



Severe Storms and Flooding Potential

May 23, 2025
5:16 AM

Today and Memorial Day Weekend (Today - Monday)

Key Messages

- Marginal (1/5) to Slight (2/5) risk for severe weather tonight and Saturday night, with a Marginal (1/5) risk on Sunday. Large hail and damaging winds are the primary threats.
- Increasing confidence in heavy rainfall tonight through Monday, likely leading to flooding.
- A Flood Watch is in effect for the entire area from 7 PM today until 7 PM Monday

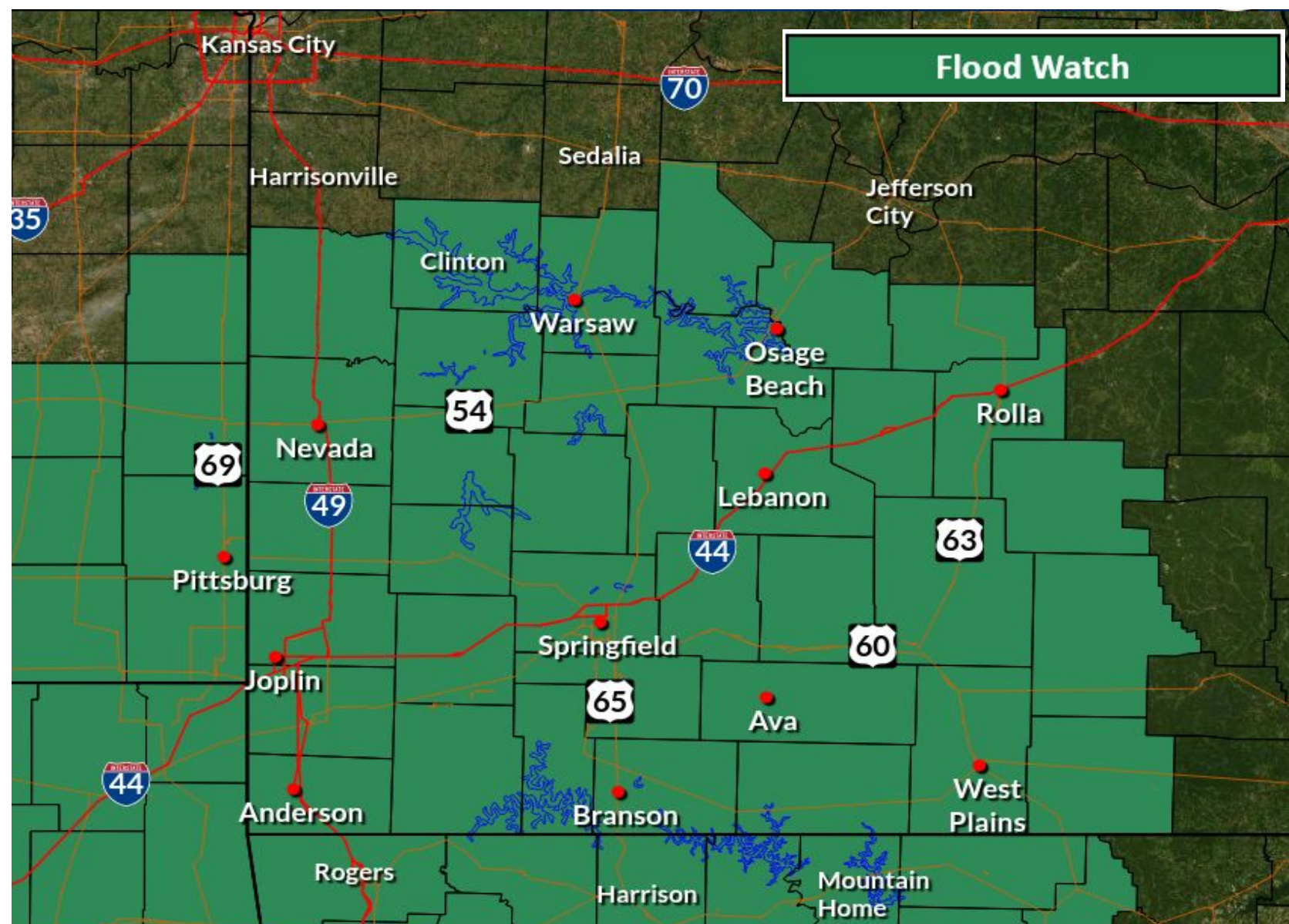
NEW

Important Updates

- Increased severe weather risk tonight through Sunday night.

Next Scheduled Briefing

- By 5 PM Today



Flood Watch 7 PM Today - 7 PM Monday



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Severe Storm This Evening - Tonight

May 23, 2025
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Timing

 6pm this evening through tonight

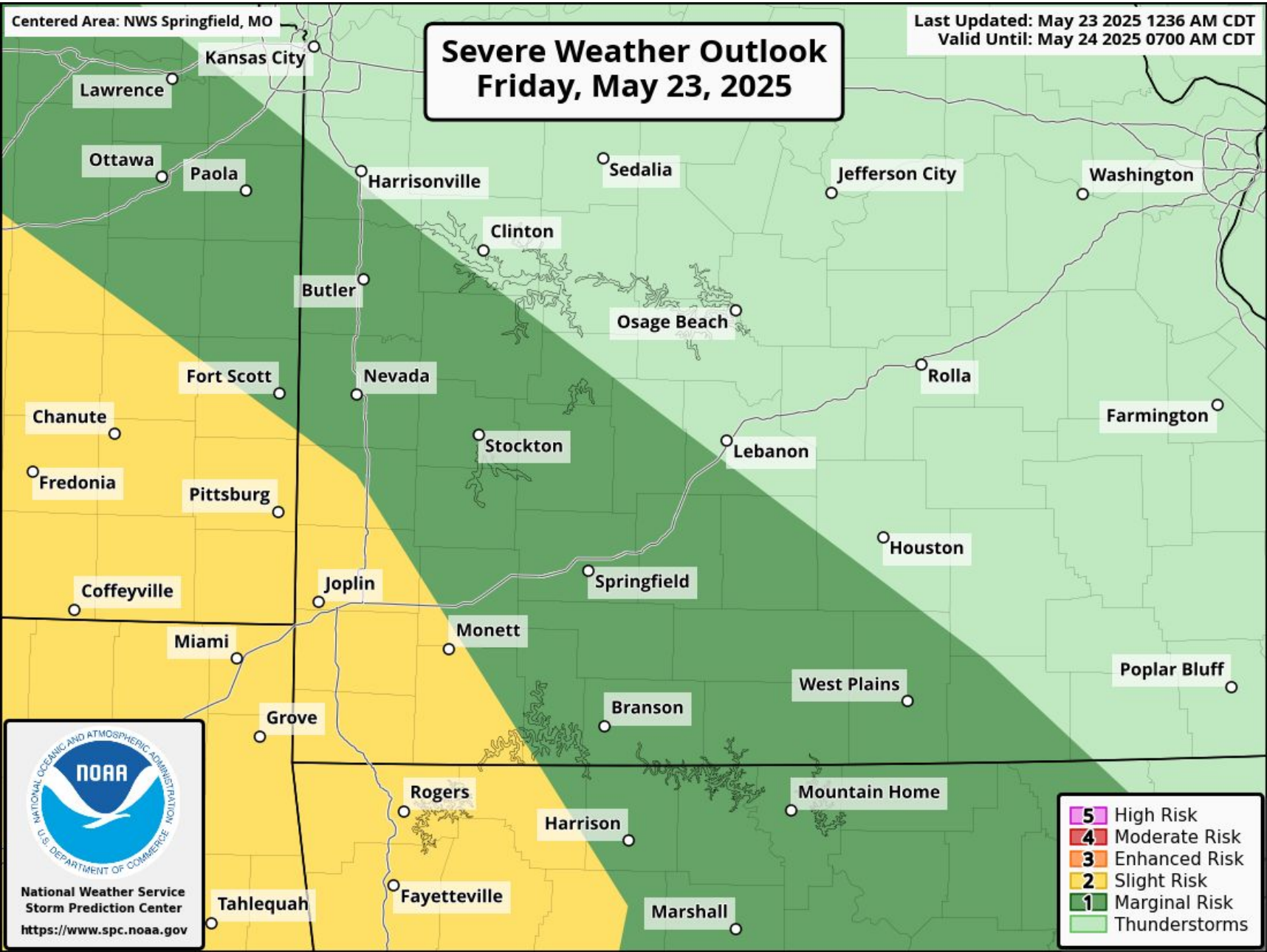
Actions

 Be weather aware and ready to act.
Have multiple ways to receive warning information!

Severe Threats

 **Large Hail**
Up to the size of golf balls

 **Damaging Wind**
60-70 mph



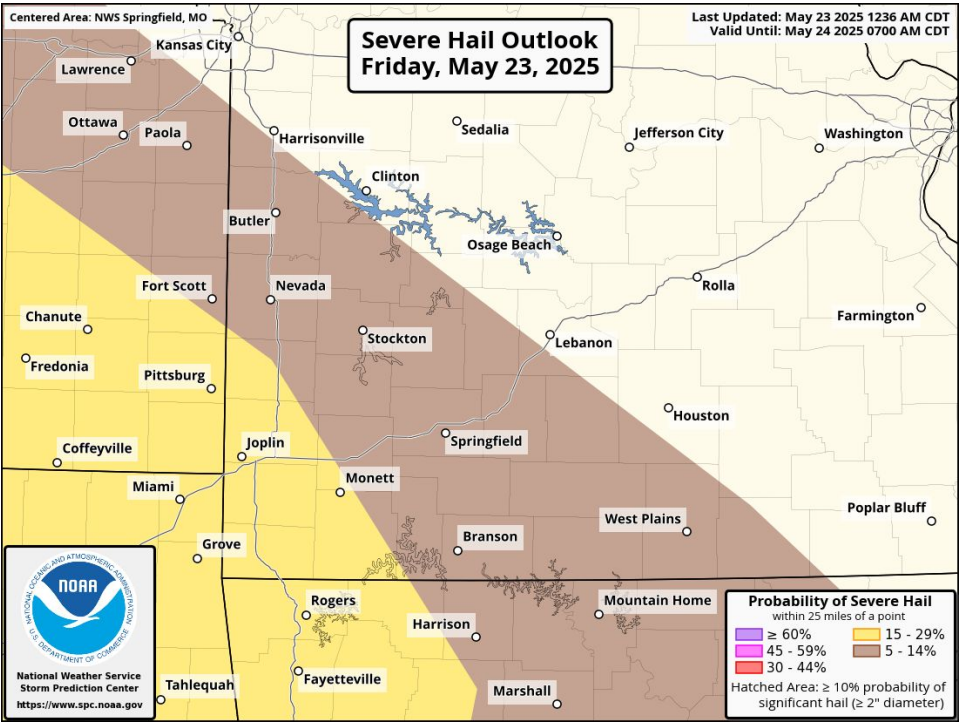


Severe Storm This Evening - Tonight

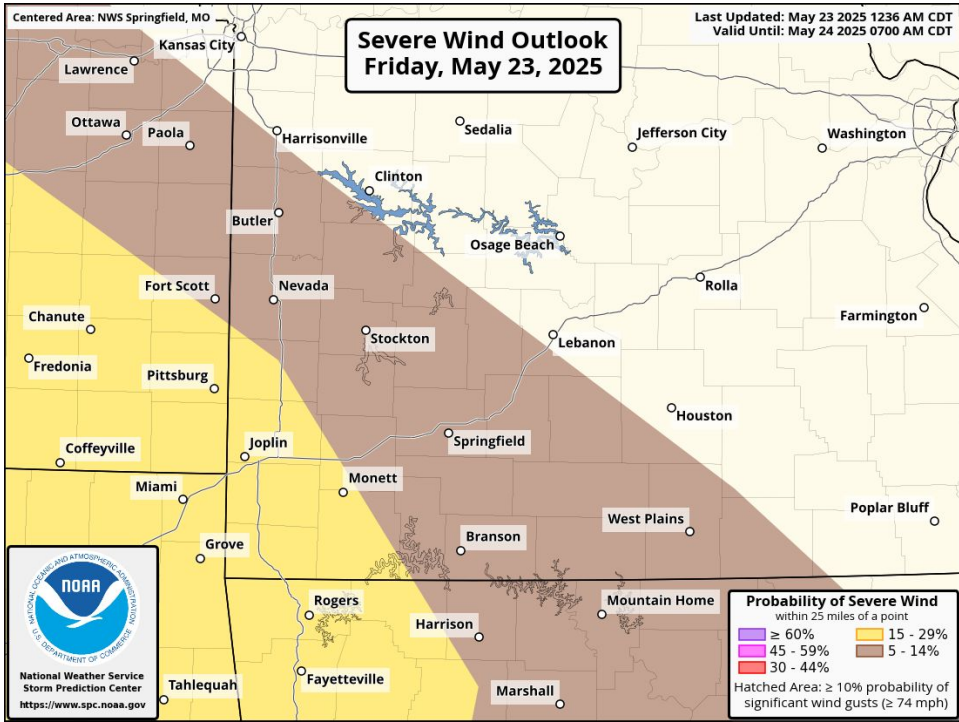
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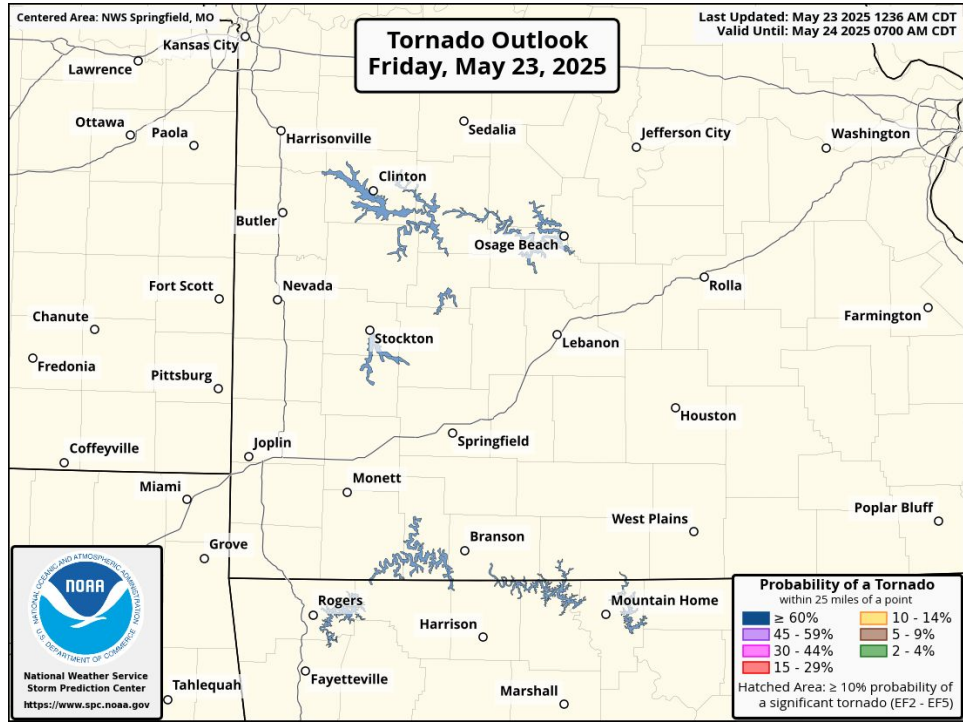
Hail Probability



Wind Probability



Tornado Probability



Pennies	Quarters	Golf Balls	Baseballs
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< 60 mph	60-70 mph	70-80 mph	>80 mph
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Very Low	Low	Moderate	High
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Severe Storms Sat Evening/Night

May 23, 2025
5:16 AM

Timing



8pm through Saturday night

Actions



Be weather aware and ready to act.
Have multiple ways to receive
warning information!

Severe Threats



An isolated tornado threat



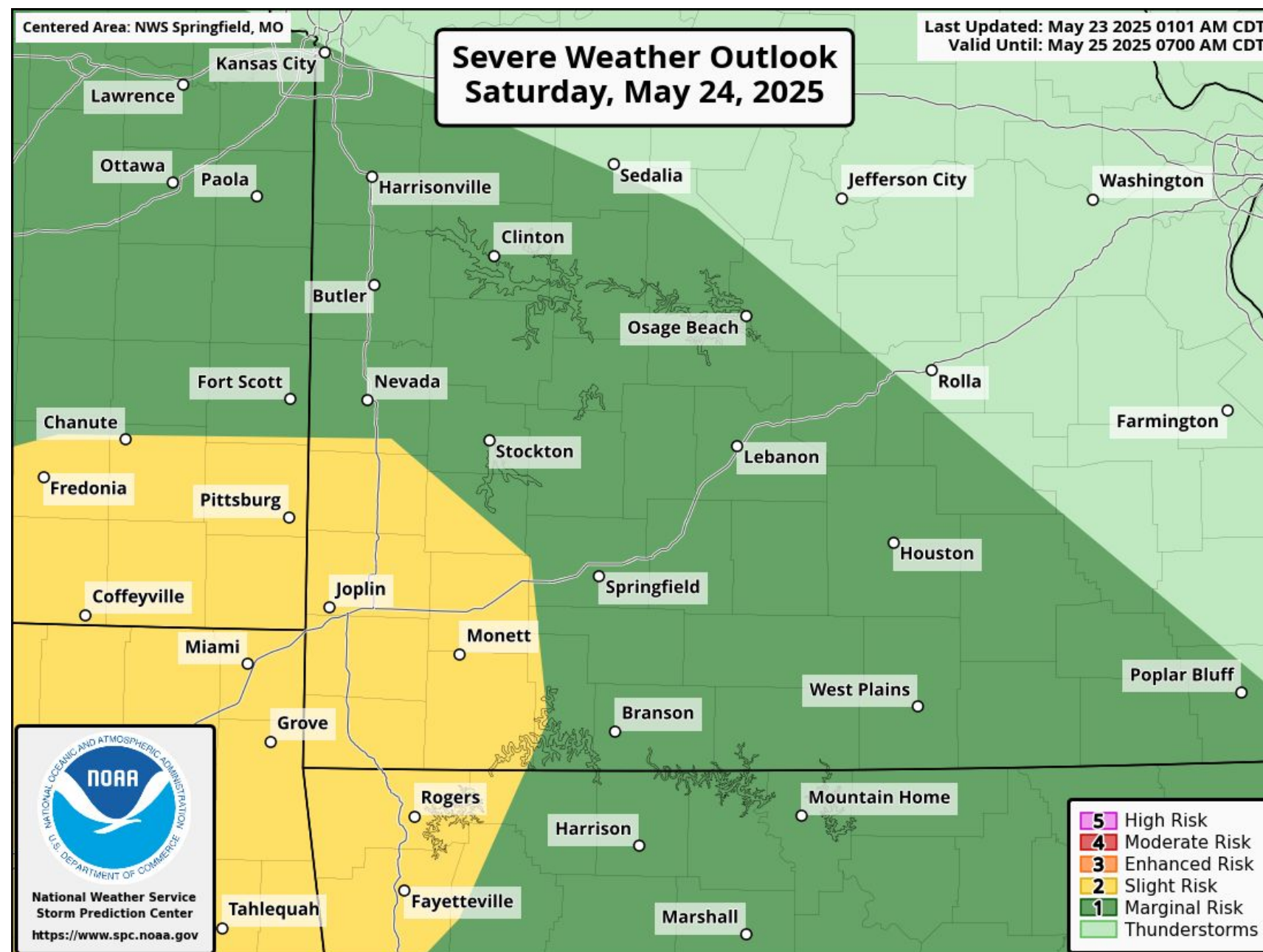
Large Hail

Mainly up to golf ball size, potentially tennis ball size



Damaging Wind

60-70 mph



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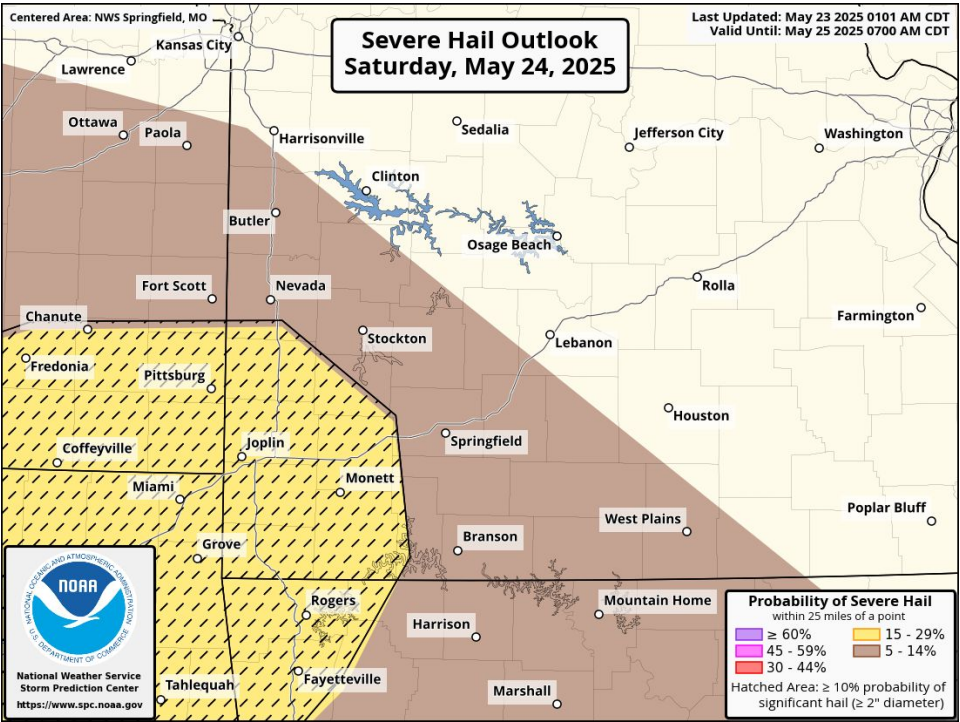


Severe Storms Sat Evening/Night

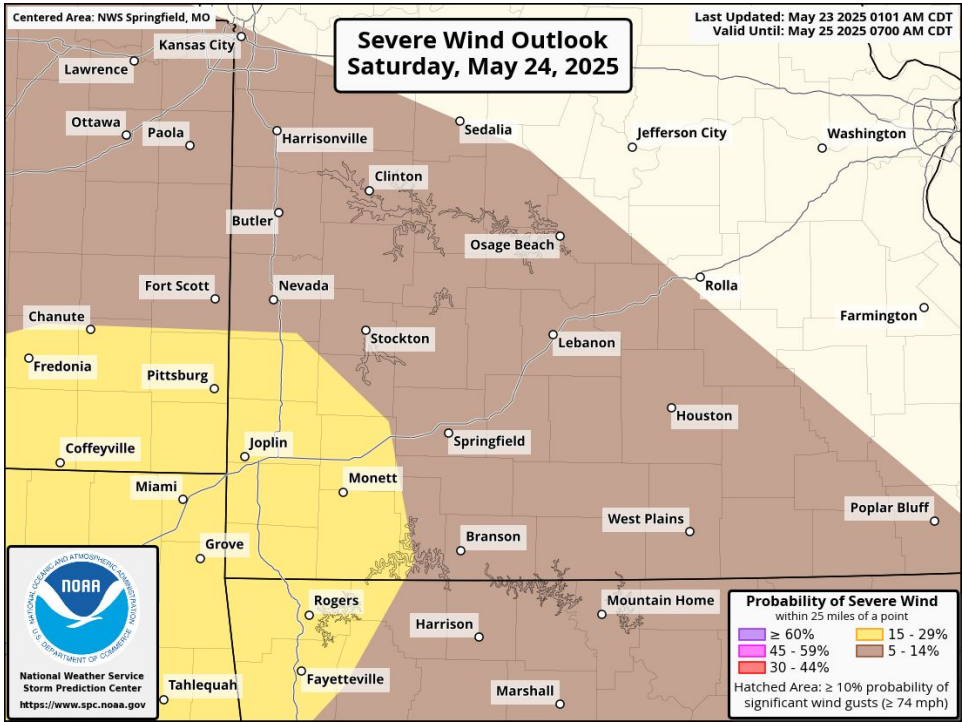
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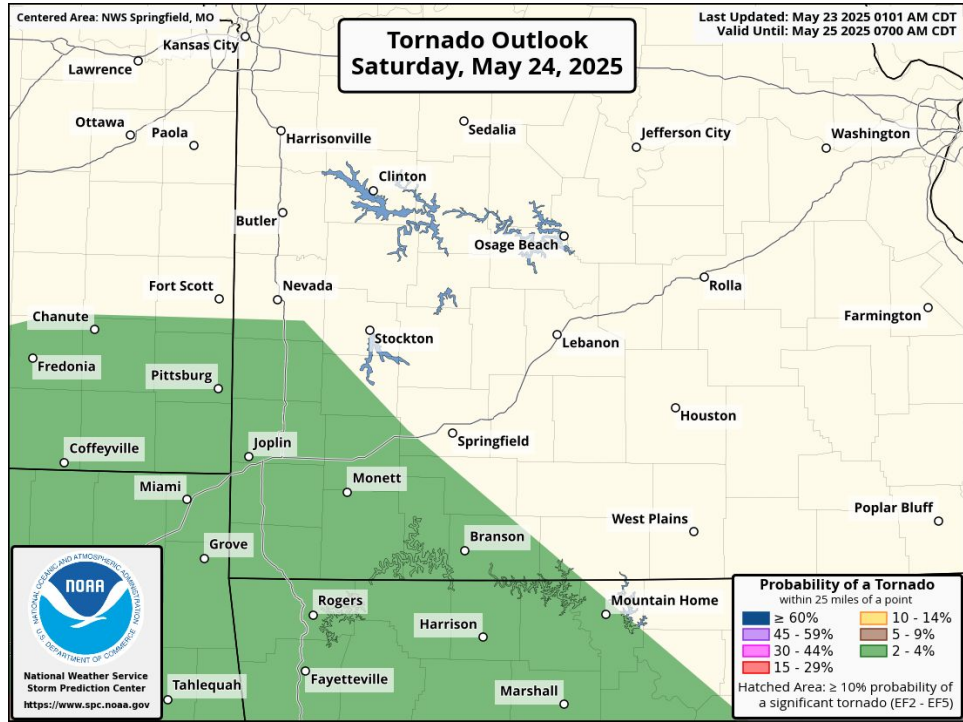
Hail Probability



Wind Probability



Tornado Probability



Pennies	Quarters	Golf Balls	Baseballs
---------	----------	------------	-----------



< 60 mph	60-70 mph	70-80 mph	>80 mph
----------	-----------	-----------	---------



Very Low	Low	Moderate	High
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Severe Storms Sun and Sun Night

May 23, 2025
5:16 AM

Timing



Greatest potential Sunday afternoon into Sunday night

Actions



Be weather aware and ready to act.
Have multiple ways to receive warning information!

Severe Threats



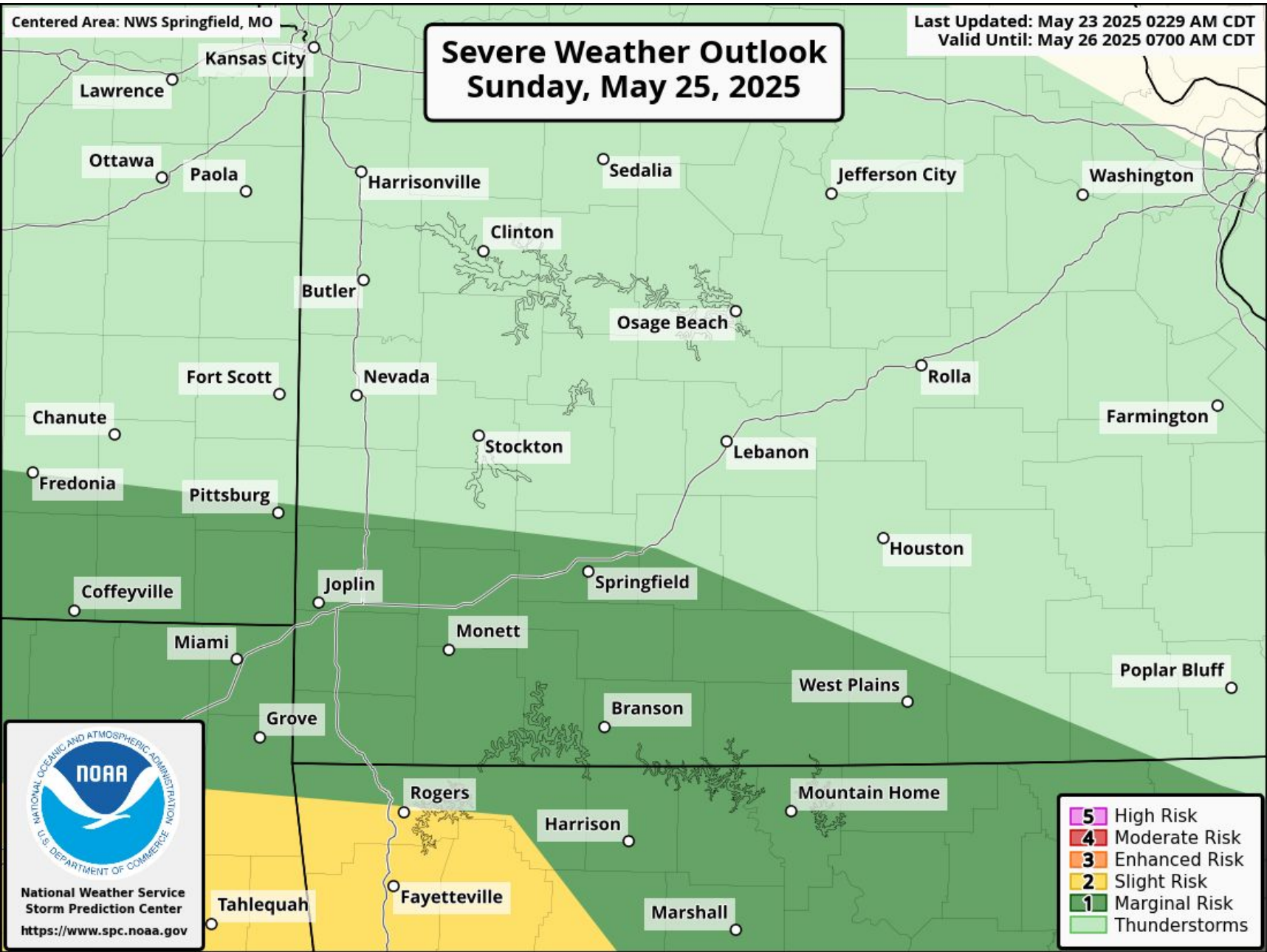
Large Hail

Up to the size of quarters



Damaging Wind

60 mph



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Flooding Concerns Today - Memorial Day

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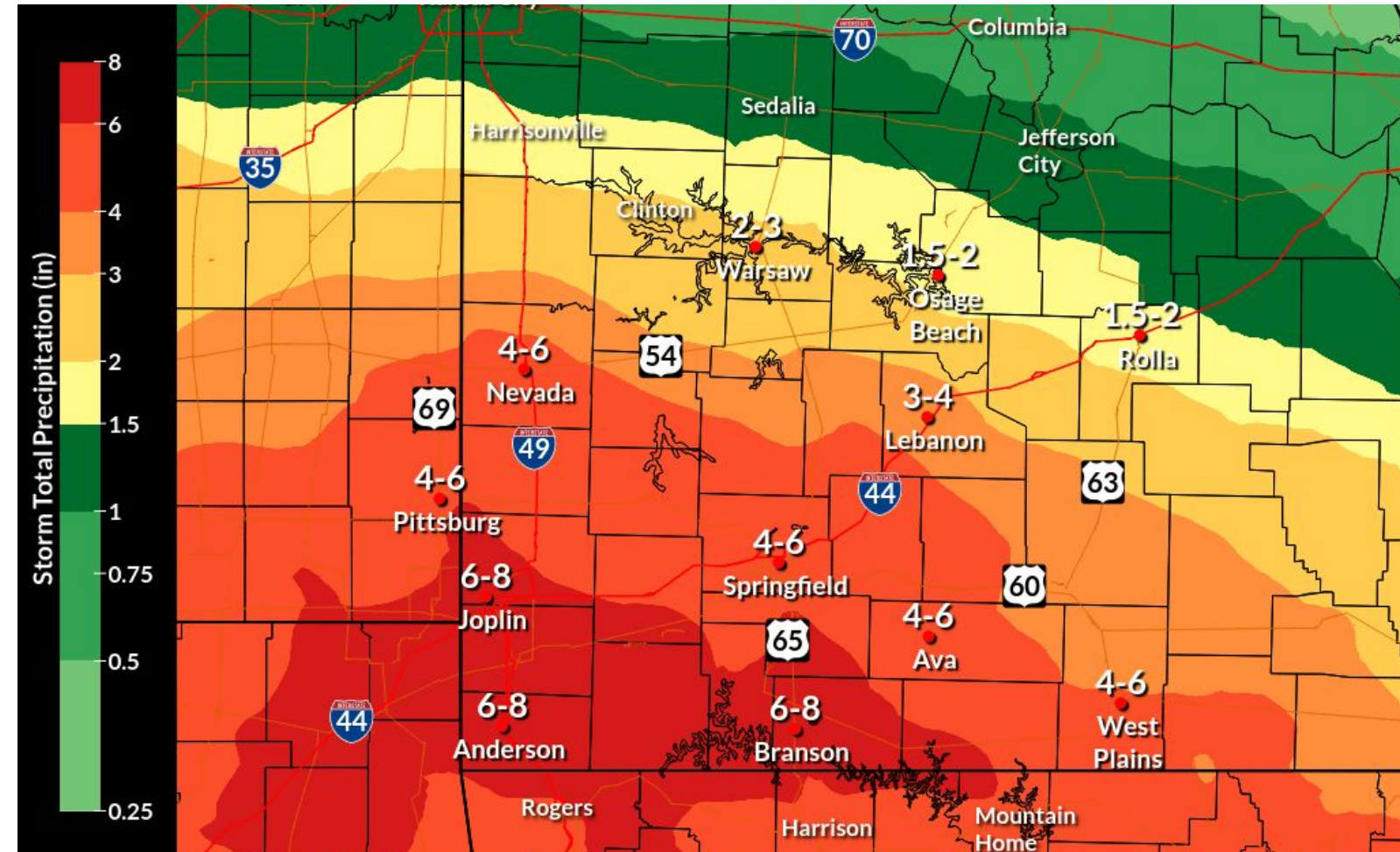
Today through Monday

What

- The first of several rounds of rain will begin this evening, with additional rounds through the holiday weekend.
- Soils are already saturated from recent rains and streamflows are already elevated, leading to concerns about flooding throughout the weekend.
- Heaviest rainfall is expected in three semi-distinct rounds. Exact locations of heavier rainfall bands will be determined by subtle movements of the front.

Timing

- First round of heavy rain this evening into Saturday morning
- Second round of heavy rain Saturday night into Sunday morning
- Third round of heavy rain Sunday evening into Monday morning



Forecast Rainfall Today Through Monday



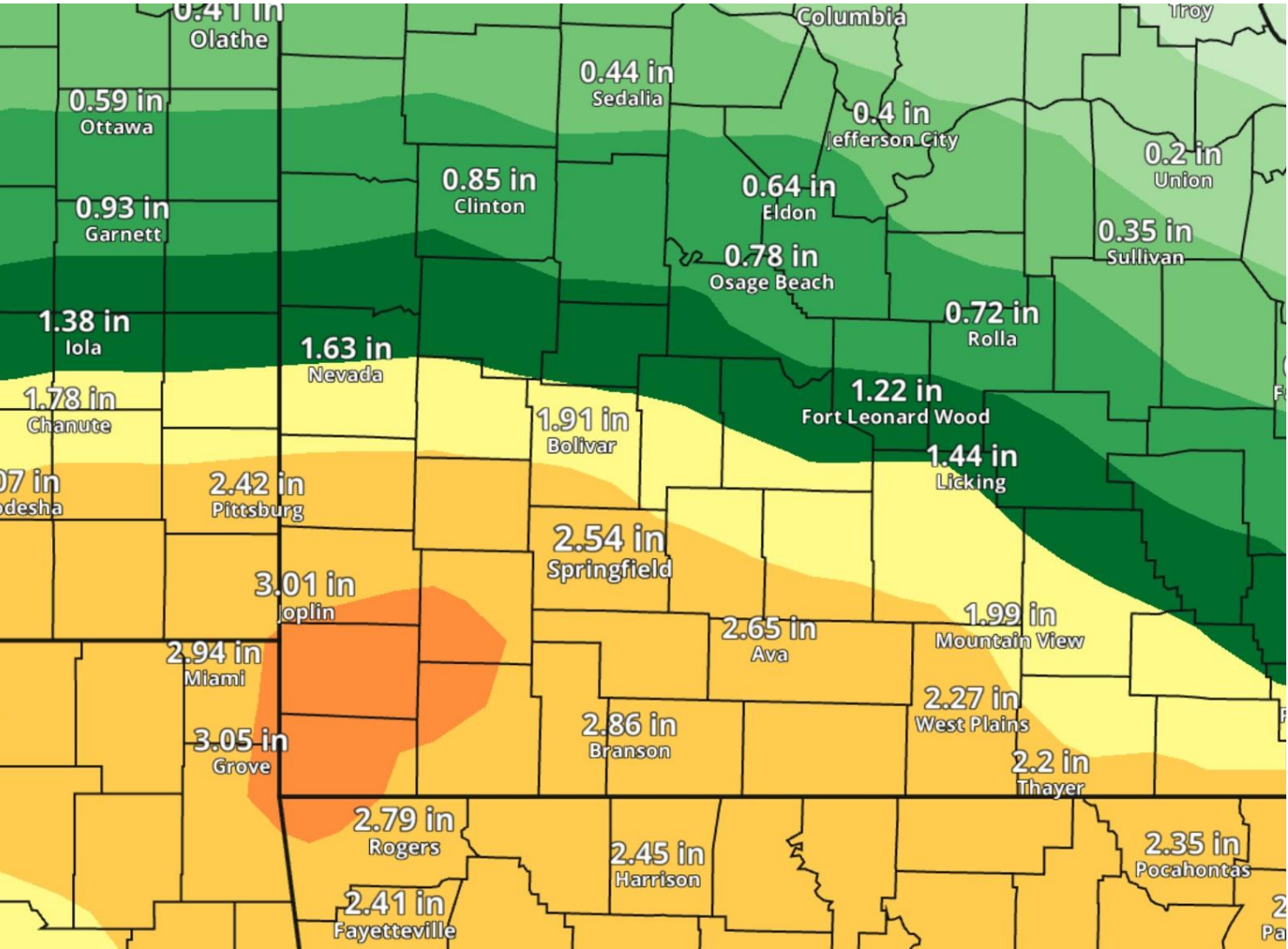


Rainfall Ranges

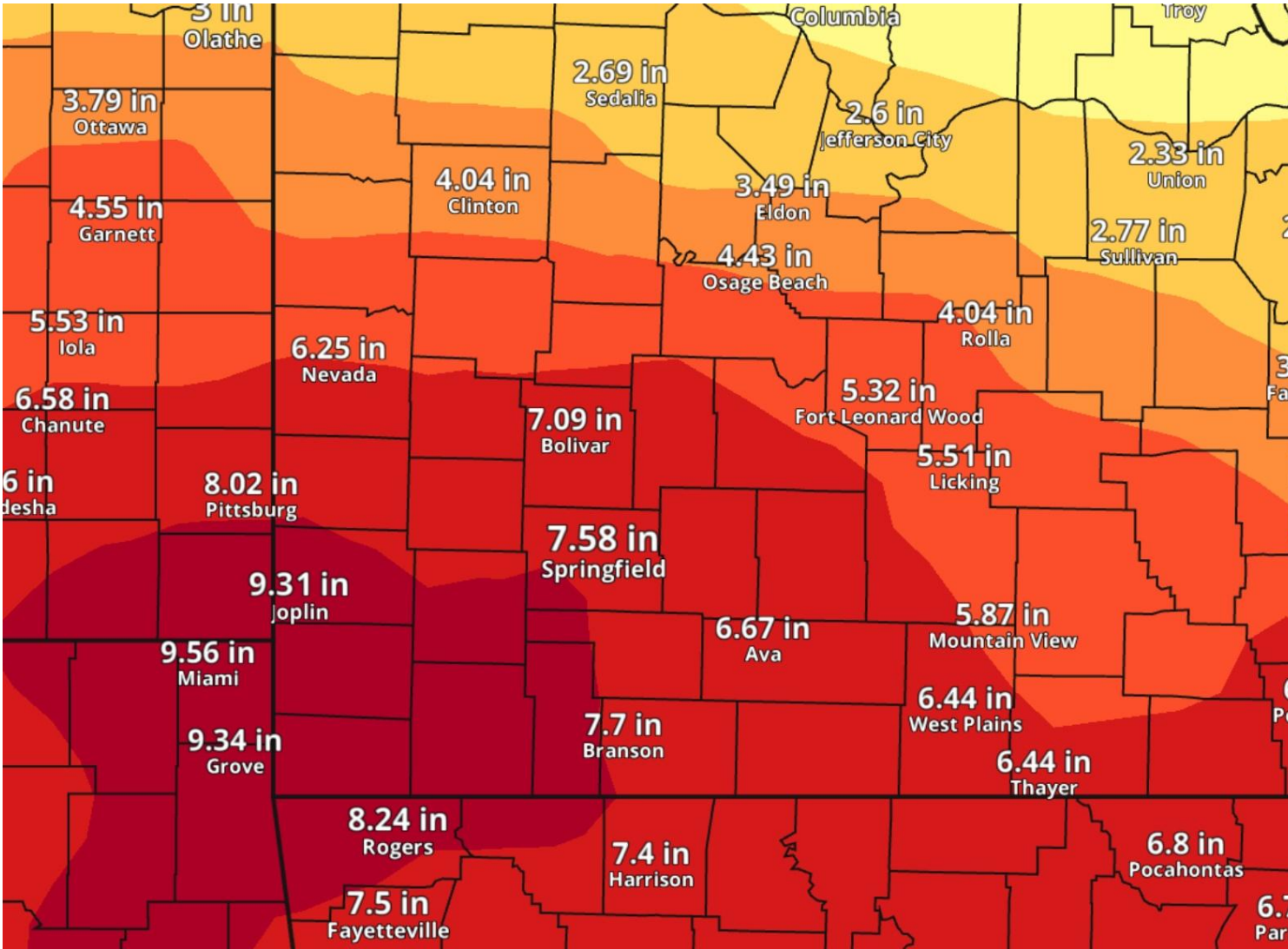
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Today - Monday

**Expect at least this much
(90% chance of exceeding)**



**Potentially up to this much
(10% chance of exceeding)**



Locally higher values possible





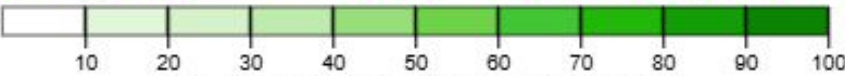
Rainfall Timing

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Today - Monday

Probability of Precipitation Forecast (%)

	5/23 Fri						5/24 Sat								5/25 Sun								5/26 Mon								5/27 Tue
	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am
Branson	5	5	5	15	45	75	65	85	55	80	80	50	50	75	75	90	90	90	90	85	85	75	75	85	85	75	75	65	65	45	45
Fort Leonard Wood	0	0	0	15	30	50	65	65	50	60	60	45	45	80	80	90	90	85	85	75	75	60	60	75	75	70	70	55	55	45	45
Joplin	5	5	15	30	70	75	80	75	30	75	75	70	70	90	90	90	90	85	85	80	80	70	70	80	80	70	70	55	55	50	50
Lebanon	0	0	0	20	30	55	75	85	55	65	65	55	55	90	90	95	95	85	85	75	75	70	70	80	80	70	70	55	55	55	55
Monett	5	5	10	25	60	70	80	90	40	80	80	65	65	90	90	90	90	85	85	85	85	75	75	80	80	75	75	60	60	50	50
Mountain Grove	0	0	0	10	40	50	60	85	70	80	80	50	50	80	80	95	95	90	90	80	80	70	70	80	80	75	75	65	65	40	40
Nevada	0	10	5	25	55	55	70	80	30	65	65	65	65	90	90	95	95	80	80	70	70	65	65	80	80	70	70	50	50	55	55
Osage Beach	0	0	0	10	30	35	55	60	50	50	50	40	40	75	75	85	85	75	75	60	60	55	55	75	75	70	70	45	45	40	40
Pittsburg, KS	5	5	15	35	65	75	70	85	30	75	75	70	70	95	95	95	95	80	80	75	75	70	70	80	80	70	70	55	55	50	50
Rolla	0	0	0	5	25	40	50	65	55	50	50	35	35	65	65	85	85	80	80	65	65	50	50	70	70	70	70	55	55	40	40
Springfield	0	0	5	15	50	75	65	90	60	75	75	55	55	90	90	95	95	90	90	75	75	80	80	85	85	70	70	55	55	55	55
Warsaw	0	5	5	20	35	45	55	55	45	50	50	50	50	85	85	85	85	75	75	60	60	55	55	75	75	70	70	45	45	50	50
West Plains	0	0	0	10	30	60	65	70	85	80	80	35	35	70	70	90	90	85	85	70	70	65	65	80	80	75	75	60	60	45	45



Probability of Precipitation Forecast (%)

Created: 4 am CDT Fri 5/23/2025 |





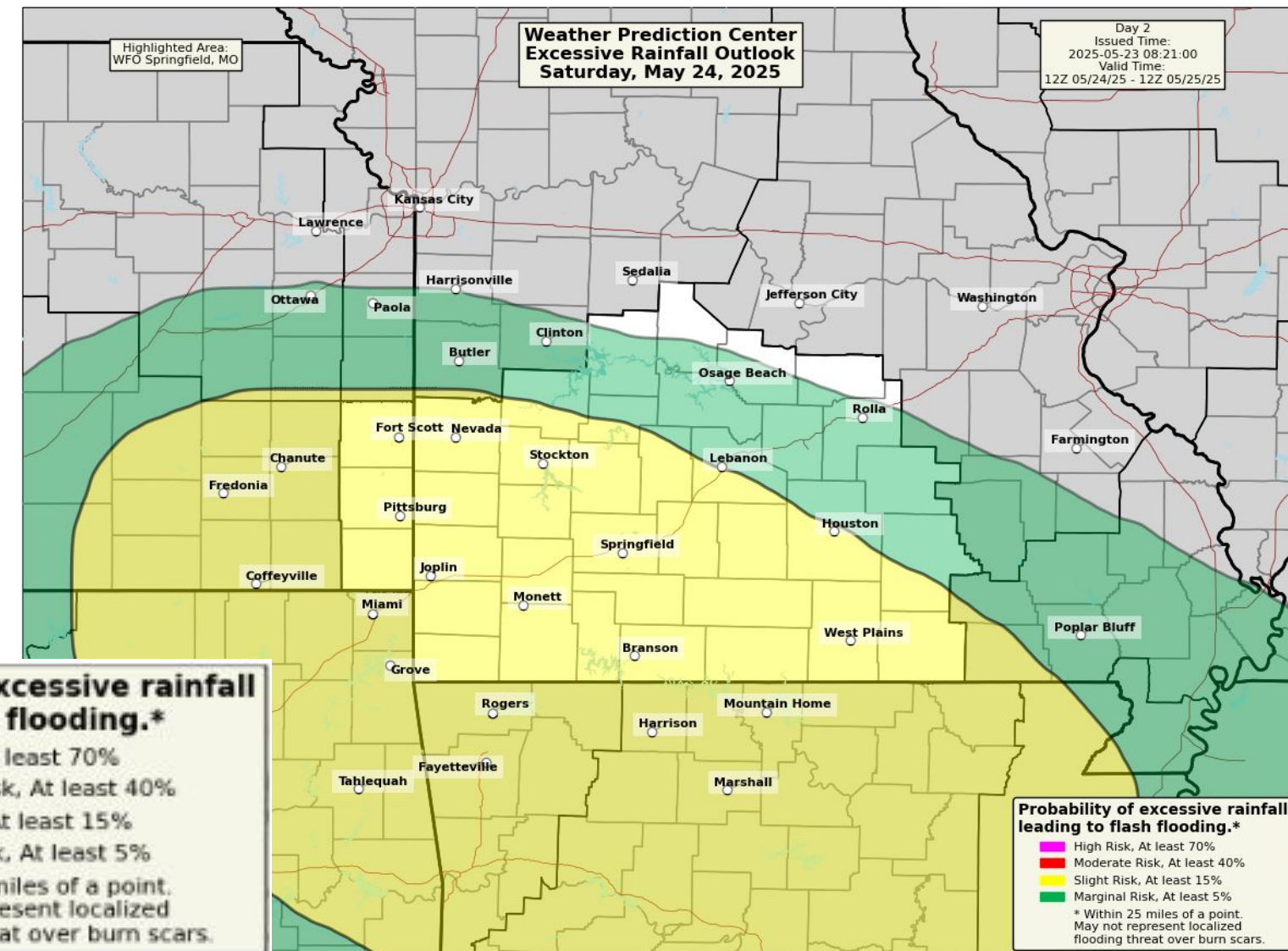
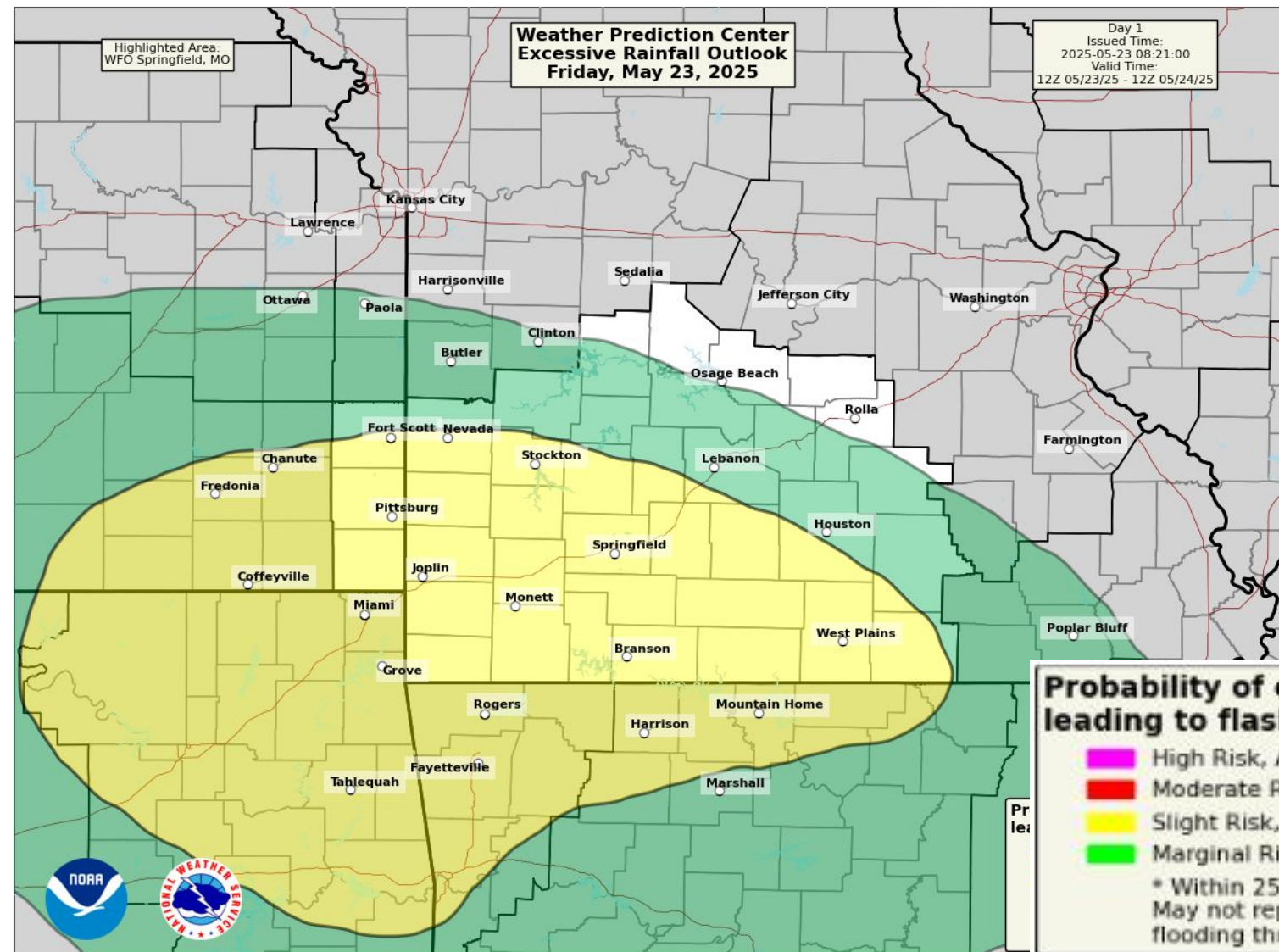
Excessive Rainfall Outlooks

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Today and Saturday

Excessive Rainfall Outlook - Today

Excessive Rainfall Outlook - Saturday



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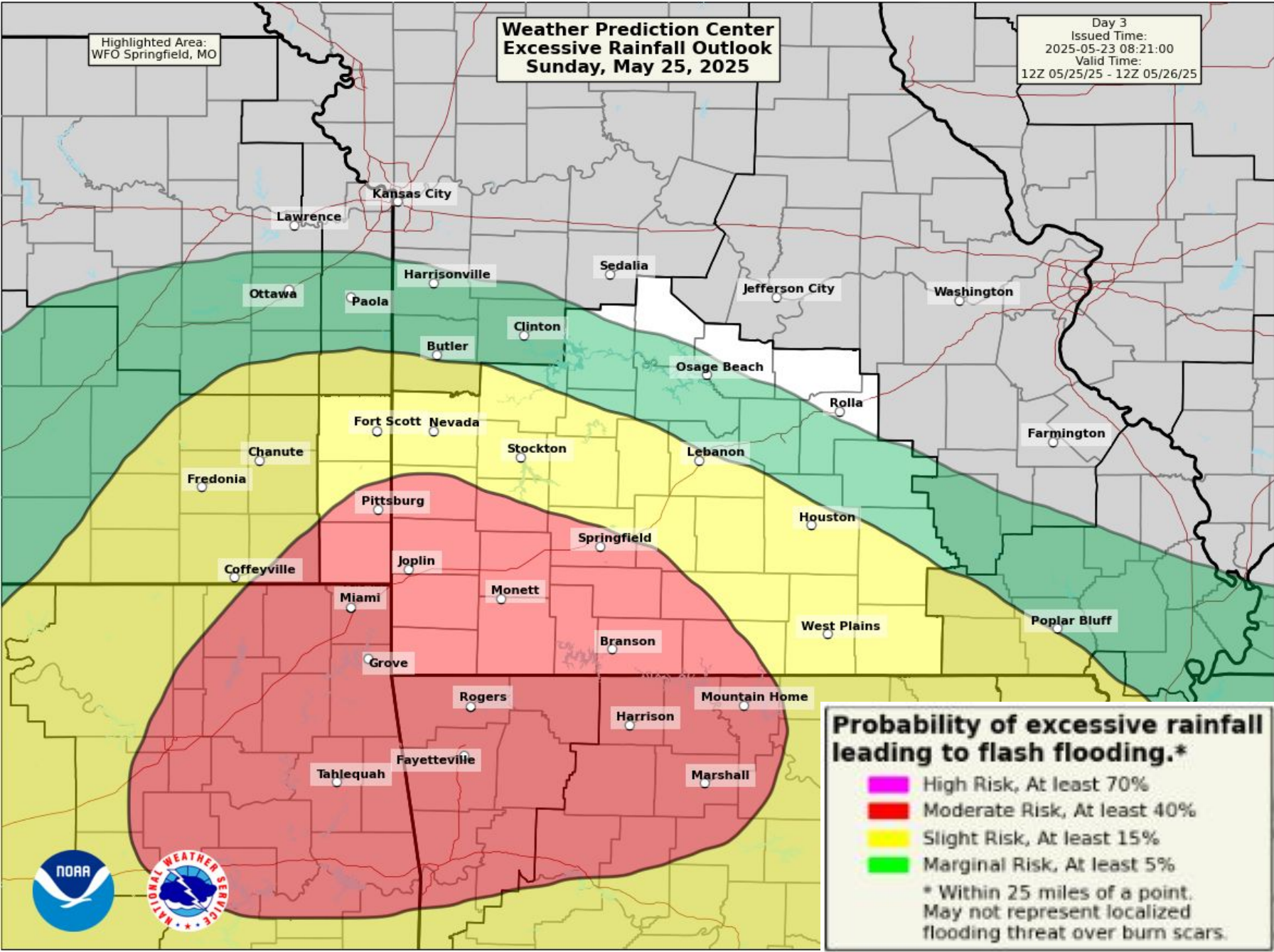
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Excessive Rainfall Outlooks

May 23, 2025
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Sunday



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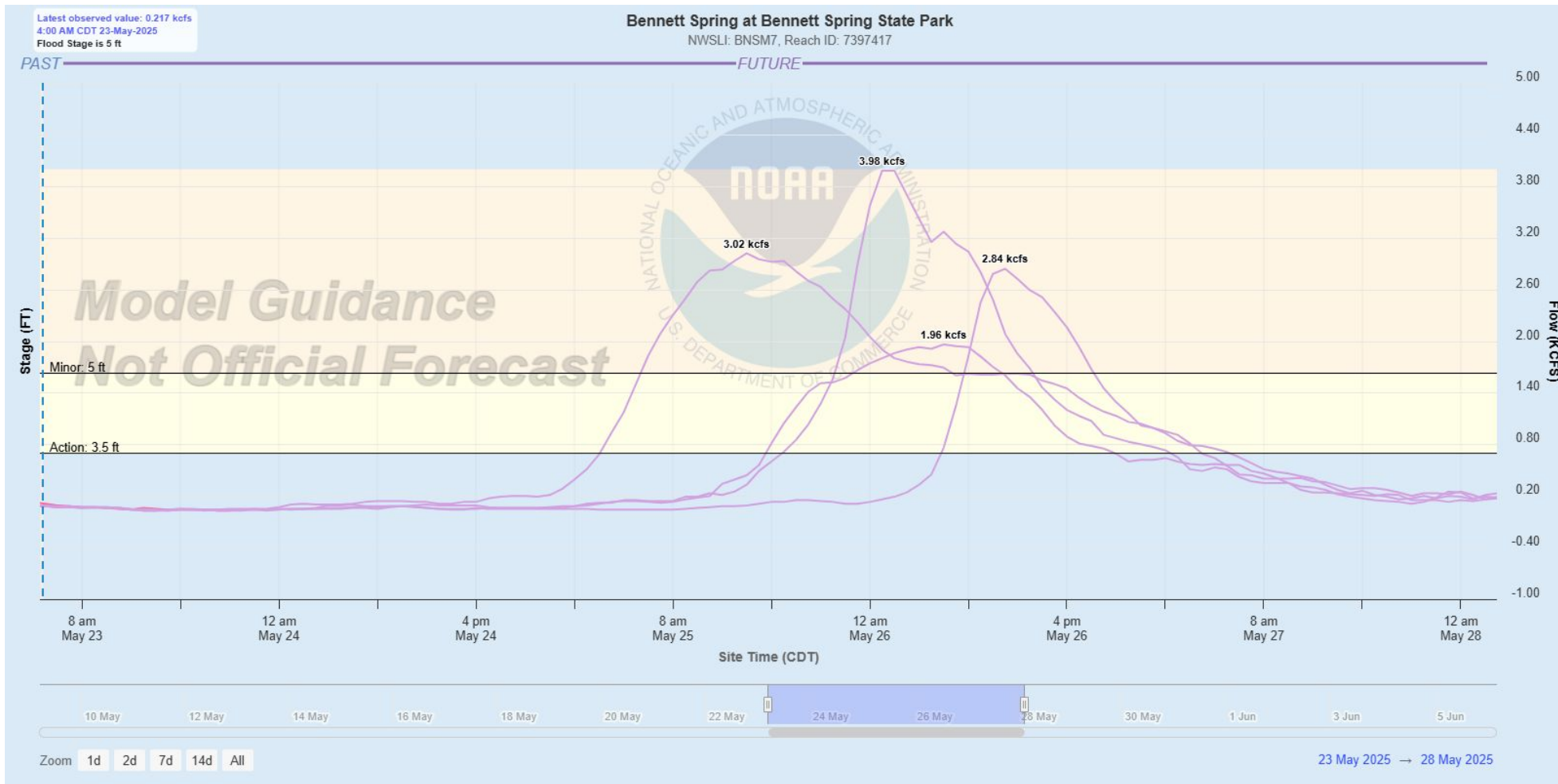


River/Campground Flooding

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5:16 AM

Emphasis on camping/floating

- The busy Memorial day weekend will see increased recreational activities on rivers and streams across the area.
- Use of experimental river modeling on this and following pages is meant to give a generalized idea of potential severity and timing of flooding in order to bring awareness to this concern.
- Each line on this graph represents a single model ensemble member. ***This information is not an official forecast.***



Bennett Spring State Park



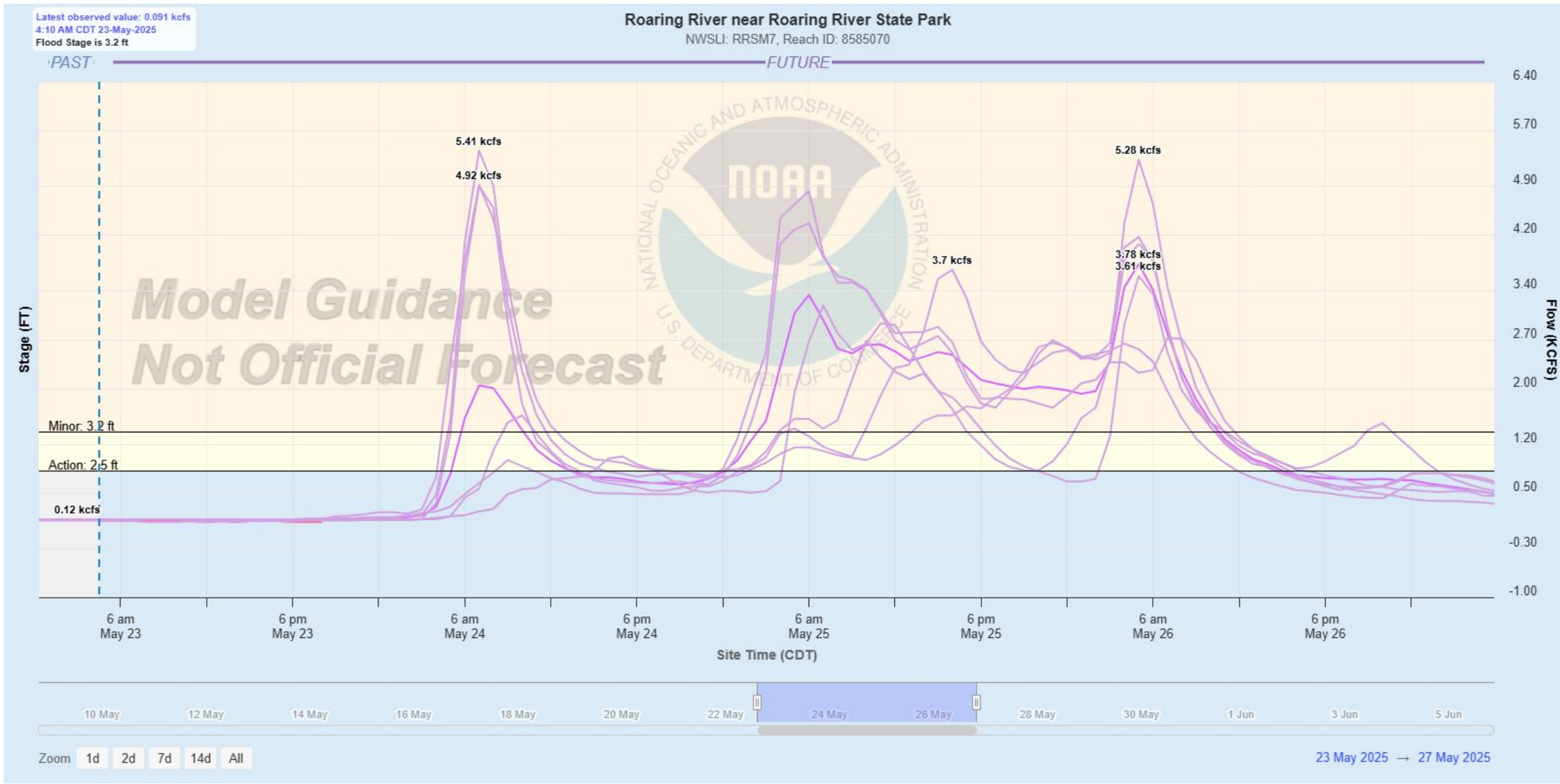
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River/Campground Flooding

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Roaring River State Park



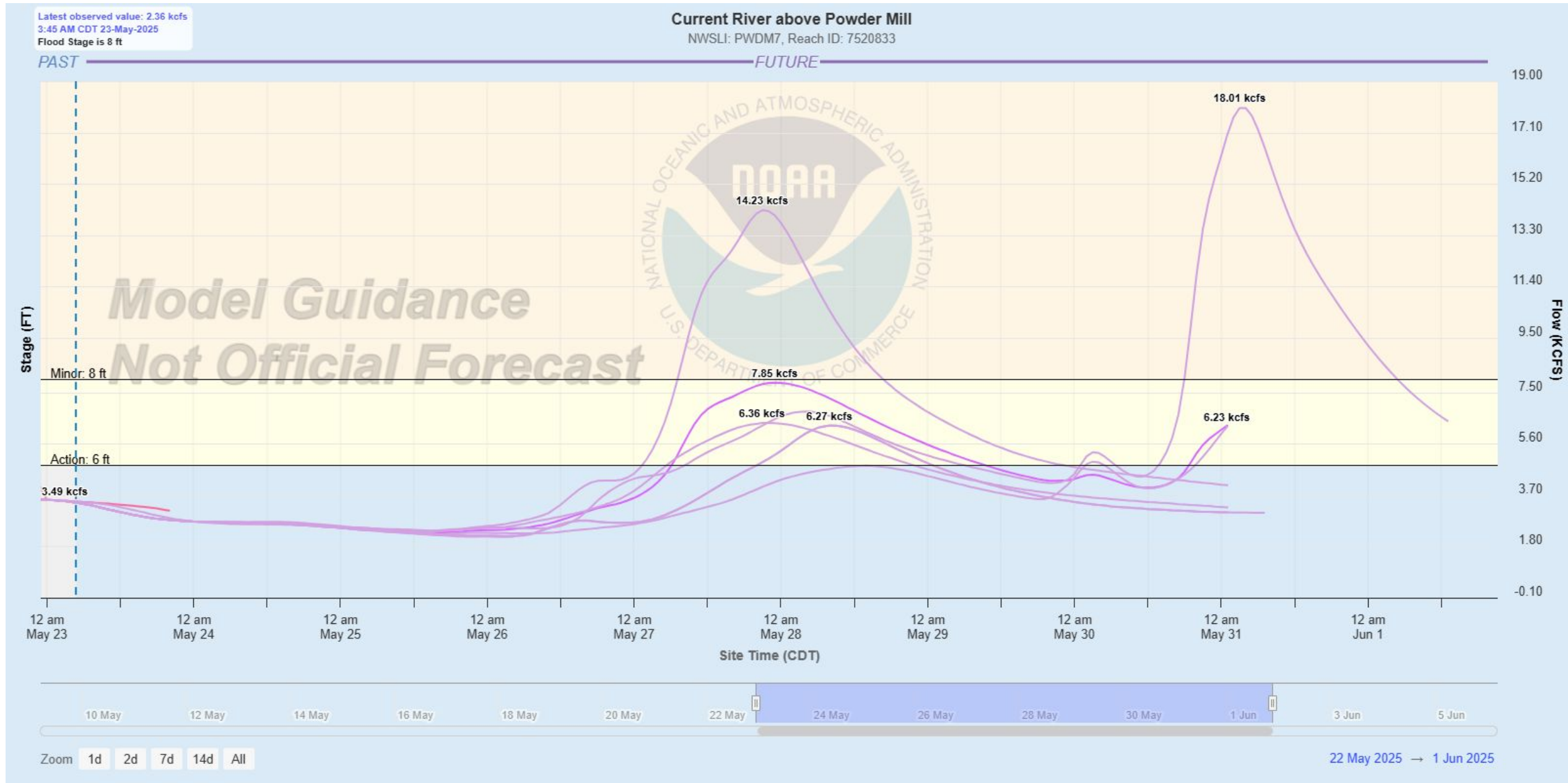
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River/Campground Flooding

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Current River at Powder Mill



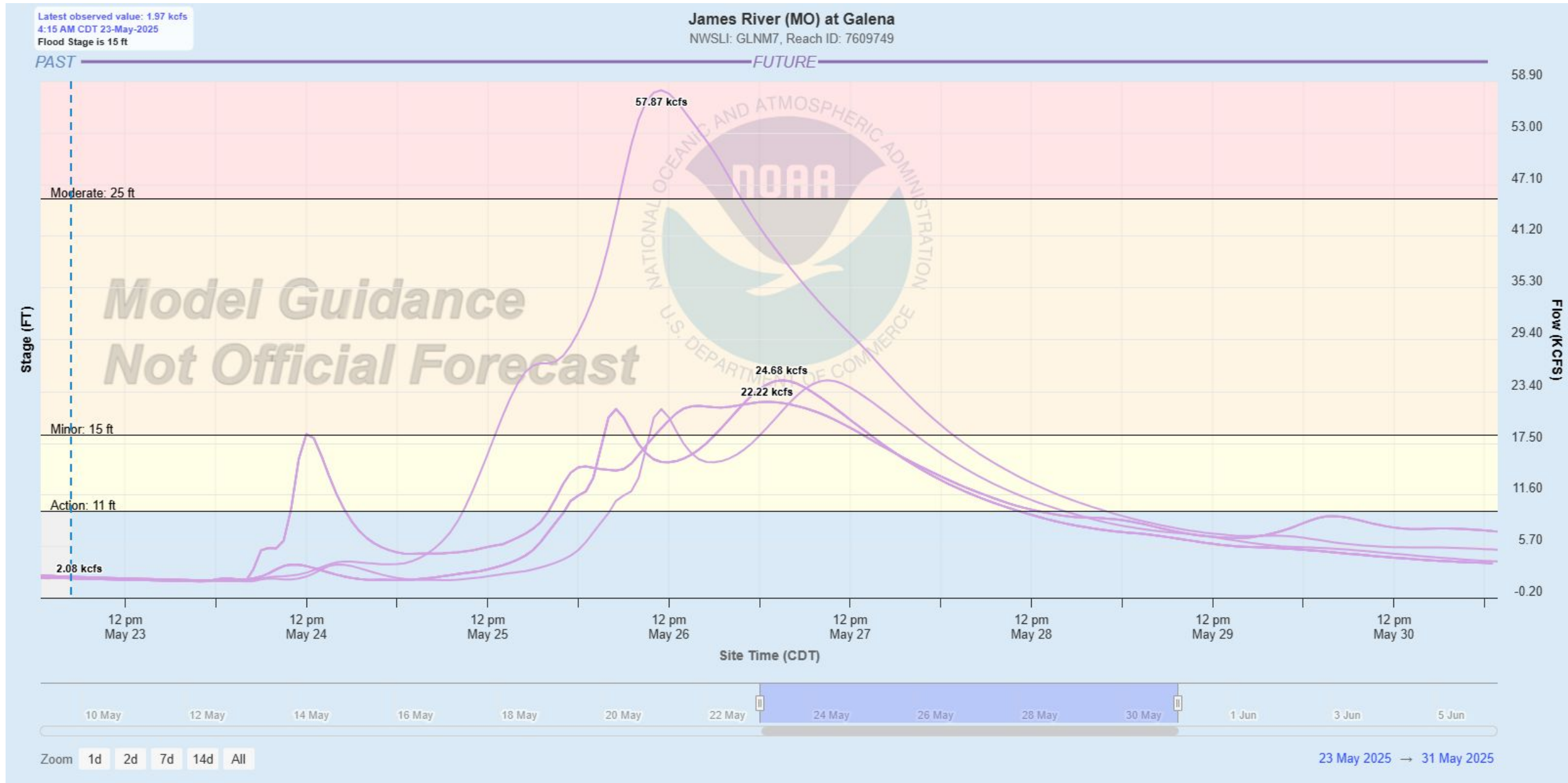
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River/Campground Flooding

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James River at Galena



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Confidence Levels - Flooding

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Location



Timing



Amounts



Confidence Details

- Rainfall amounts will be highly dependent on where warm front stalls, which is still in question.
- Small wiggles in the axis/axes of higher rainfall amounts are likely until the event. Each round will likely have its own distinct heavy rainfall axis, rather than one single pocket for the whole event.
- As higher-resolution models start to pick up on the system, the potential for localized higher amounts will become more clear.

Alternate Scenarios

- If the front stalls further north, warmer and more unstable air will allow for a greater severe threat over the weekend.
- Additional rounds of thunderstorms could push axis of heaviest rainfall further south, reducing flooding potential.





Additional Resources

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For Additional Information

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

BEWARE OF FLOODS WHEN CAMPING



Heavy rain can quickly cause flash flooding. Use caution if camping near a stream, river, or in a low-lying area.



Stay informed. Be able to get the forecast online or with a NOAA Weather Radio.



Get to higher ground immediately if alerted to flooding.



Never walk or drive through floodwater. It only takes 6 inches to knock you over and only 12 inches to sweep a car way.



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