



# Severe Thunderstorm and Flooding Potential

April 28, 2025  
5:38 AM

Overnight Tonight through Thursday

## Key Messages

- Potential for strong to severe thunderstorms to move through the region overnight tonight through Tuesday evening. Primary hazards are damaging winds and large hail.
- Increasing confidence in the potential for heavy rainfall and flooding Tuesday through Thursday.

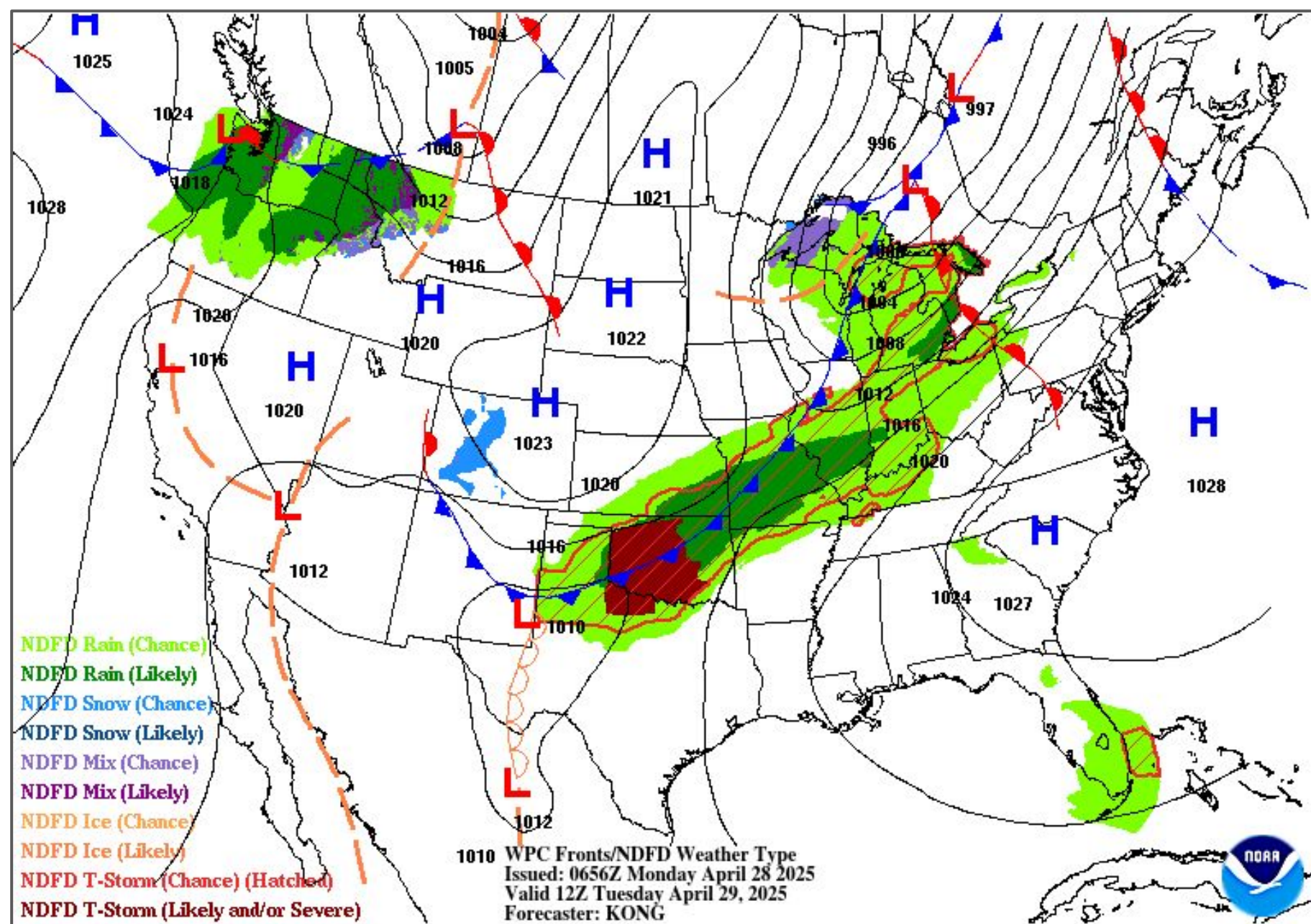
NEW

## Important Updates

- Updates Severe Weather Outlooks, Excessive Rainfall Outlooks, and timing.

## Next Scheduled Briefing

- This afternoon



National Oceanic and  
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U.S. Department of Commerce

National Weather Service  
Springfield, MO





# Severe Weather Outlook Overnight Tonight

April 28, 2025  
5:38 AM

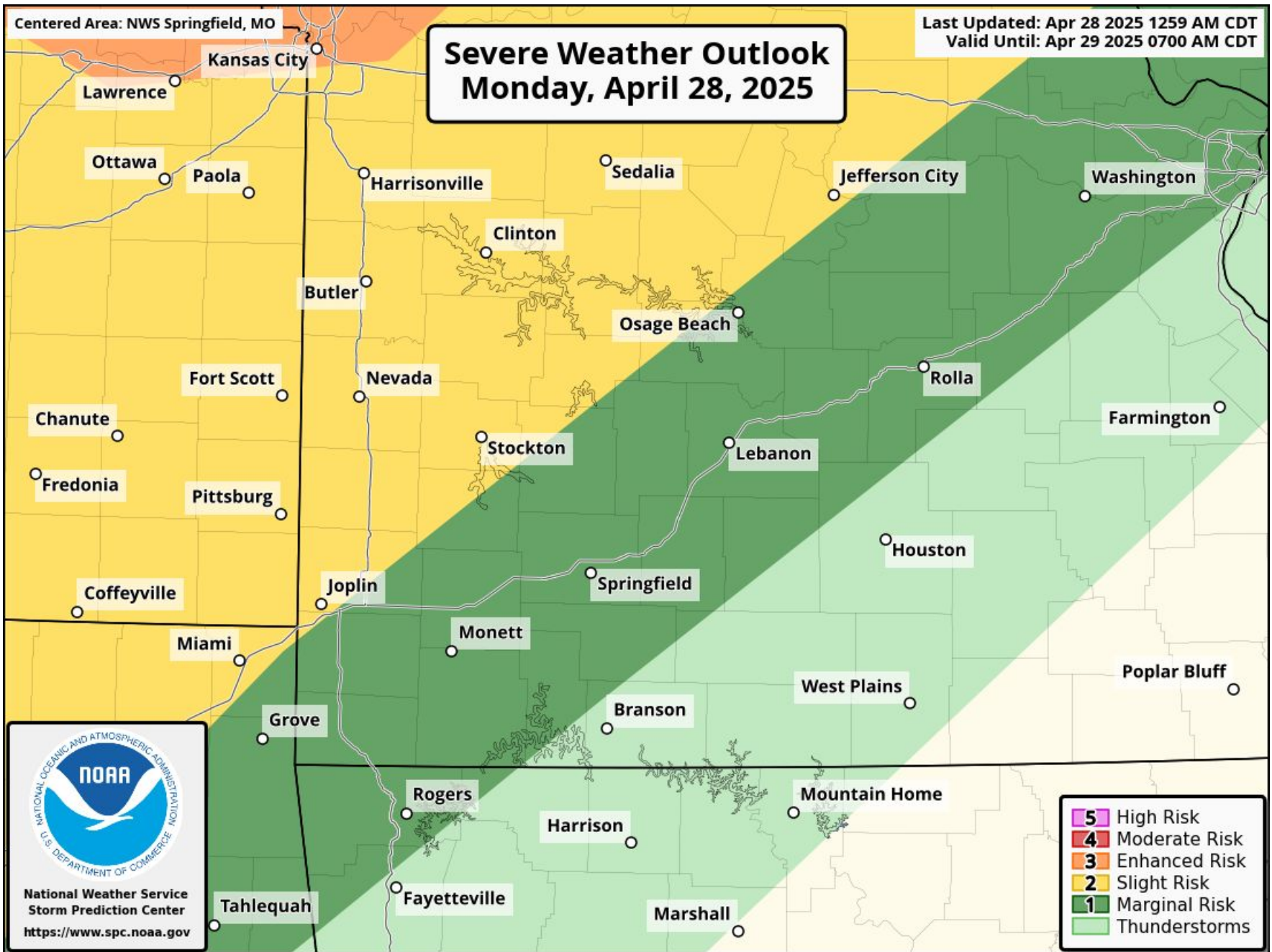
Overnight Tonight into Tuesday Morning

## Overview

- Potential for strong to severe thunderstorms overnight tonight into Tuesday morning.
- Highest chances north of the Interstate 44 corridor.
- Primary hazards are damaging winds and large hail.

Severe Threats

	<b>Tornado</b>	<div><div>Lo</div><div>Med</div><div>Hi</div></div>
	<b>Hail</b>	<div><div>Lo</div><div>Med</div><div>Hi</div></div>
	<b>Wind</b>	<div><div>Lo</div><div>Med</div><div>Hi</div></div>
	<b>Flooding</b>	<div><div>Lo</div><div>Med</div><div>Hi</div></div>





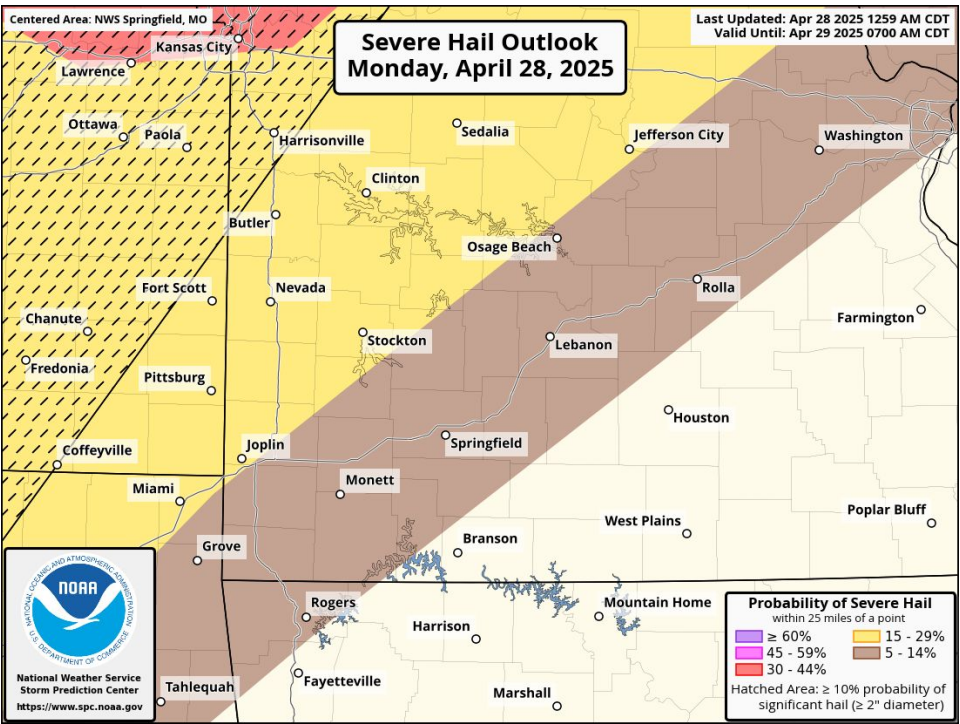
# Hazard Probabilities

April 28, 2025  
5:38 AM

Overnight Tonight into Tuesday Morning



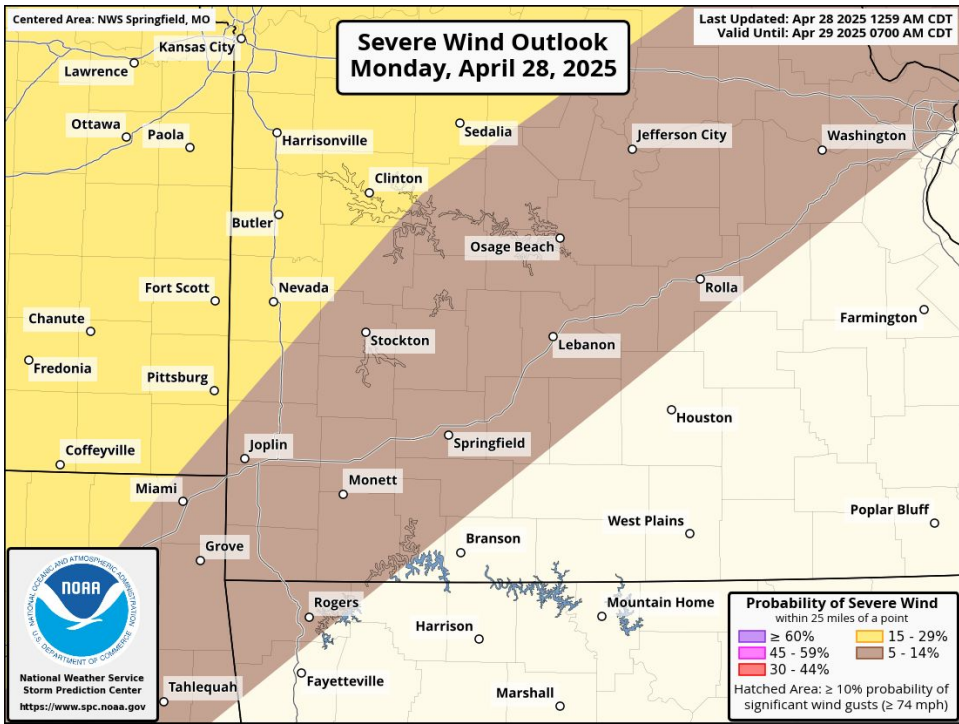
## Hail Probability



Pennies	Quarters	Golf Balls	Baseballs
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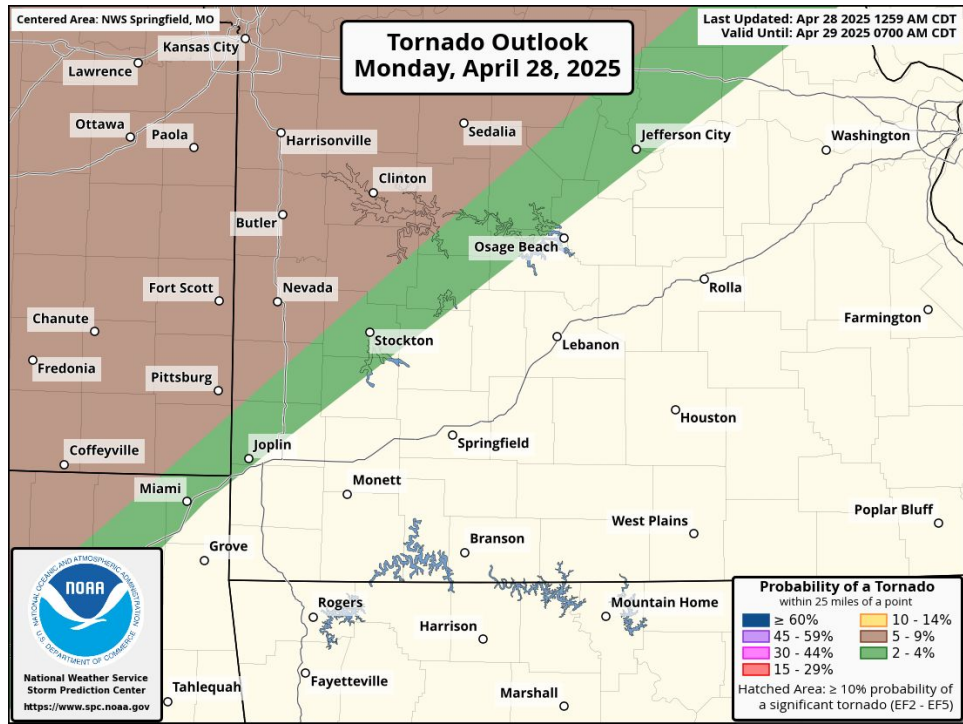
## Wind Probability



< 60 mph	60-70 mph	70-80 mph	>80 mph
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## Tornado Probability



Very Low	Low	Moderate	High
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# Severe Weather Outlook Tuesday

April 28, 2025  
5:38 AM

Tuesday Morning through Tuesday Evening

## Overview

- Additional potential for strong to severe thunderstorms through Tuesday afternoon and evening.
- Highest chances along and south of the Interstate 44 corridor.
- Primary hazards is damaging winds.

Severe Threats



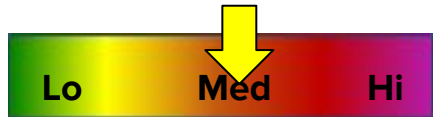
Tornado



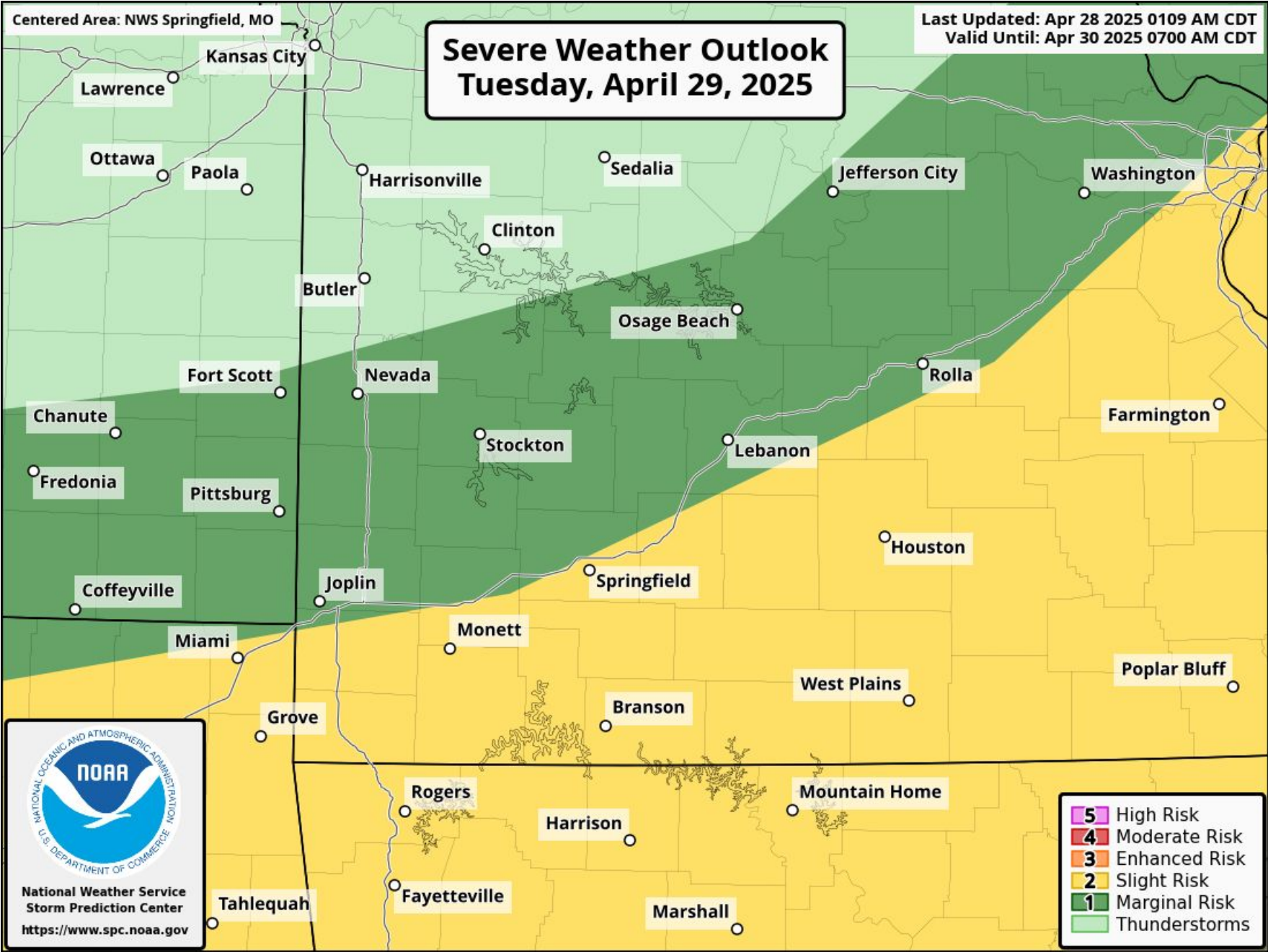
Hail



Wind



Flooding



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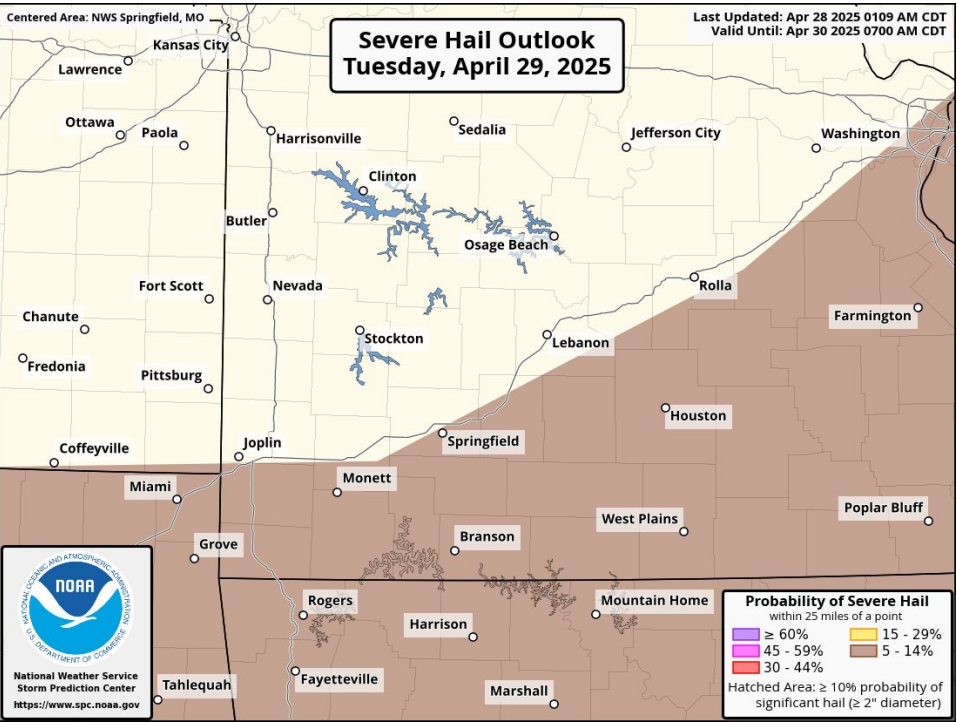
# Hazard Probabilities

April 28, 2025  
5:38 AM

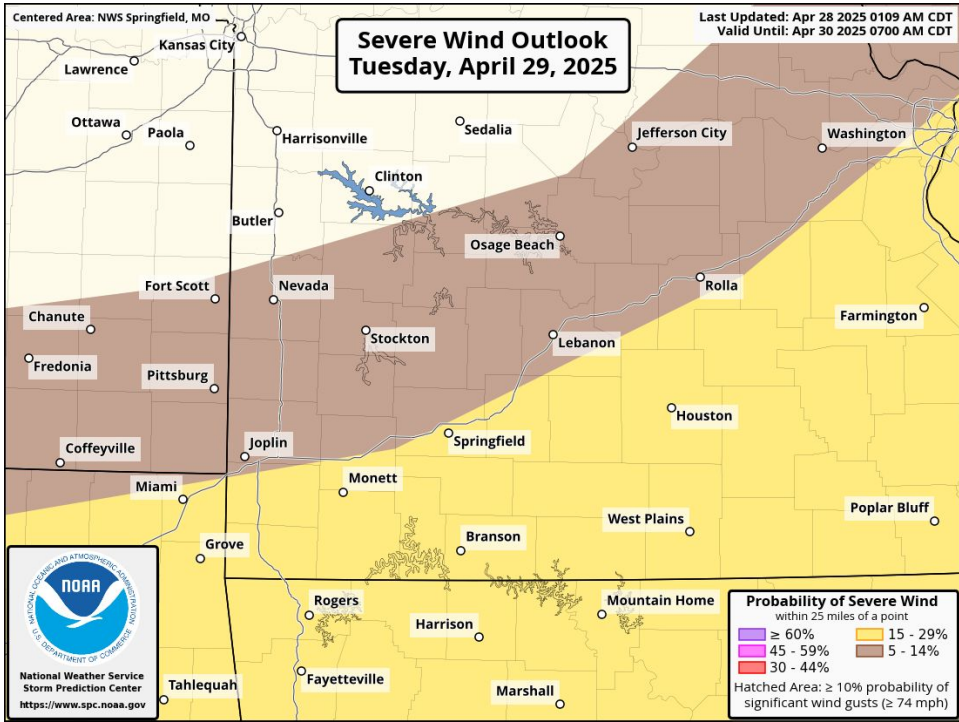
Tuesday Morning through Tuesday Evening



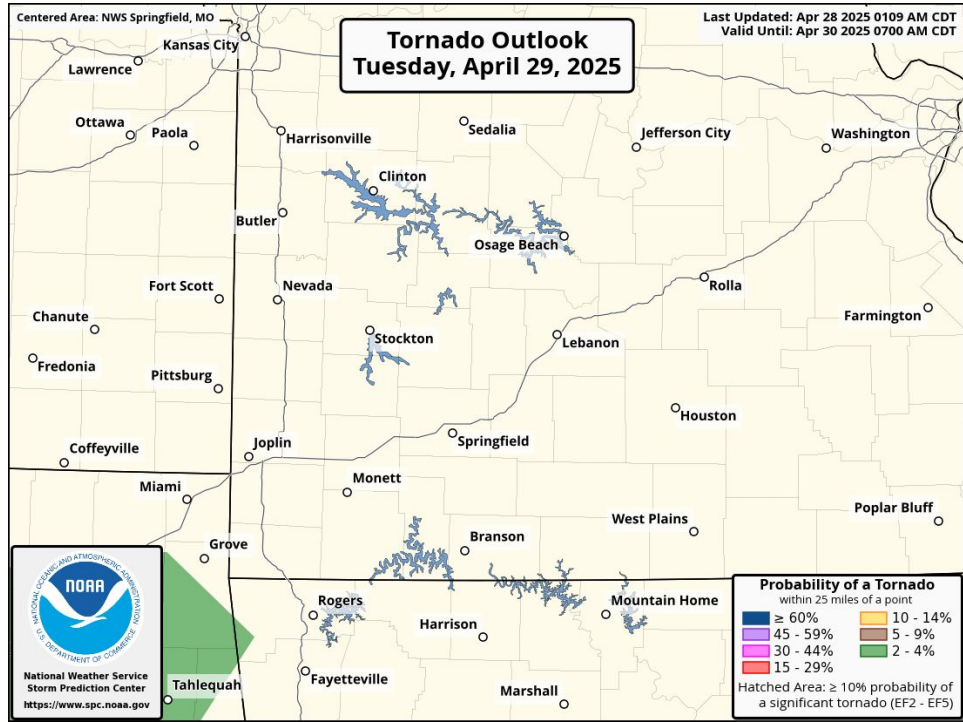
## Hail Probability



## Wind Probability



## Tornado Probability



Pennies	Quarters	Golf Balls	Baseballs
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< 60 mph	60-70 mph	70-80 mph	>80 mph
----------	-----------	-----------	---------

Very Low	Low	Moderate	High
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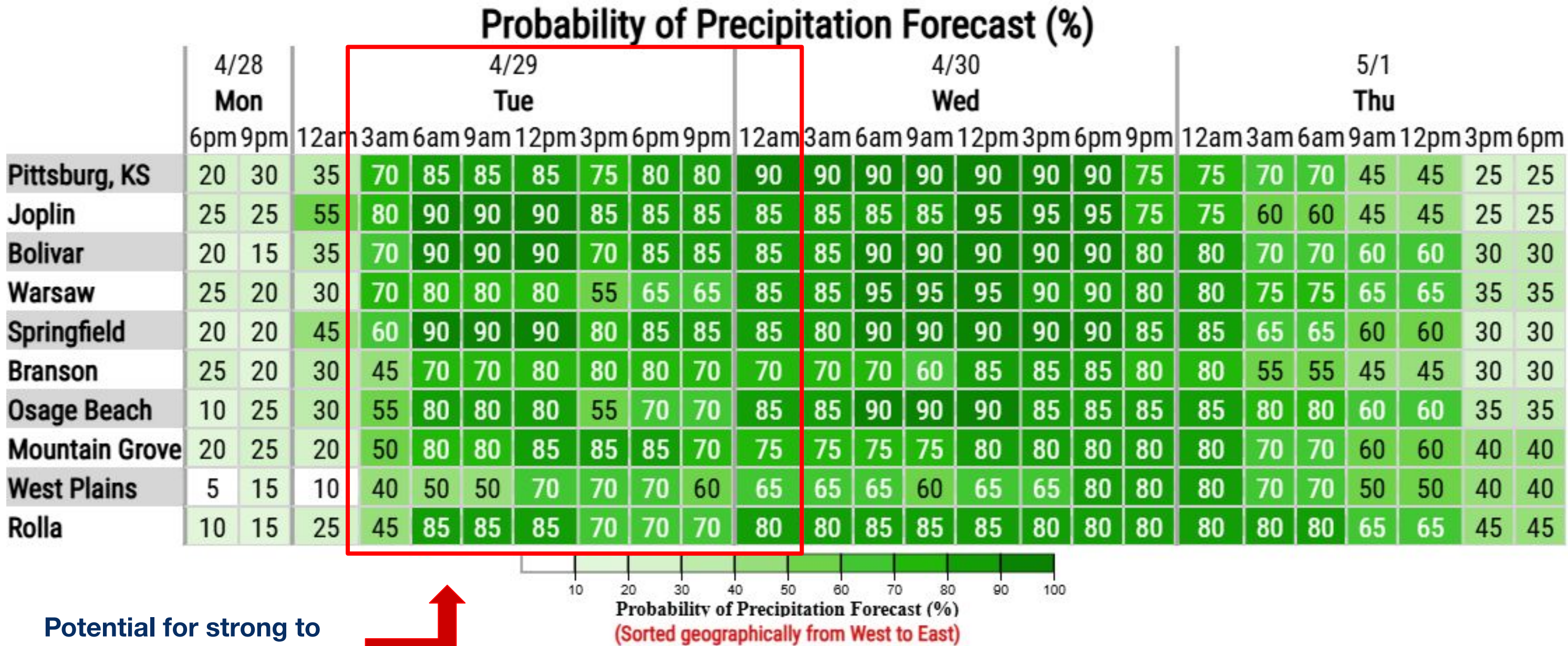




# Timing of Thunderstorm Chances

April 28, 2025  
5:38 AM

Overnight Tonight through Thursday







# Forecast Rainfall Amounts

April 28, 2025  
5:38 AM

Overnight Tonight through Wednesday Night

## What

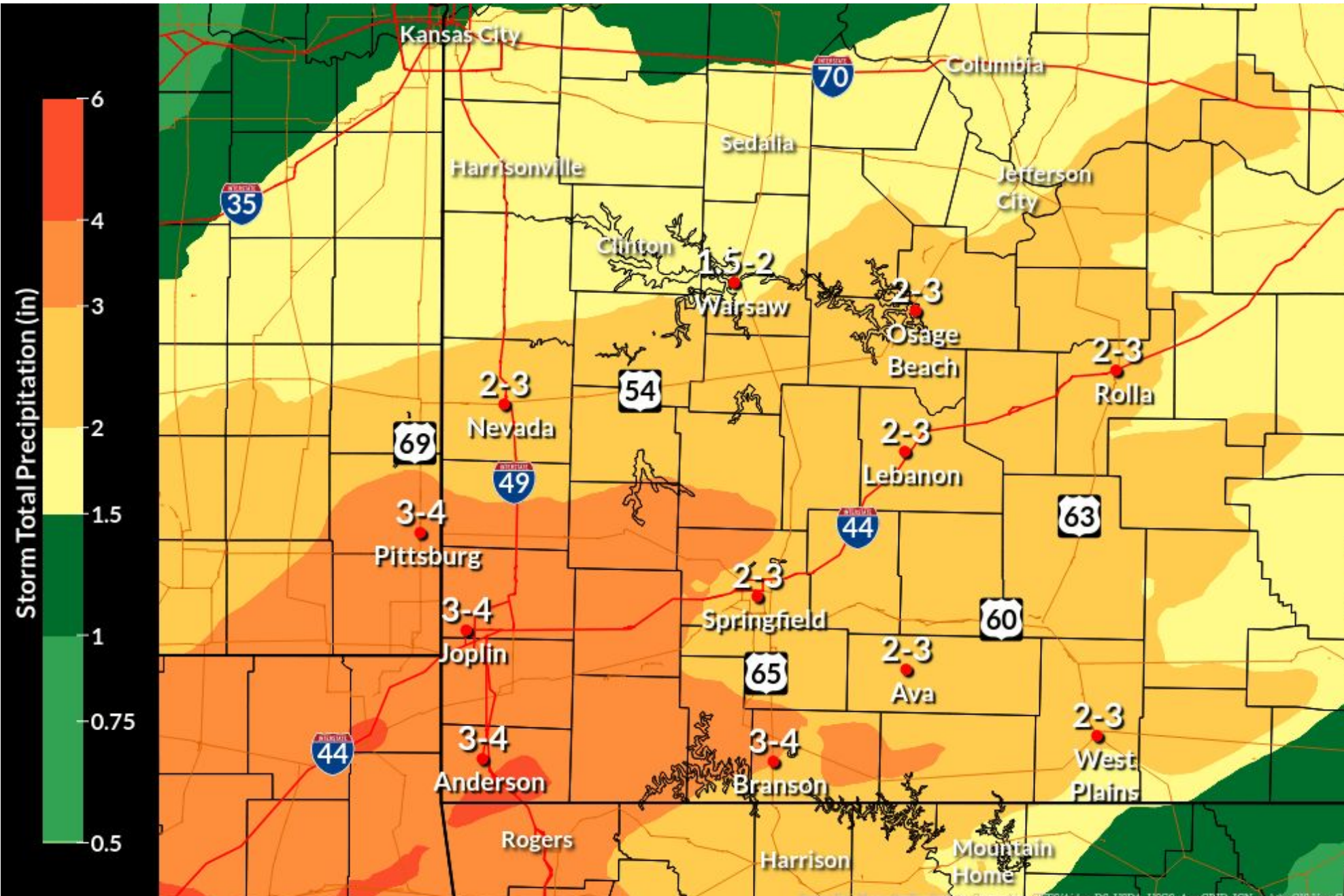
- Multiple rounds of showers and thunderstorms Tuesday through Thursday. Increasing confidence in heavy rainfall and flooding.

## Where

- Heaviest rainfall axis focuses along and north of Interstate 44.

## When

- Overnight tonight through Thursday. The heaviest rainfall is expected Tuesday morning through Wednesday evening.



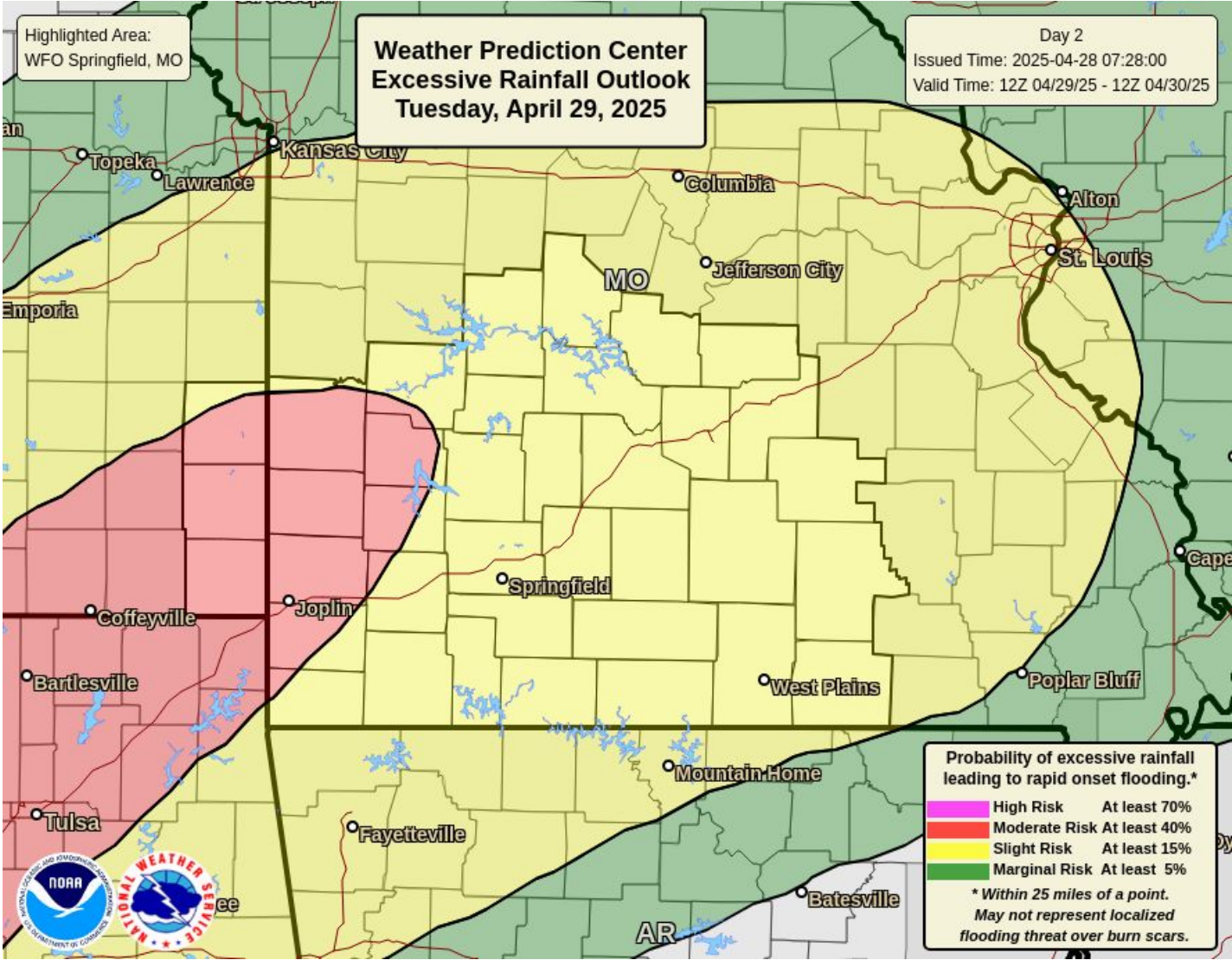




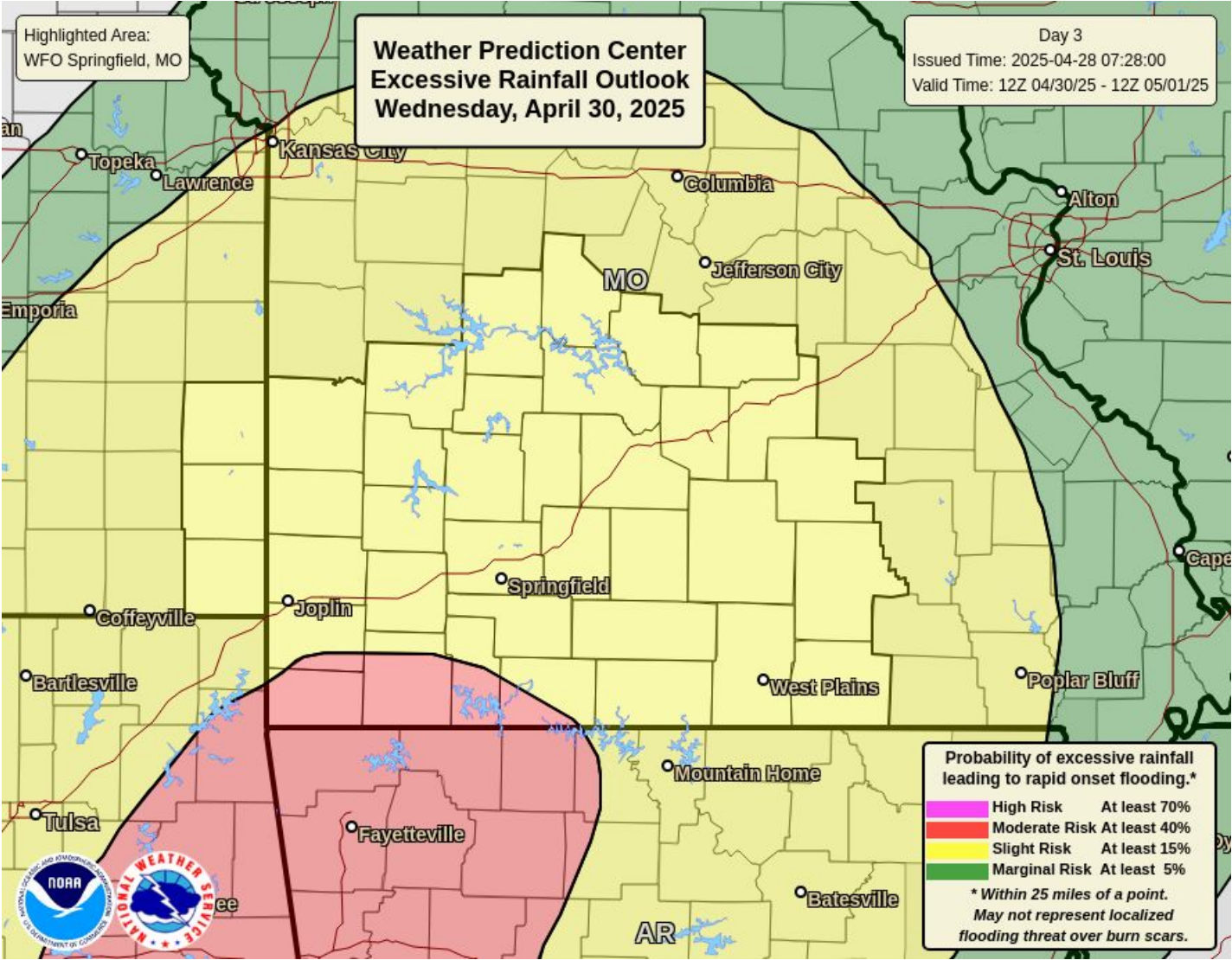
# Excessive Rainfall Outlooks

April 28, 2025  
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Tuesday and Wednesday



Tuesday



Wednesday



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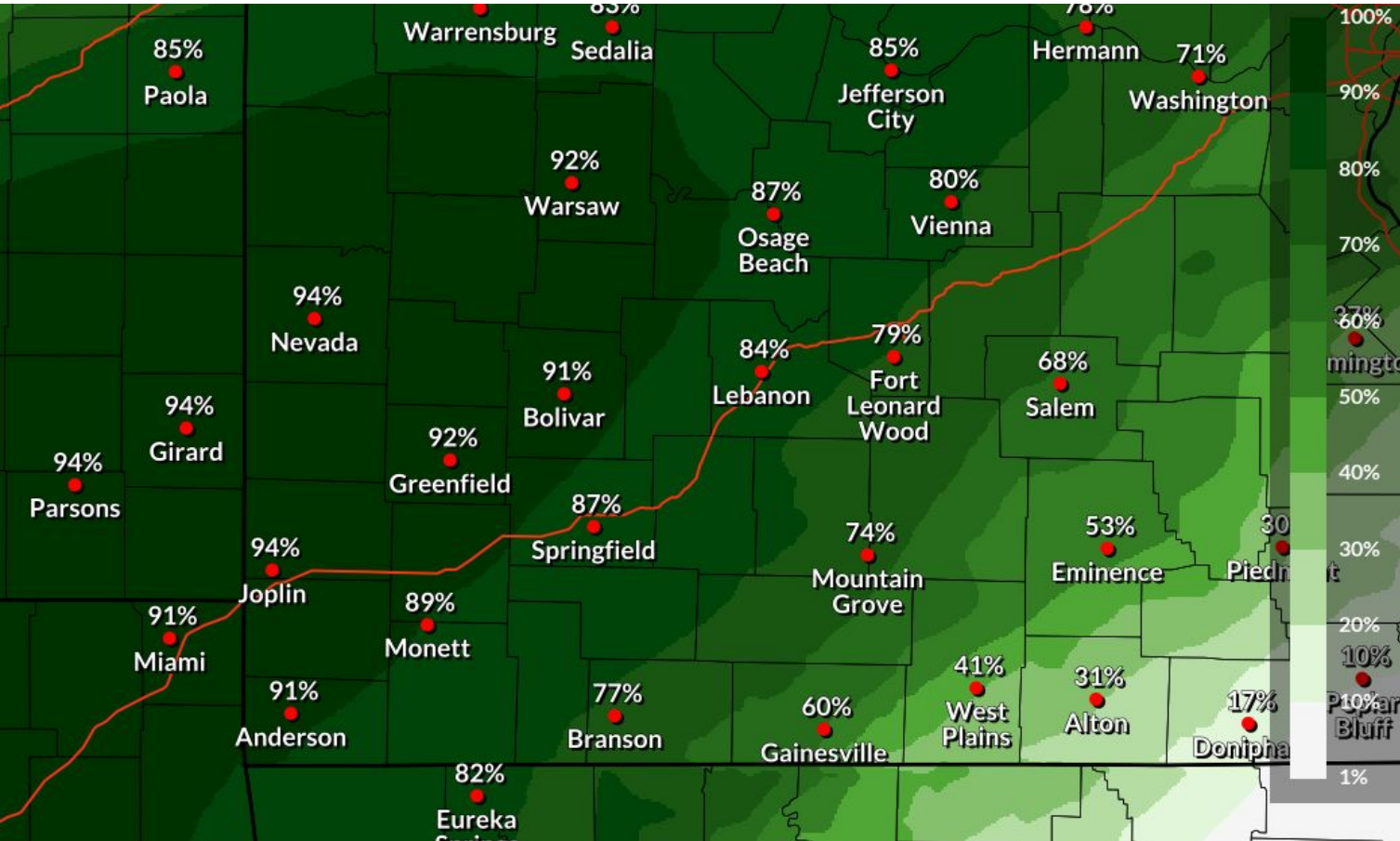




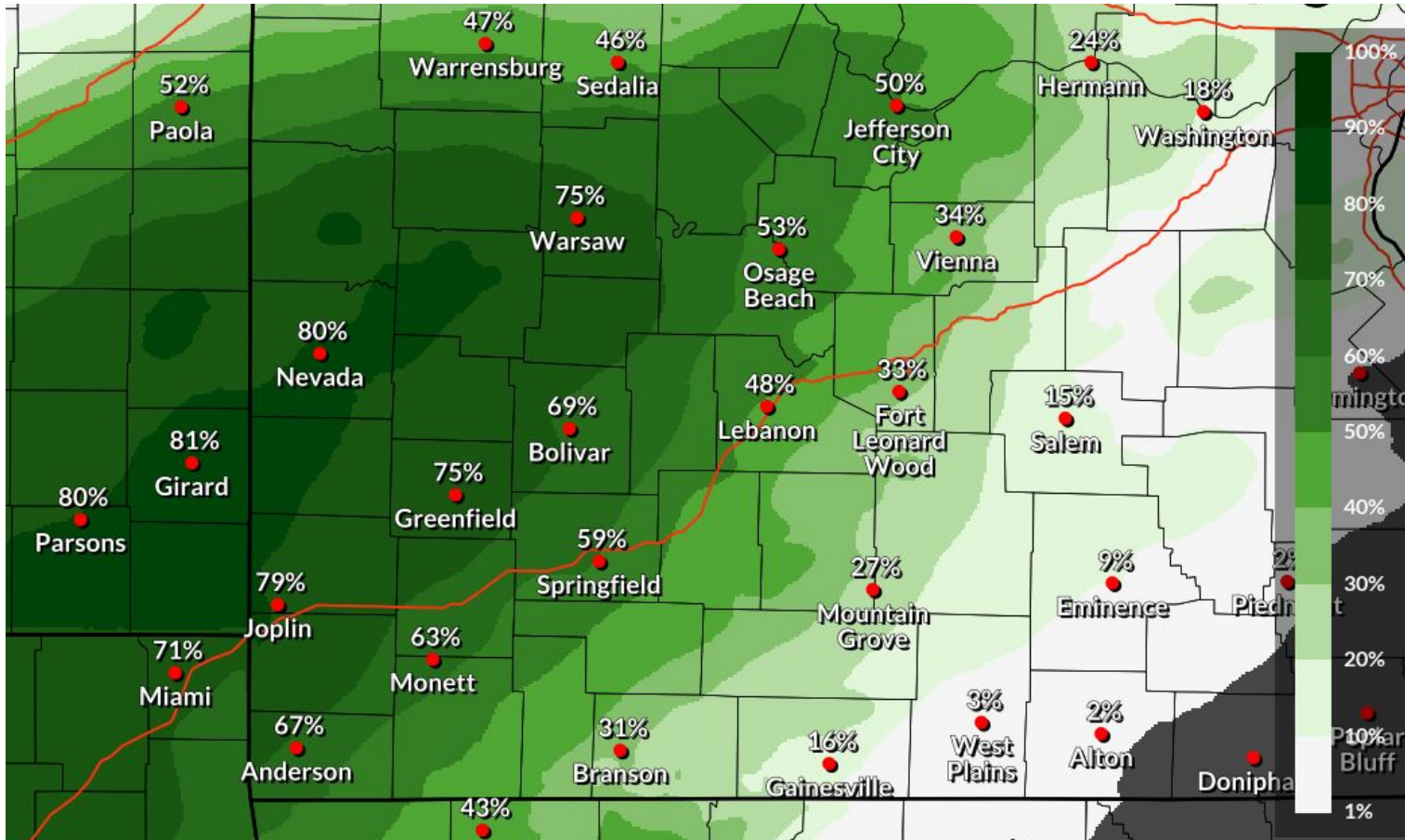
# Probabilistic Rainfall Amounts

April 28, 2025  
5:38 AM

Overnight Tonight through Wednesday Night



Probability of 1.0 inch or greater



Probability of 2.0 inch or greater



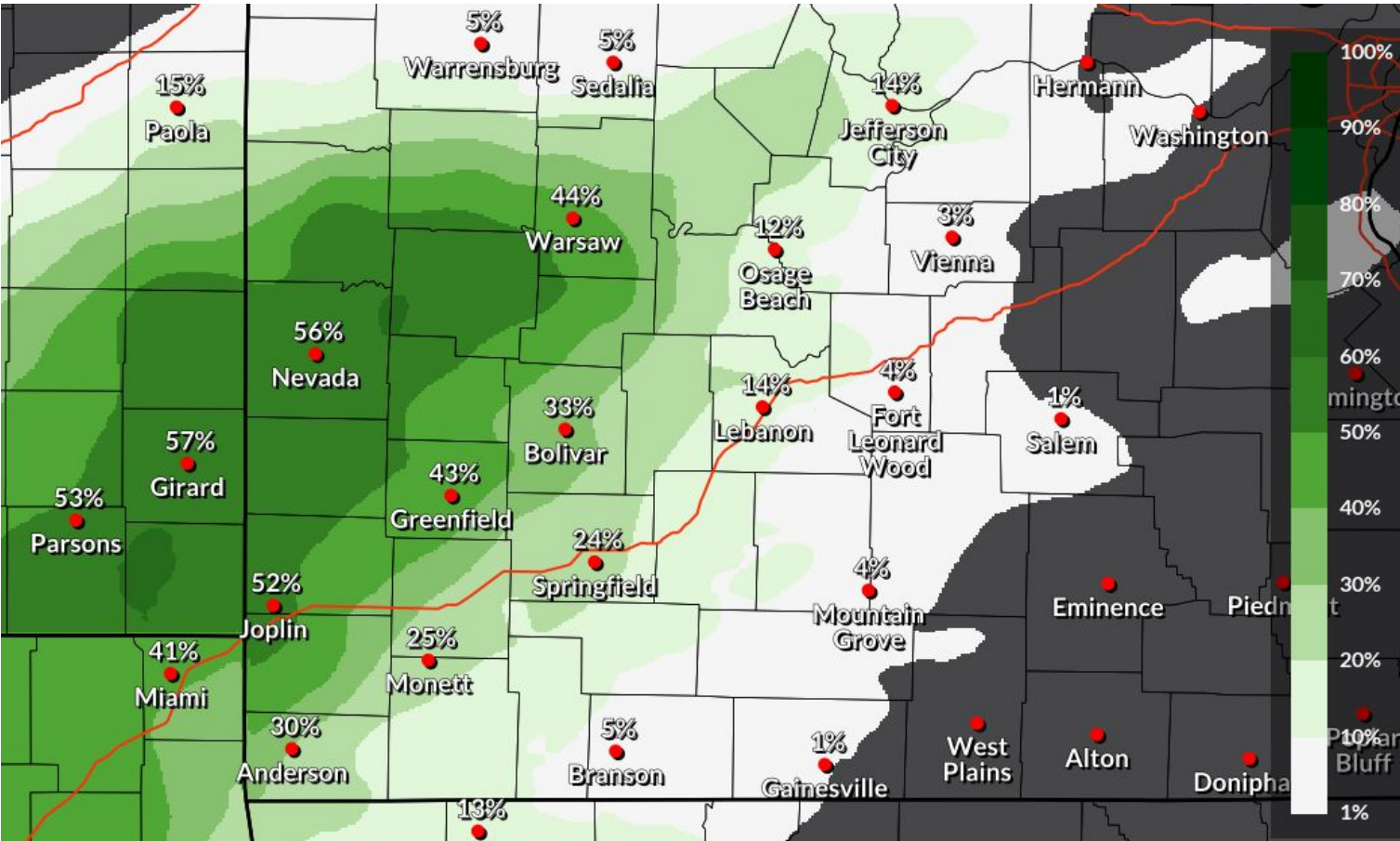




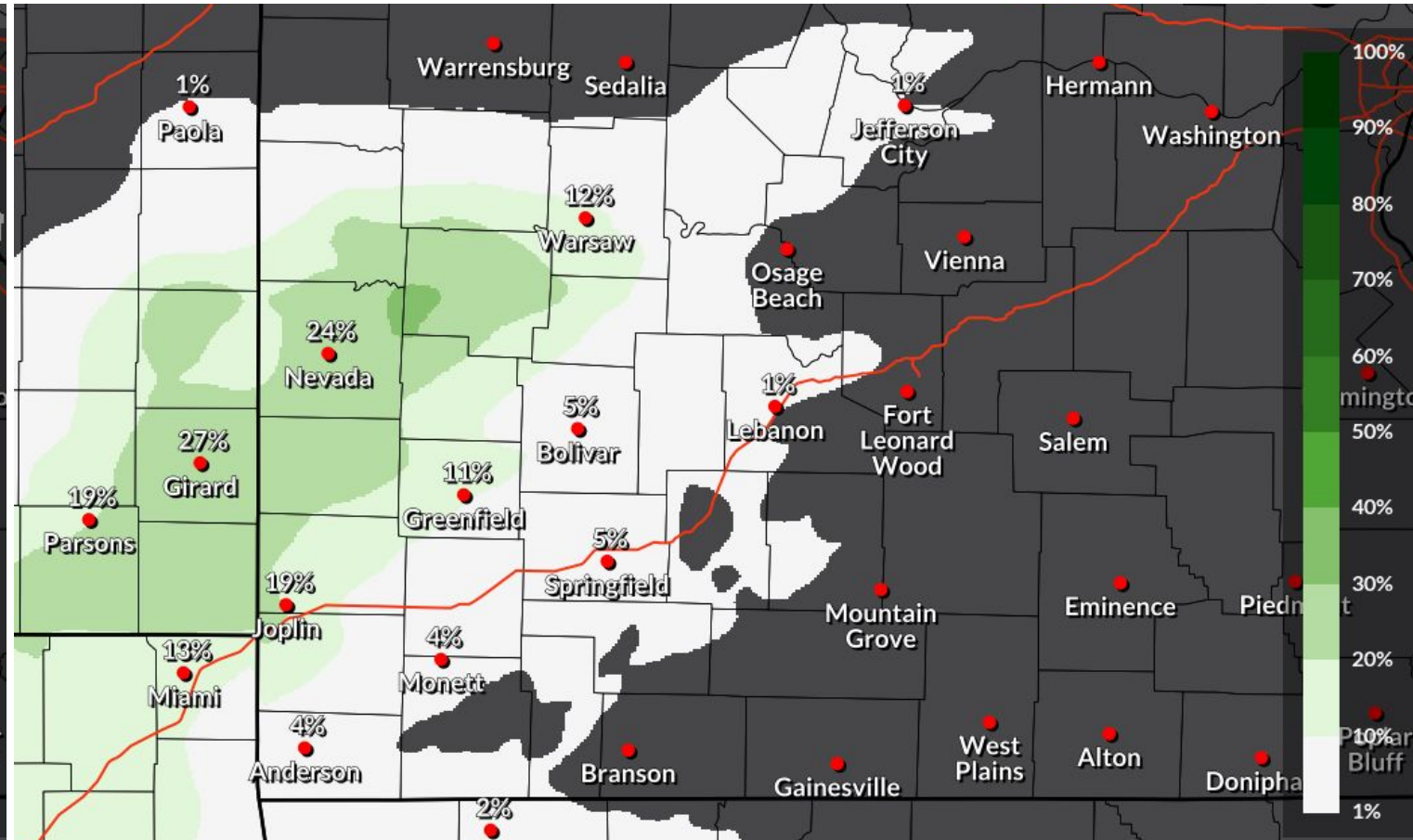
# Probabilistic Rainfall Amounts

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Overnight Tonight through Wednesday Night



Probability of 3.0 inch or greater



Probability of 4.0 inch or greater







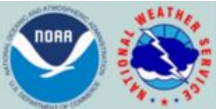
# River Ensemble Probabilities

April 28, 2025  
5:38 AM

Tuesday through Thursday

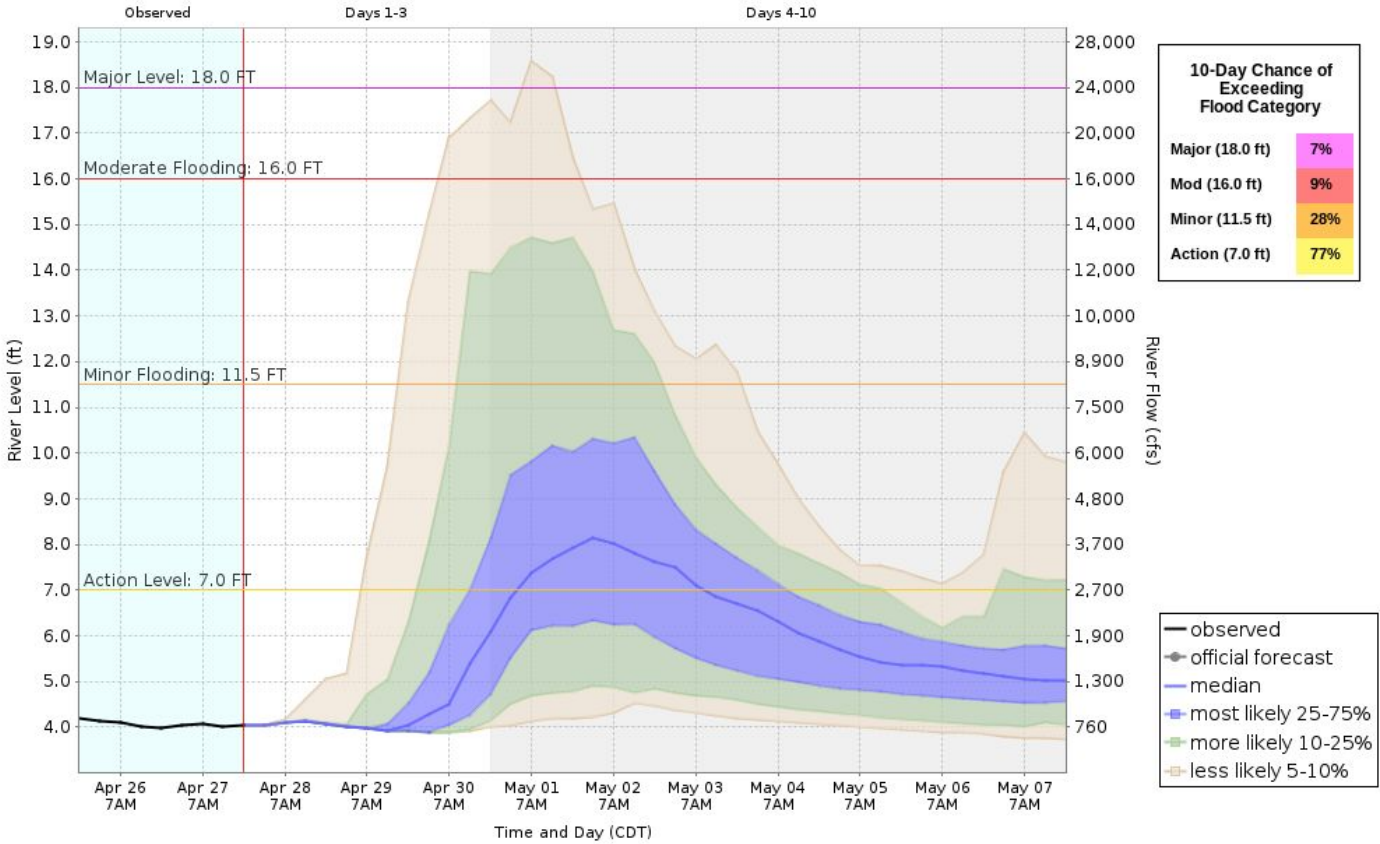
## HEFS - 10 Day River Level Probabilities

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



Apr 28 - May 08, 2025

### JOPM7 - SHOAL CREEK AT JOPLIN



Model runtime: 07:00 PM CDT Apr 27 2025  
Arkansas-Red Basin RFC

**Shoal Creek at Joplin**  
**(Probability of Occurrence)**

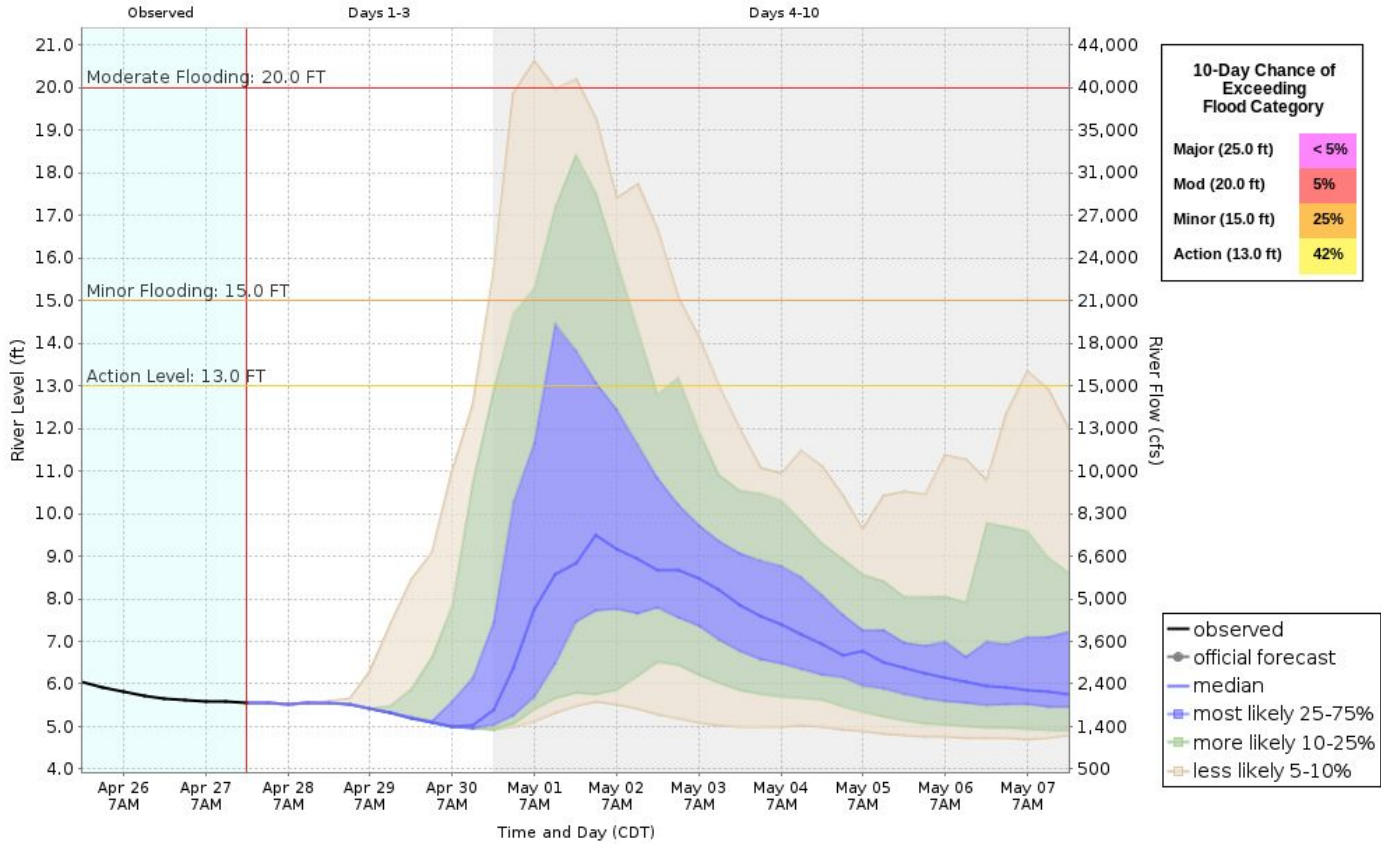
## HEFS - 10 Day River Level Probabilities

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



Apr 28 - May 08, 2025

### TIFM7 - ELK RIVER AT TIFF CITY



Model runtime: 07:00 PM CDT Apr 27 2025  
Arkansas-Red Basin RFC

**Elk River at Tiff City**  
**(Probability of Occurrence)**



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# River Ensemble Probabilities

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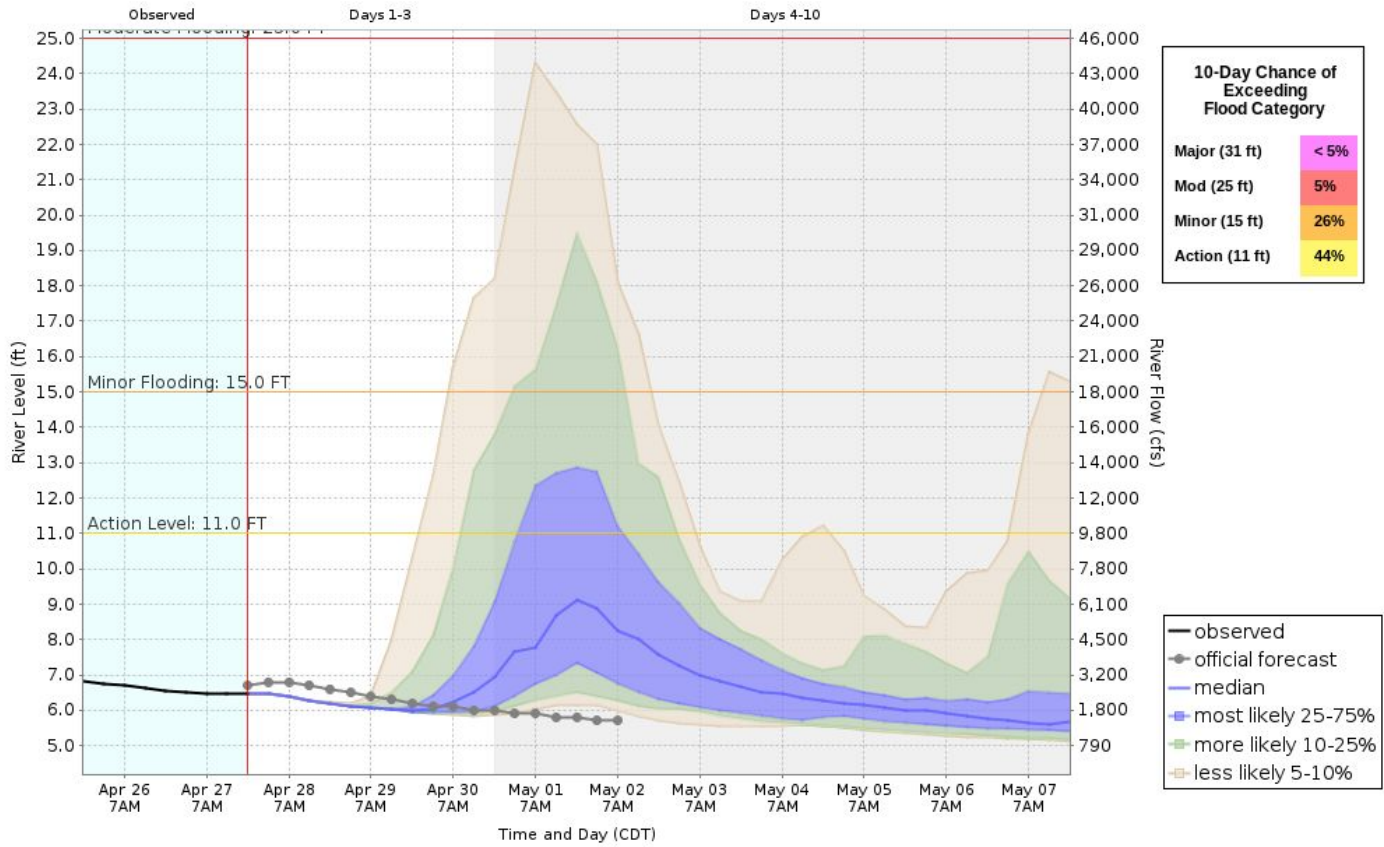
Tuesday through Thursday

## HEFS - 10 Day River Level Probabilities

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



Apr 28 - May 08, 2025  
**JAMES RIVER AT GALENA**



Model runtime: 07:00 PM CDT Apr 27 2025  
Lower Mississippi River Forecast Center

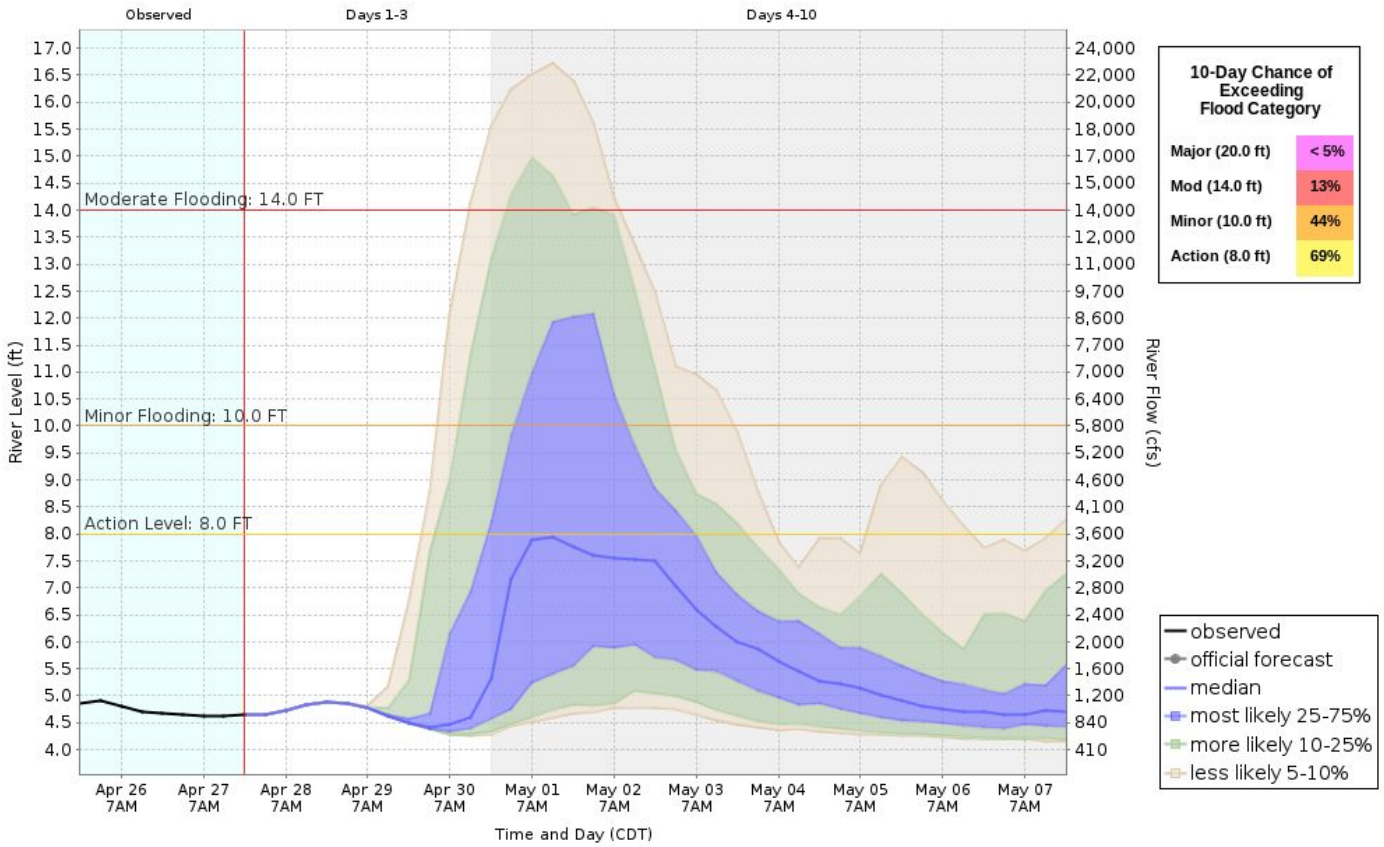
**James River at Galena**  
**(Probability of Occurrence)**

## HEFS - 10 Day River Level Probabilities

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



Apr 28 - May 08, 2025  
**CHTM7 - SPRING RIVER AT CARTHAGE 1N**



Model runtime: 07:00 PM CDT Apr 27 2025  
Arkansas-Red Basin RFC

**Spring River at Carthage**  
**(Probability of Occurrence)**



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# Confidence Levels

April 28, 2025  
5:38 AM

## Severe Weather Location



## Severe Weather Timing



## Severe/Flood Hazard Type



## Confidence Details

- A few strong to severe thunderstorms may occur overnight tonight through Tuesday. Primary hazards will be damaging wind gusts and large hail.
- The front will stall of the area through mid week with multiple rounds of rain. This increases the potential for flooding as we progress through the week, especially given saturated soils.

## Alternate Scenarios

- Most of the area remains dry through tonight, with thunderstorms arriving in the area Tuesday morning.







## For Additional Information

- [NWS Springfield Webpage](#)
- [IDSS Point Forecasts](#)
- [Graphical Hazardous Weather Outlook](#)
- [SPC Convective Outlooks](#)
- [Probabilistic QPF Experiment Webpage](#)
- [WPC Excessive Rainfall Outlooks](#)
- [WPC Precipitation Outlooks](#)
- [AHPS Lakes and Rivers](#)
- [Submit Storm Reports](#)

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## STORM PLANNING TIMELINE

A few days out	The day before	The day of
<i>If the forecast calls for severe weather in a few days, start preparing now.</i>	<i>The day before, forecast accuracy continues to improve.</i>	<i>Remain vigilant and aware of any active Watches. A Warning may be issued at a moment's notice!</i>
Make sure that you have emergency supplies	Adjust plans	Remind your family of the communication plan
Know your safe places	Make sure your phone can receive WEAs	Know how to evacuate and/or get to safety from wherever you are
Have a family communication plan	Ensure your shelter is clean and accessible	When a Warning is issued, you may only have seconds to take action!

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