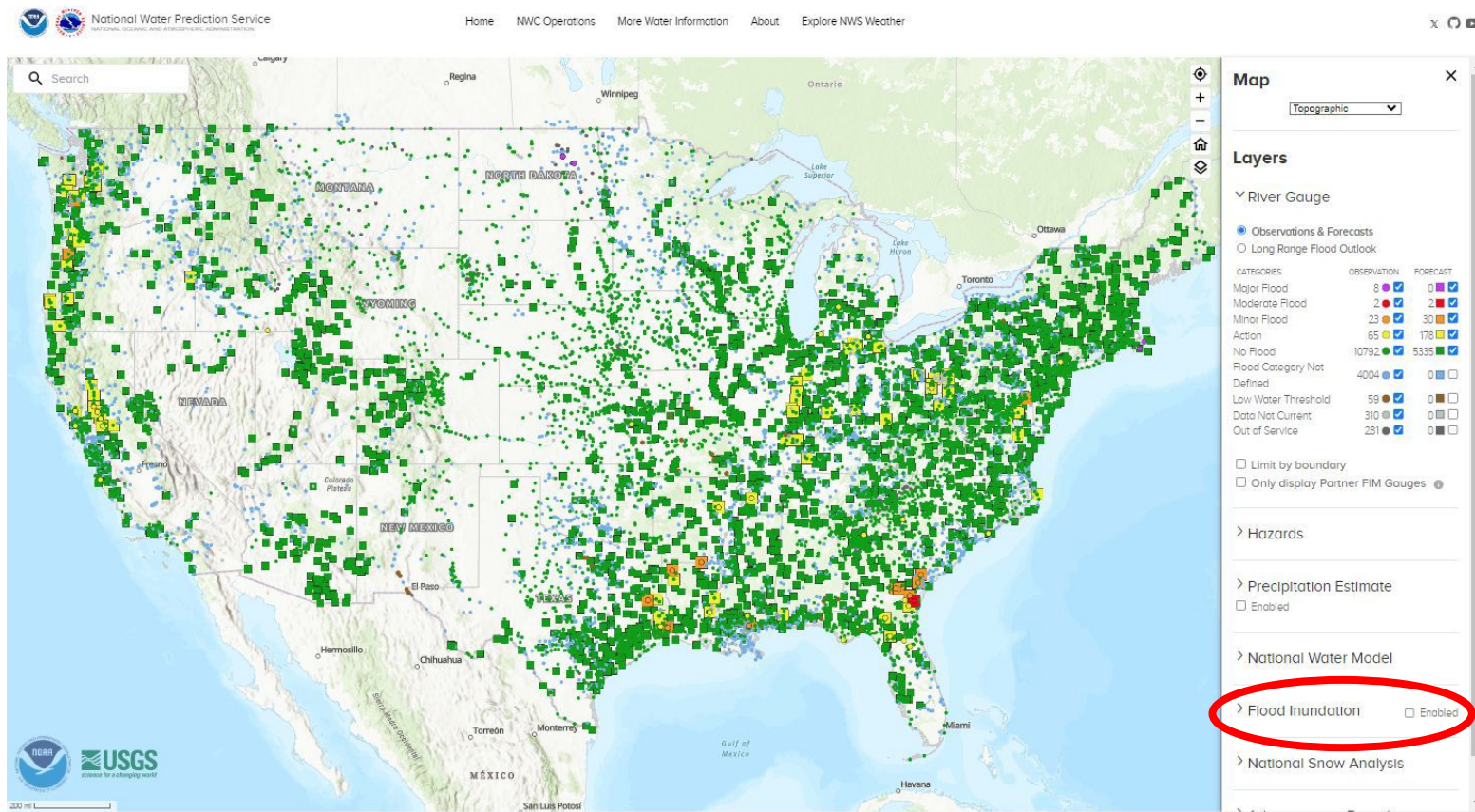


Model runtime: 06:00 PM CST Mar 05 2025
North Central River Forecast Center

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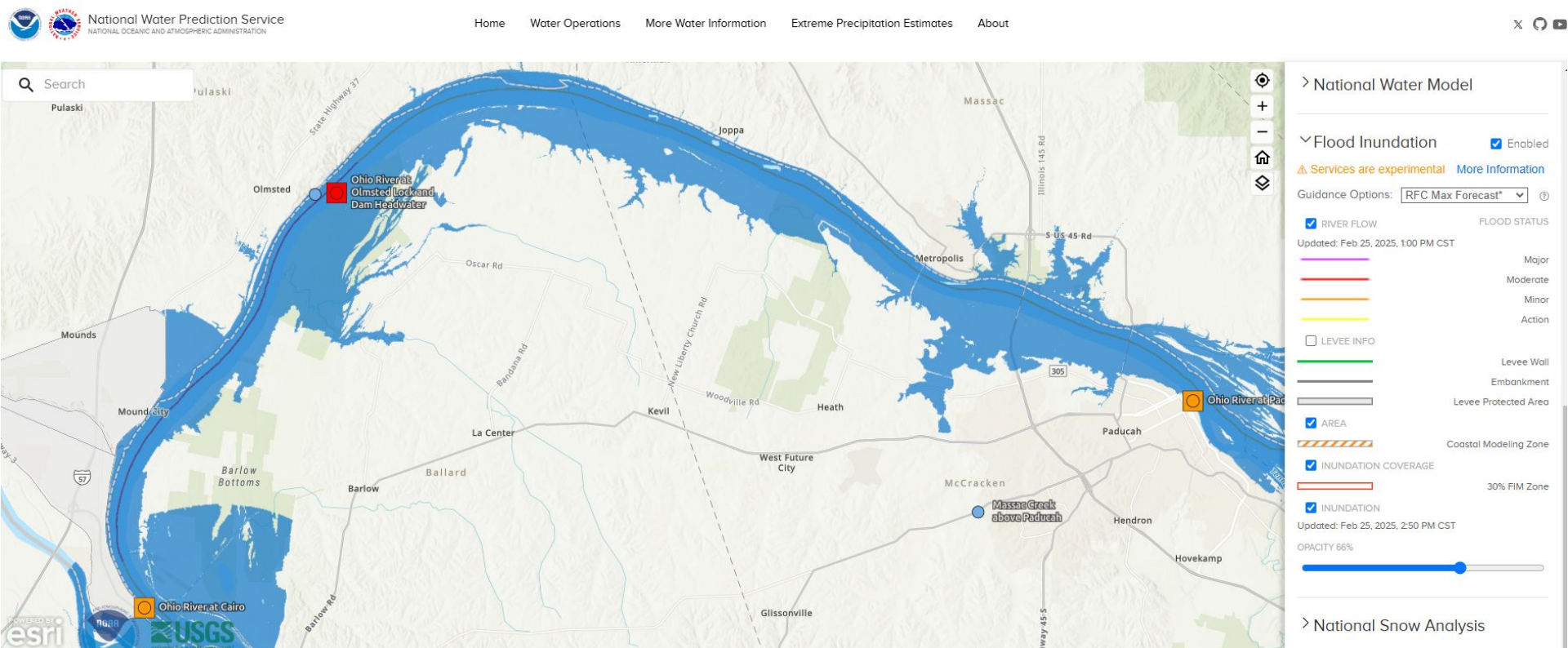
Flood Inundation Mapping Services - Went live in late September 2024



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Flood Inundation Mapping Services - Went live in late September 2024



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Questions???

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