



Severe Weather and Flooding Potential

April 18, 2025
4:26 AM

Through This Weekend

Key Messages

- Slight risk for severe thunderstorms this evening through Sunday. Highest chances this evening into Saturday with large hail and damaging winds the main threats.
- Several rounds of heavy rainfall will lead to some flash flooding and rises on area rivers this weekend. A Flood Watch has been issued.
- Total Rainfall amounts of 2-5 inches are likely across the entire area through the weekend, with localized amounts up to 7 inches.

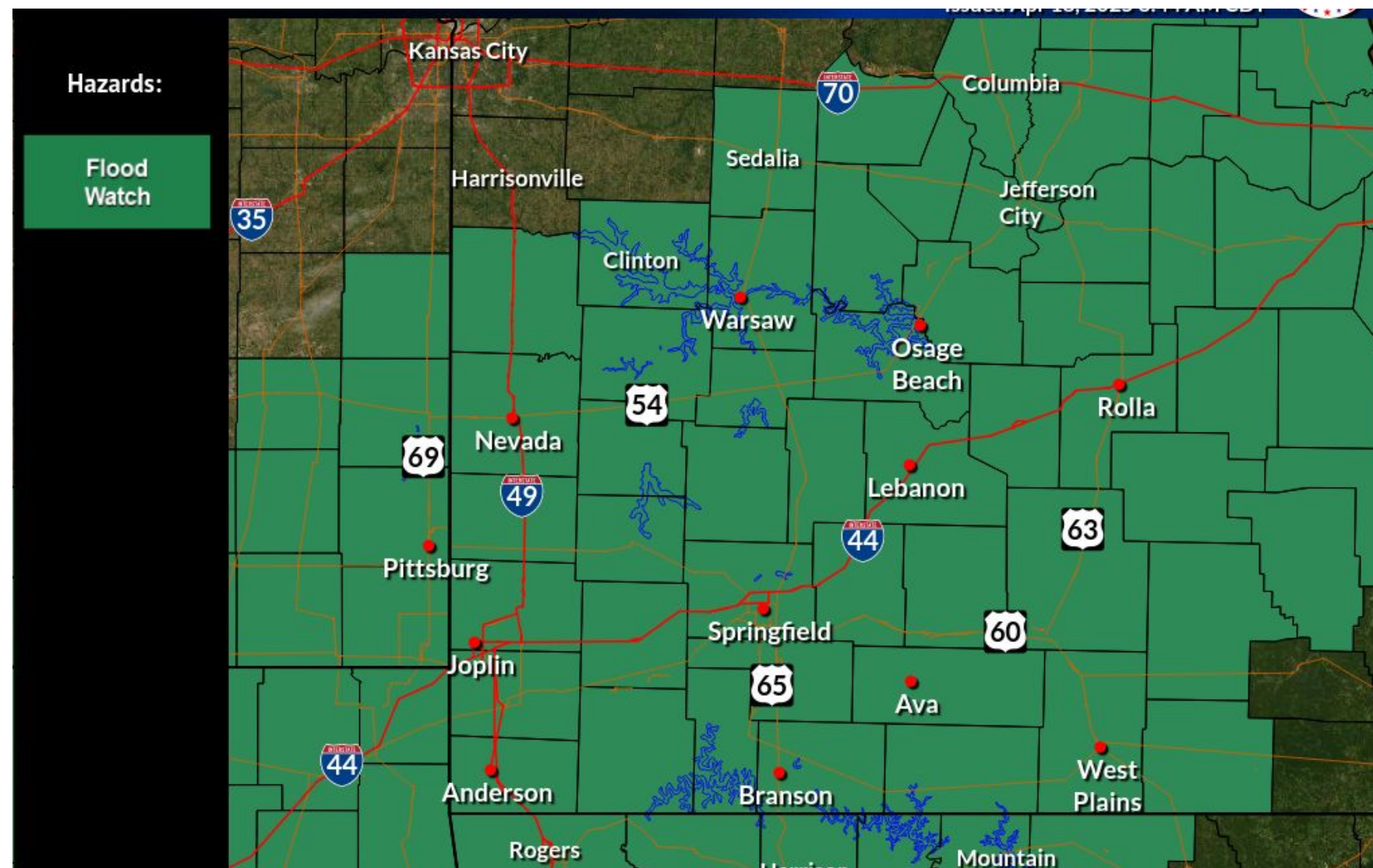
NEW

Important Updates

- Minor refinements to rainfall amounts.

Next Scheduled Briefing

- This Afternoon



Flood Watch
7pm Today - 7pm Sunday



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Springfield, MO



Severe Outlook This Evening - Tonight

April 18, 2025
4:26 AM

Large Hail and Damaging Winds

Timing and Expectations



We are expecting thunderstorms to develop across southeast Kansas and western Missouri after 5pm today and continue through the overnight hours.

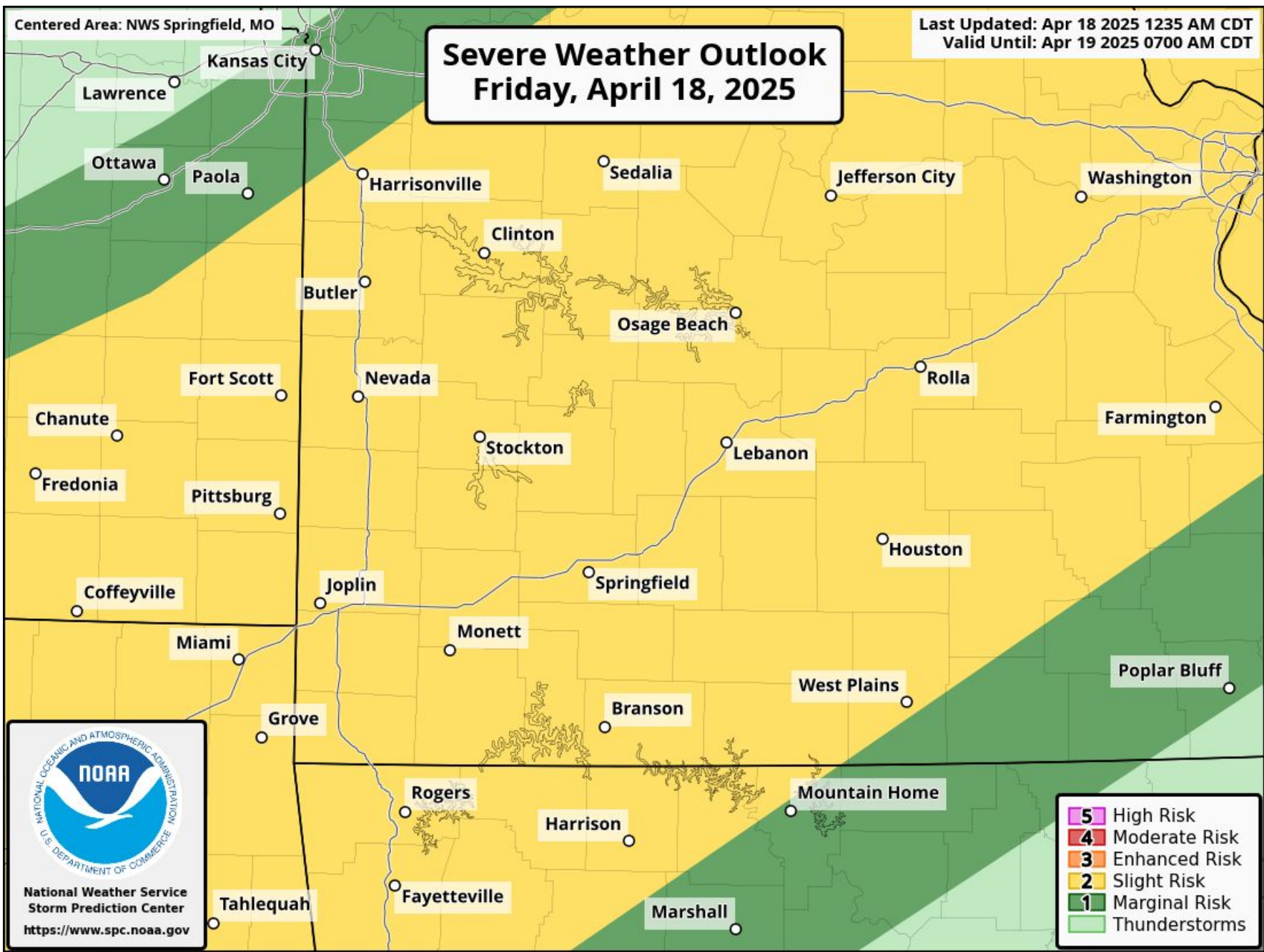
Most Likely Severe Threats



Large Hail
Up to the size of quarters



Damaging Wind
60 to 70 mph



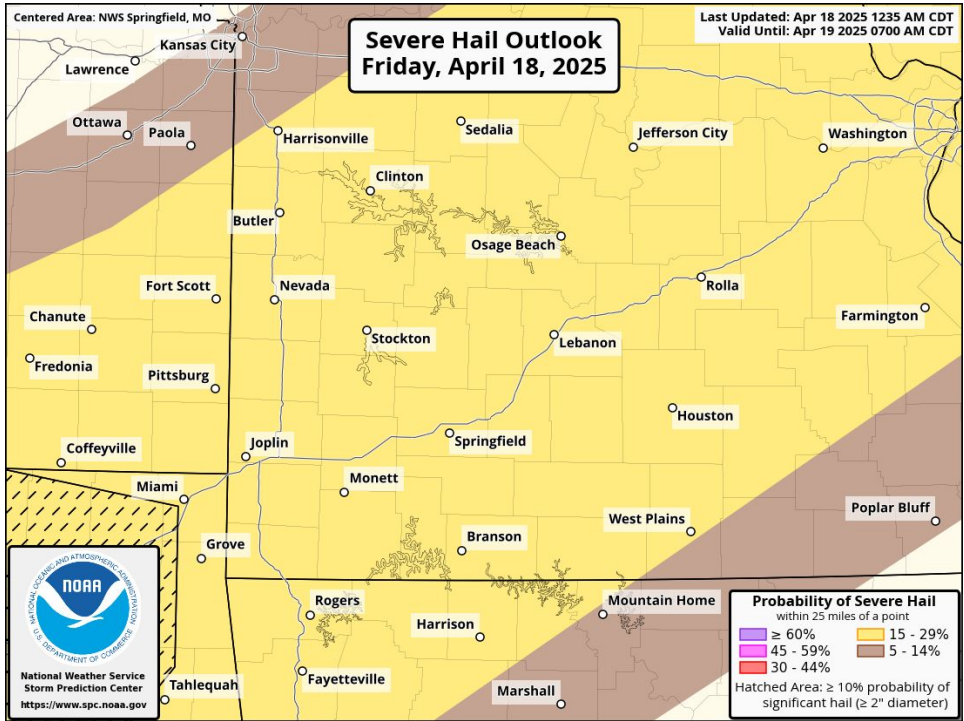
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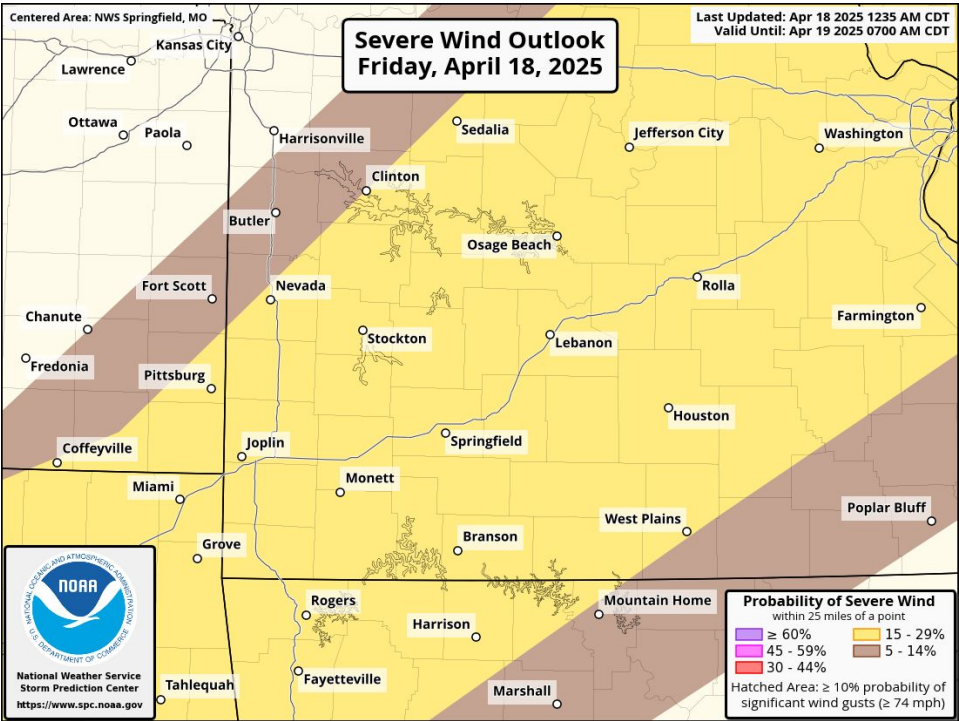


Friday Night Severe Hazards

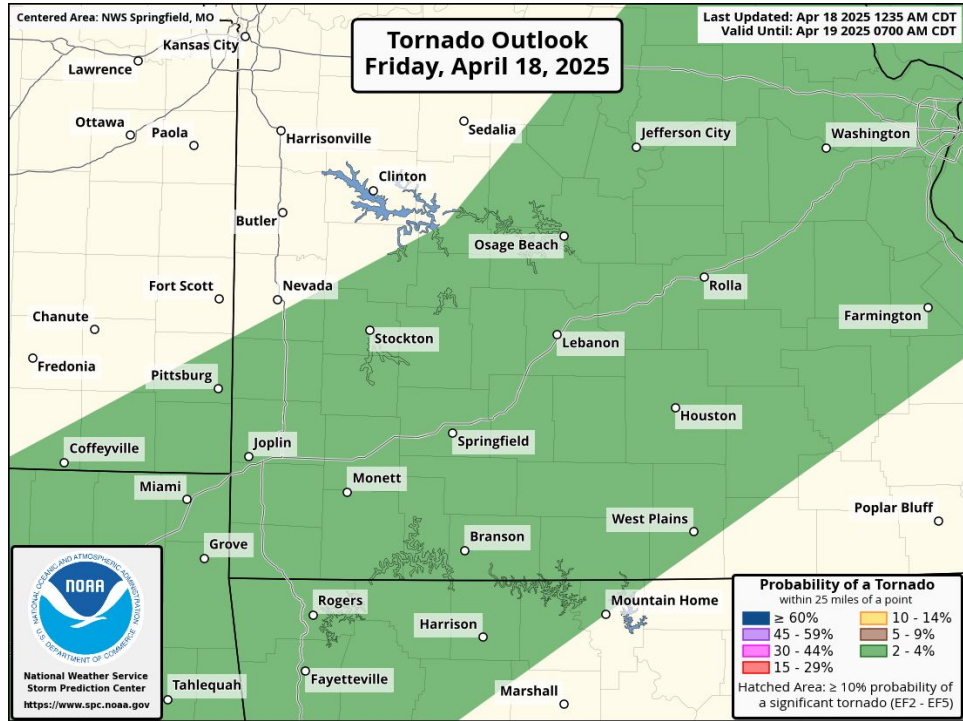
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Hail Probability
1 inch diameter



Wind Probability
60-70 mph winds



Tornado Probability
Very low chance



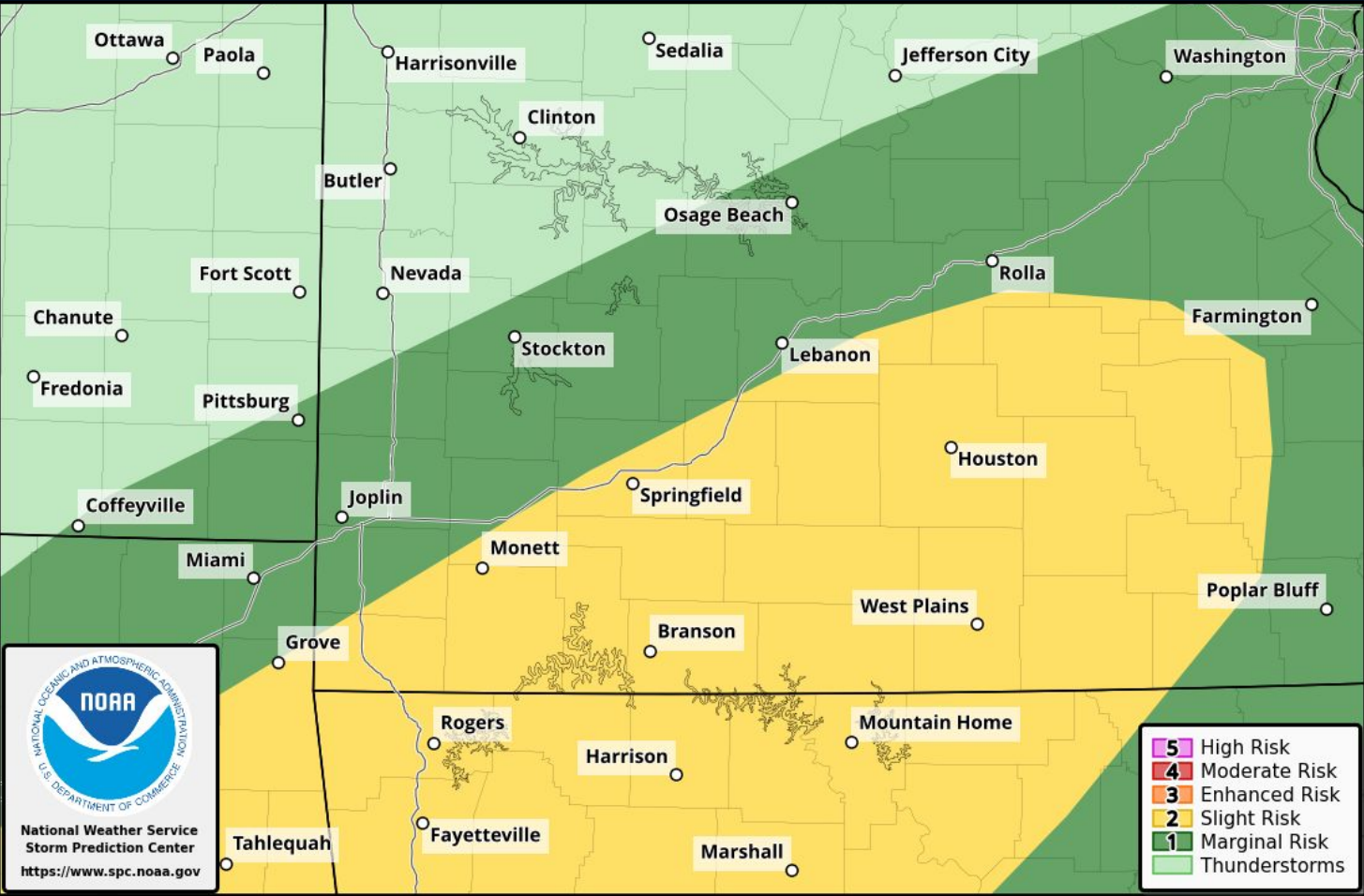


Severe Weather Outlooks

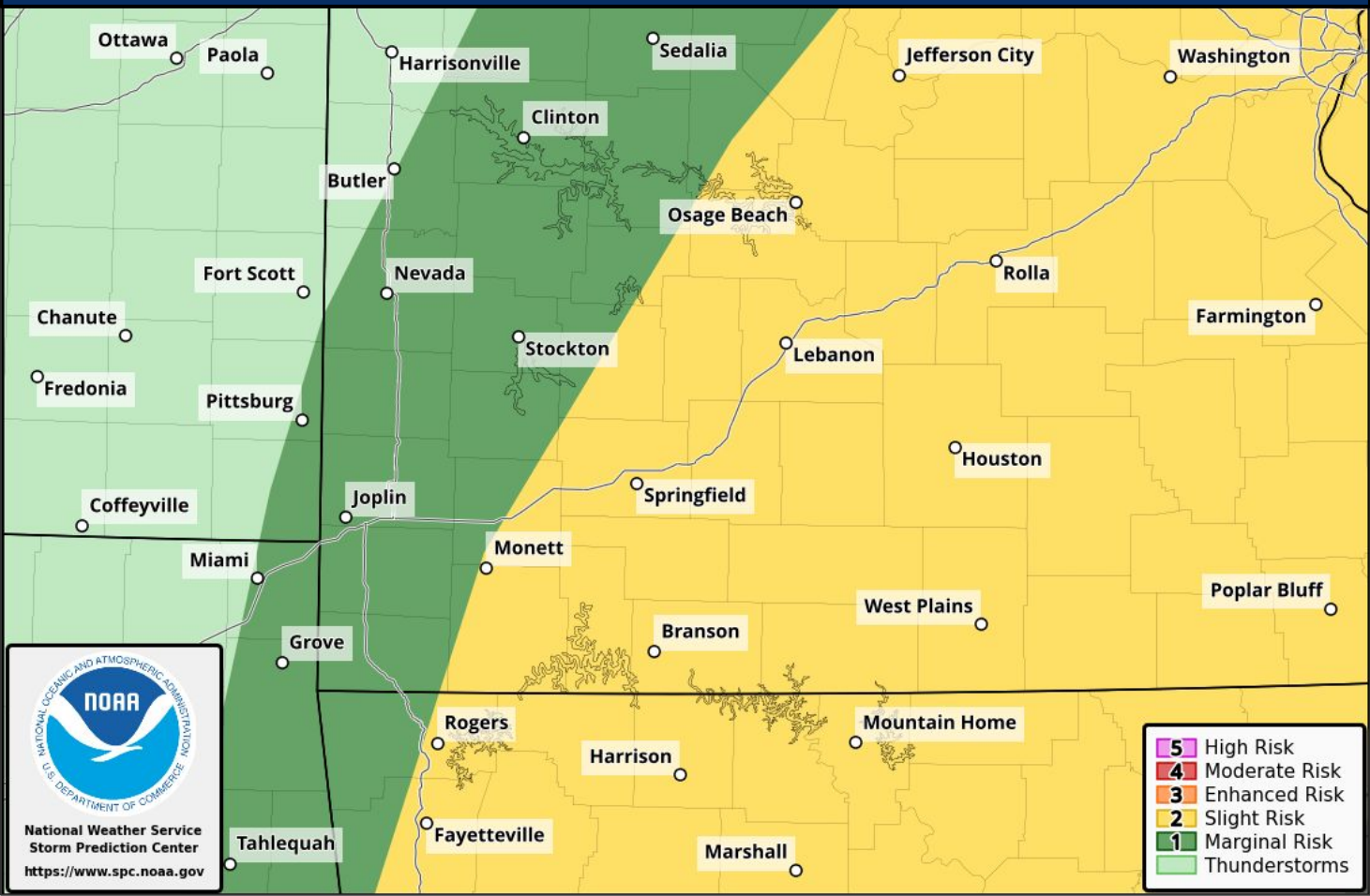
April 18, 2025
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Saturday and Sunday

Severe Weather Outlook Saturday



Severe Weather Outlook Sunday



Monitor the forecast. Consider making alternative plans for outdoor activities. Review your severe weather plans.



Hail up to Quarters



Damaging Wind Gusts



Heavy Downpours



Lightning



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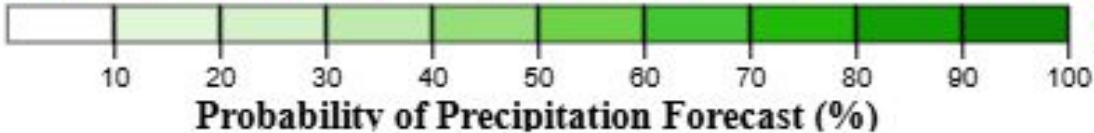
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Rainfall Timing this Weekend

April 18, 2025
4:26 AM

	4/18 Fri				4/19 Sat								4/20 Sun								4/21 Mon		
	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am
Branson	5	15	35	40	80	95	90	85	90	90	95	95	95	80	80	55	85	85	85	40	40	10	10
Fort Leonard Wood	15	25	45	65	85	100	100	100	100	95	95	95	95	95	95	65	85	85	85	60	60	15	15
Joplin	20	45	65	85	90	90	100	100	100	100	100	90	95	95	95	95	95	85	85	25	25	5	5
Lebanon	20	20	45	65	90	95	100	100	100	95	95	95	95	95	95	75	90	90	90	55	55	15	15
Monett	10	45	40	65	95	95	100	100	100	95	95	95	95	95	95	90	95	95	95	30	30	10	10
Mountain Grove	10	15	40	45	80	95	95	90	90	90	95	95	95	90	90	50	80	80	80	60	60	15	15
Nevada	45	60	50	65	95	95	100	100	100	95	95	90	95	95	95	95	95	85	85	35	35	15	15
Osage Beach	20	40	55	70	90	95	100	100	100	95	95	95	95	95	95	90	90	90	90	55	55	15	15
Pittsburg, KS	40	45	55	80	95	90	100	100	100	95	95	85	95	95	95	95	95	80	80	25	25	10	10
Rolla	15	25	45	75	90	100	100	100	100	95	95	95	95	95	95	70	80	80	80	65	65	20	20
Springfield	15	30	45	50	90	95	100	100	100	95	100	100	100	95	95	80	90	90	90	40	40	10	10
Warsaw	25	60	55	60	95	100	100	100	100	90	90	90	95	95	95	95	95	90	90	45	45	15	15
West Plains	10	10	20	50	50	80	75	65	70	70	85	85	85	80	80	30	70	70	70	65	65	25	25





Forecast Rainfall Amounts

April 18, 2025
4:26 AM

Today through Sunday

What

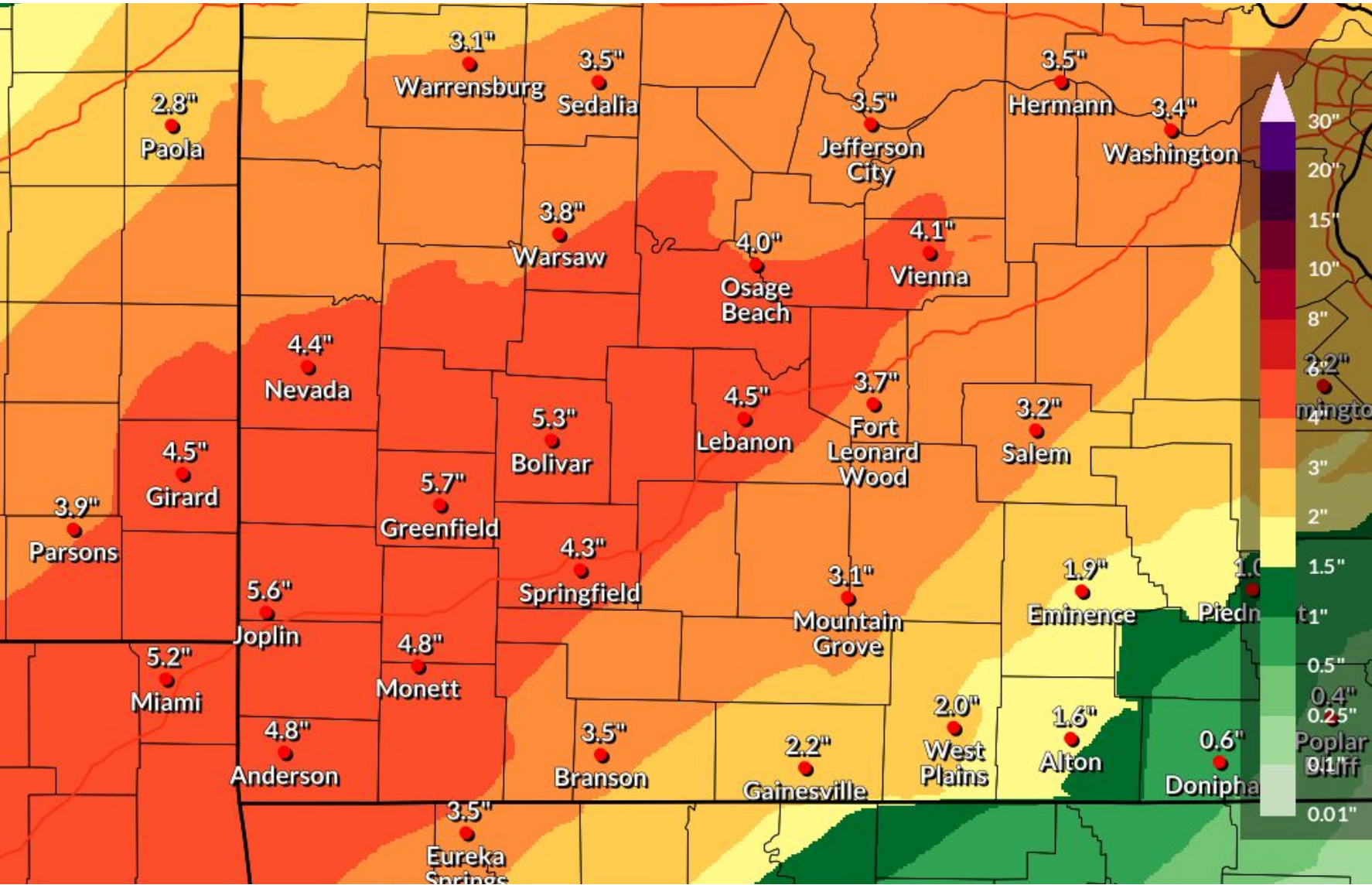
- Rainfall Amounts of 2 to 5 inches with localized amounts up to 7 inches.

Where

- Highest amounts focused northwest of a line from Branson to Rolla.

When

- Friday 7 pm through Sunday 7 pm.
Heaviest rainfall occurs tonight through Sunday afternoon.



Rainfall Amounts (Friday 7 pm through Sunday 7 pm)
Additional rainfall will occur Sunday





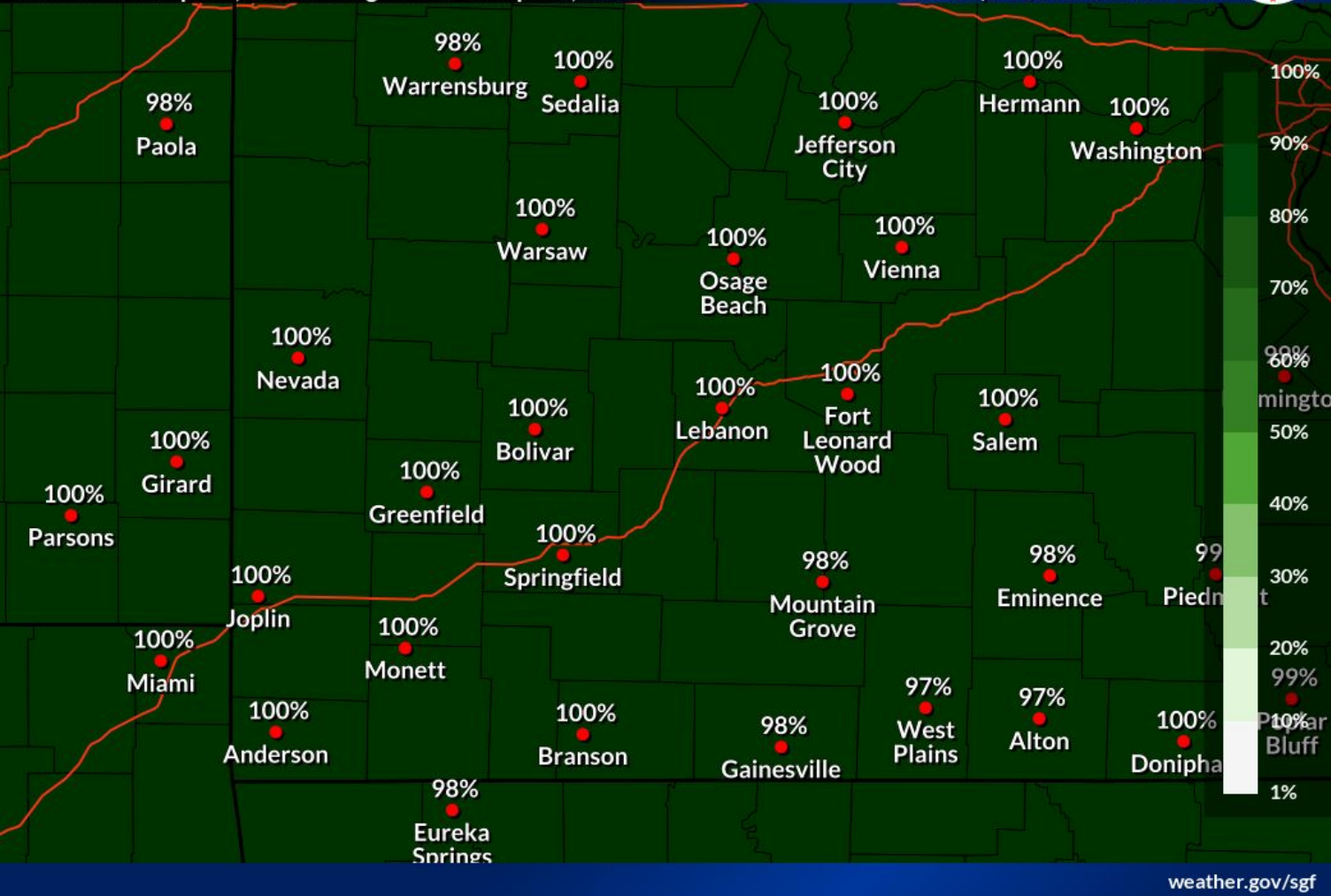
Rainfall Probs (Today - Sunday)

April 18, 2025
4:26 AM

Percent Chance of 0.01" Liquid Precipitation or More

Valid 1 AM Fri Apr 18, 2025 through 7 PM Sun Apr 20, 2025

Weather Forecast Office
Springfield, MO
Issued Apr 18, 2025 3:17 AM CDT

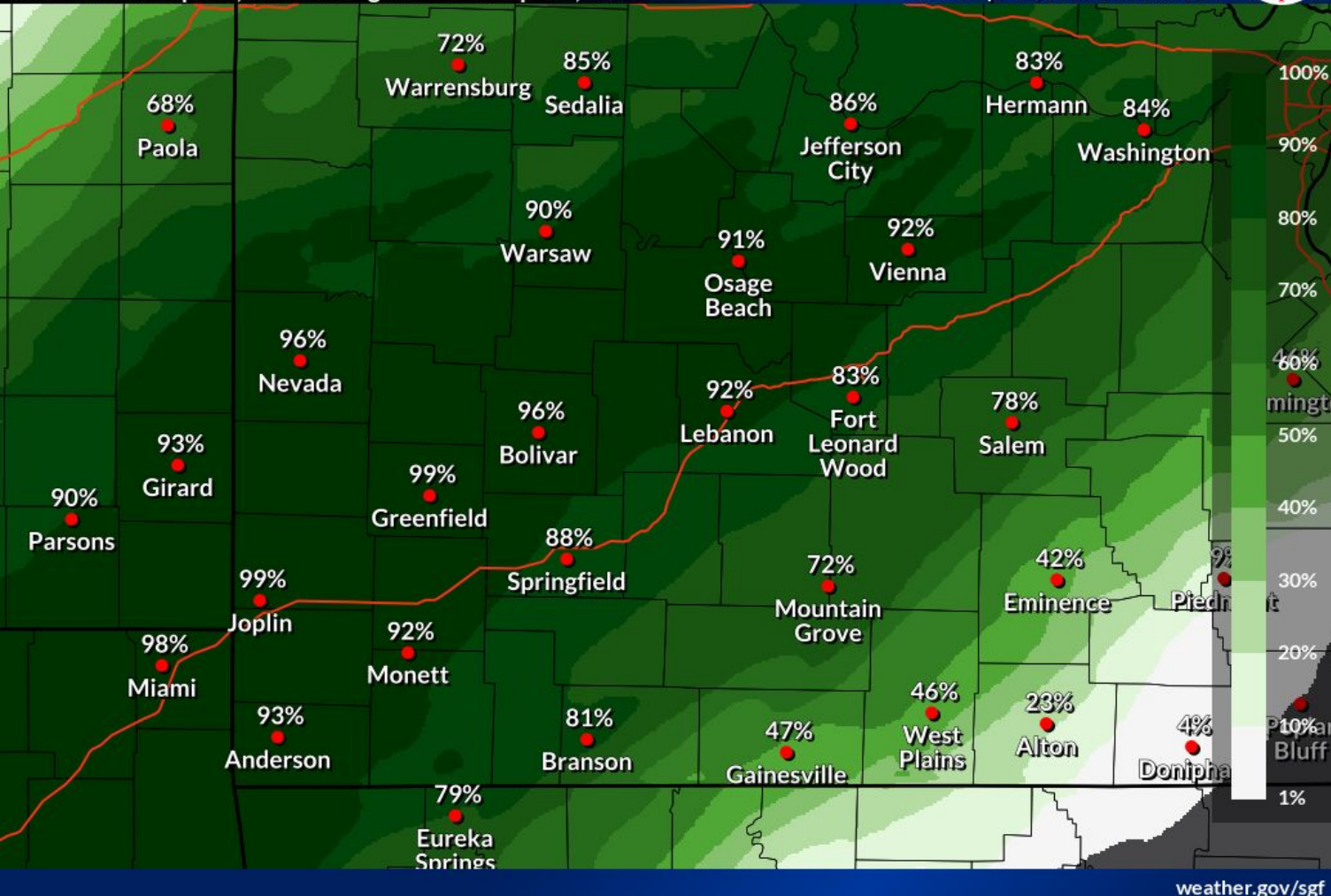


Probability of > 1.00" of rain

Percent Chance of 2" Liquid Precipitation or More

Valid 1 AM Fri Apr 18, 2025 through 7 PM Sun Apr 20, 2025

Weather Forecast Office
Springfield, MO
Issued Apr 18, 2025 3:16 AM CDT



Probability of > 2.00" of rain



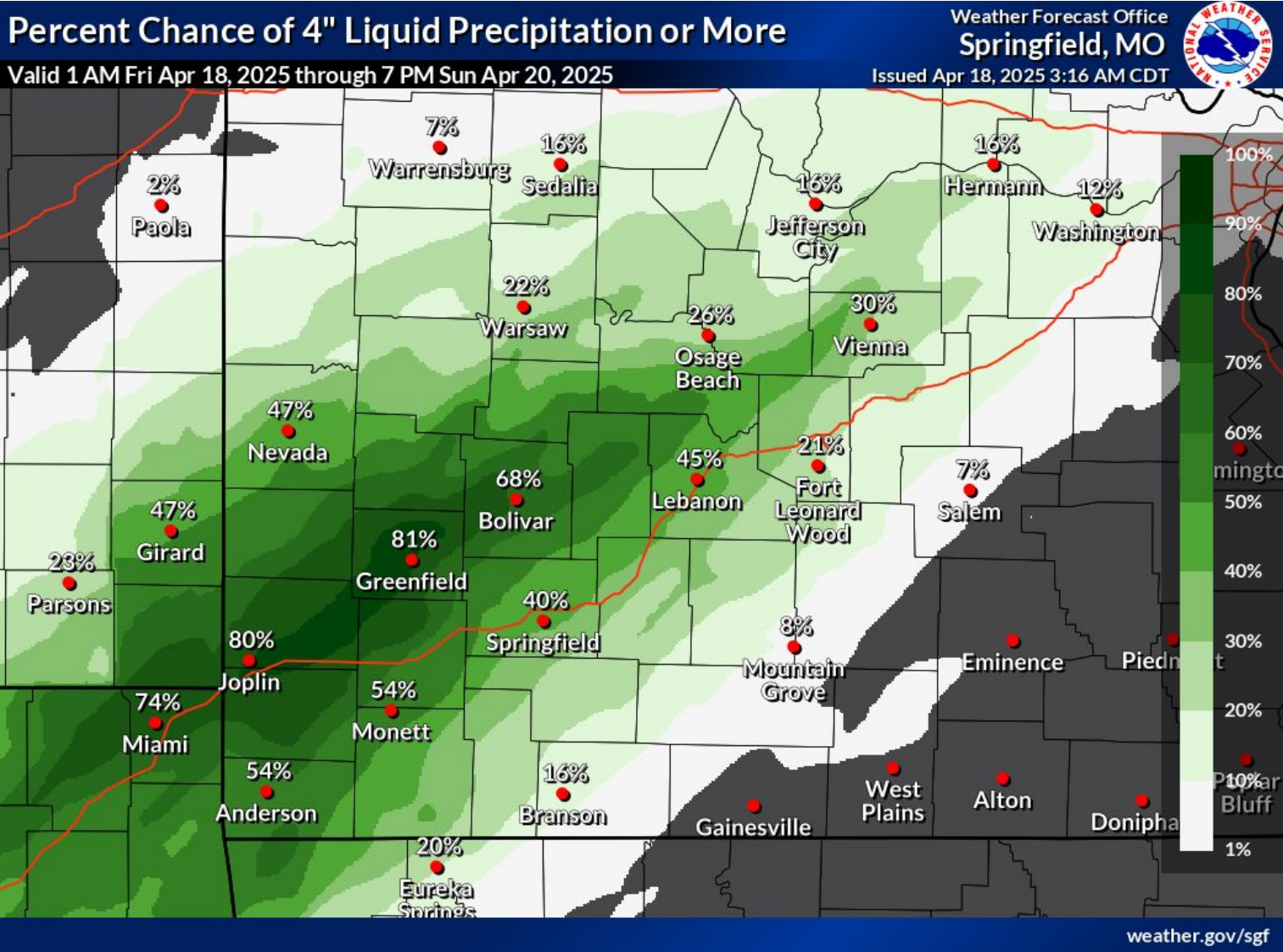
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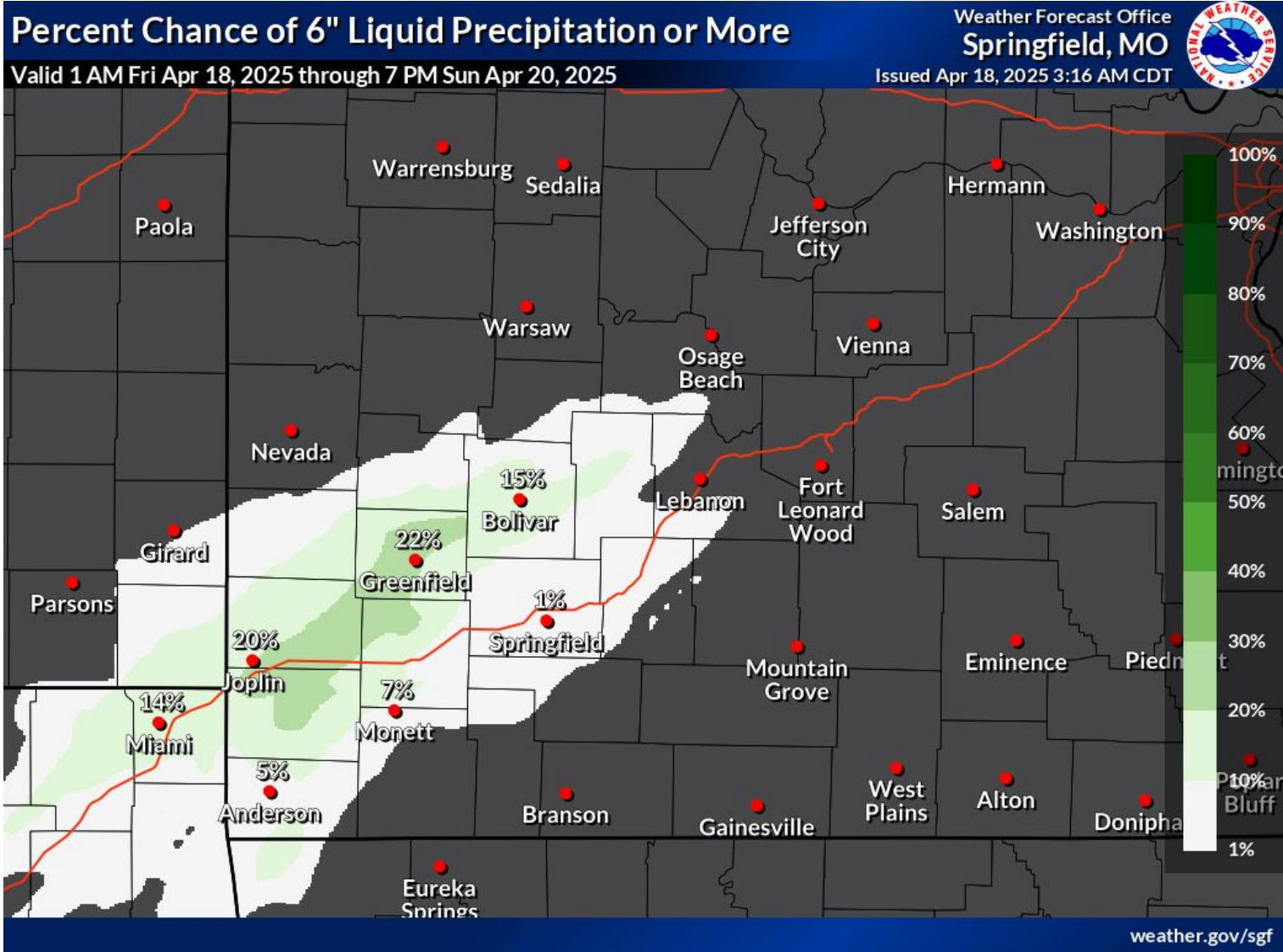


Rainfall Probs (Today - Sunday)

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Probability of > 4.00" of rain



Probability of > 6.00" of rain



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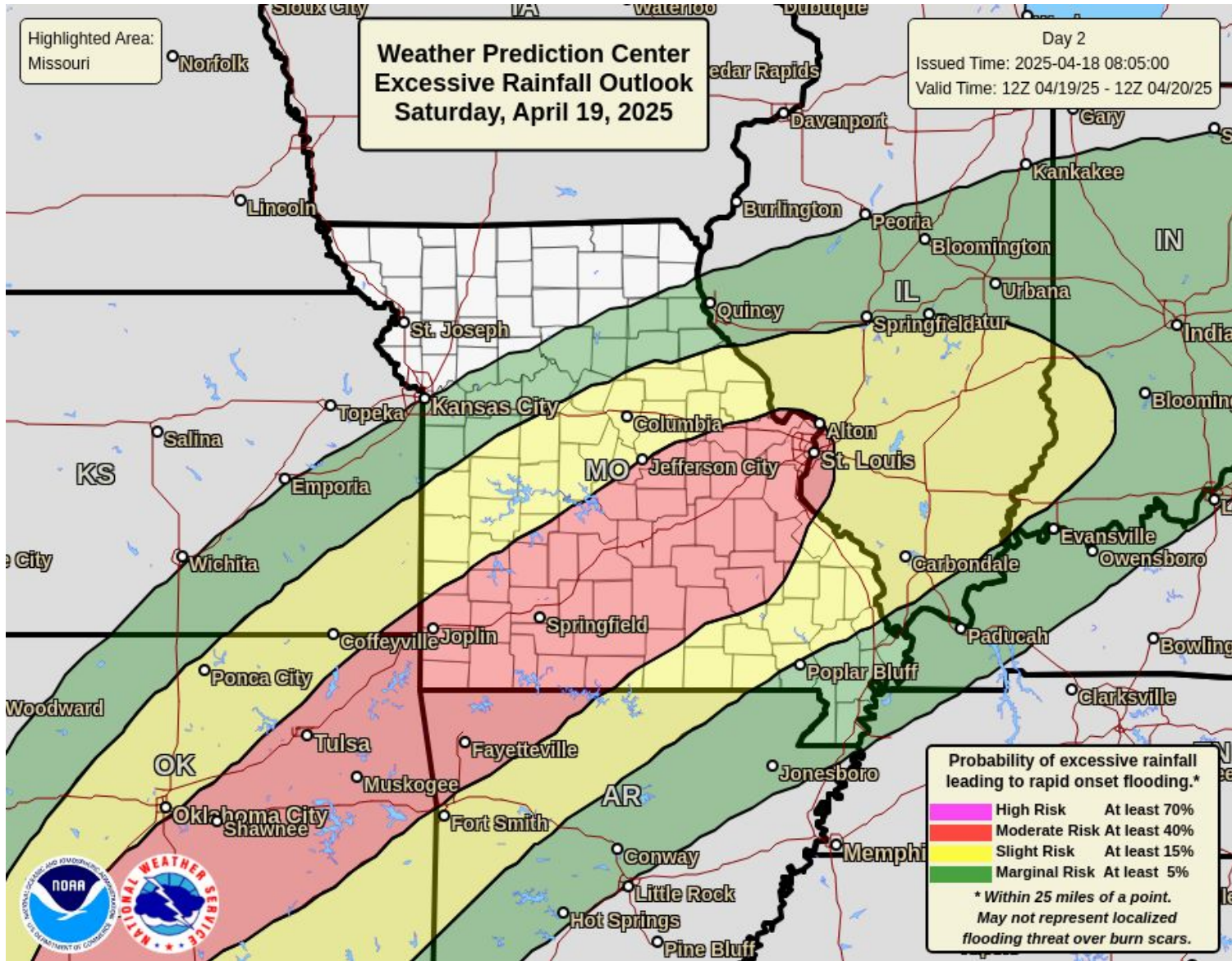
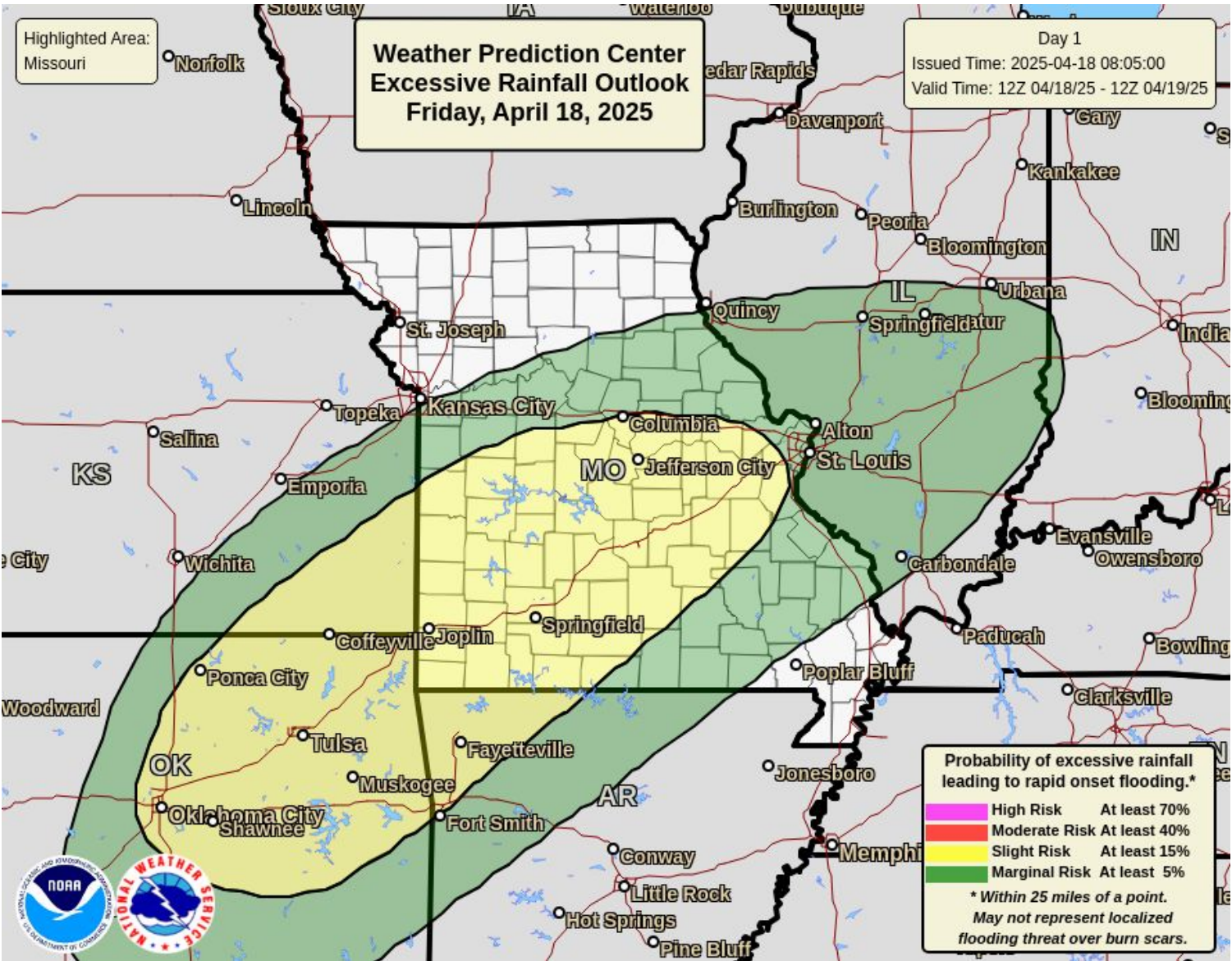
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Excessive Rainfall Outlooks

April 18, 2025
4:26 AM

Friday and Saturday



This Evening and Tonight

Saturday - Saturday Night



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River Flood Potential

April 18, 2025
4:26 AM

Highlights

- Long range ensemble forecasts are showing increasing percentages for near action stage along the Spring, James, Marmaton and especially the Jacks Fork Rivers.
- The image to the right is not a hydrograph but instead a probability of occurrence for the James River at Galena, Missouri.
- Currently there is a 35% chance of exceeding action stage at this location within the next 10 days.
- Locations along creeks and rivers will need to monitor the situation closely this weekend.

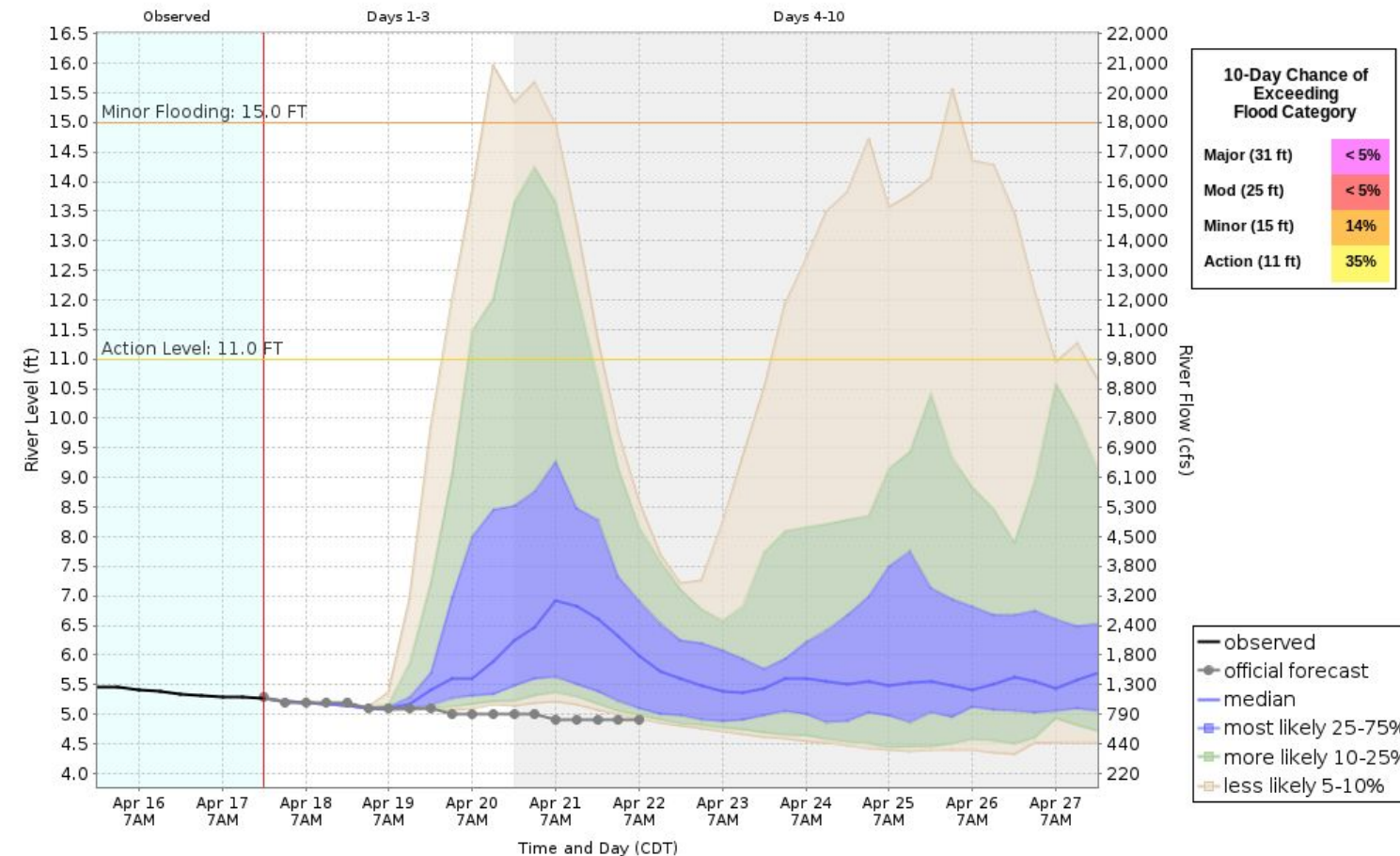
HEFS - 10 Day River Level Probabilities

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



Apr 18 - Apr 28, 2025

JAMES RIVER AT GALENA



****Not a Hydrograph - Probability of Occurrence**
James River at Galena, Missouri





River Flood Potential

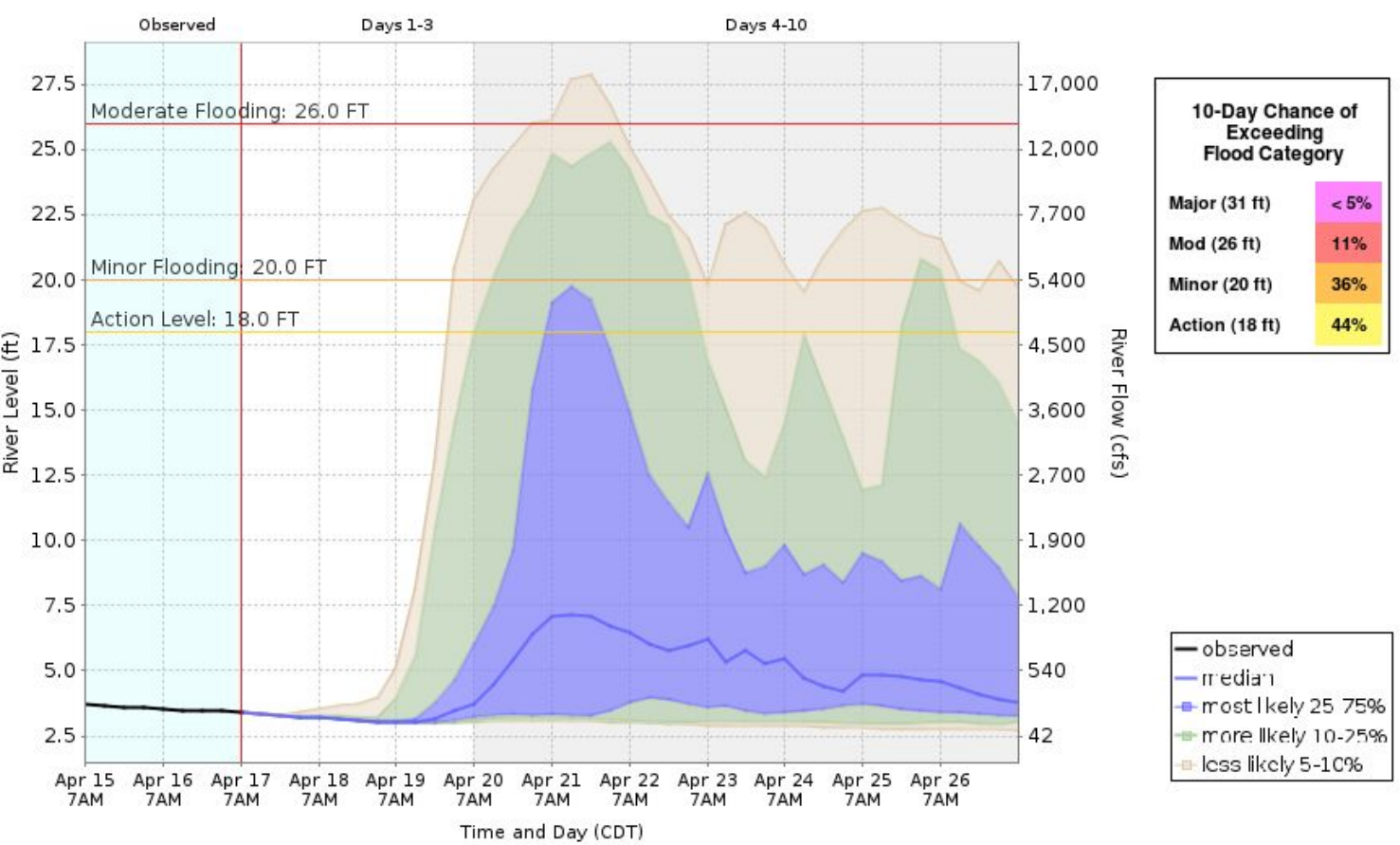
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HEFS - 10 Day River Level Probabilities

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Used to Estimate the Range of Possible River Levels



Apr 17 - Apr 27, 2025
MARMATON R at NEVADA MO 2NW



Model runtime: 07:00 AM CDT Apr 17 2025
Missouri Basin River Forecast Center

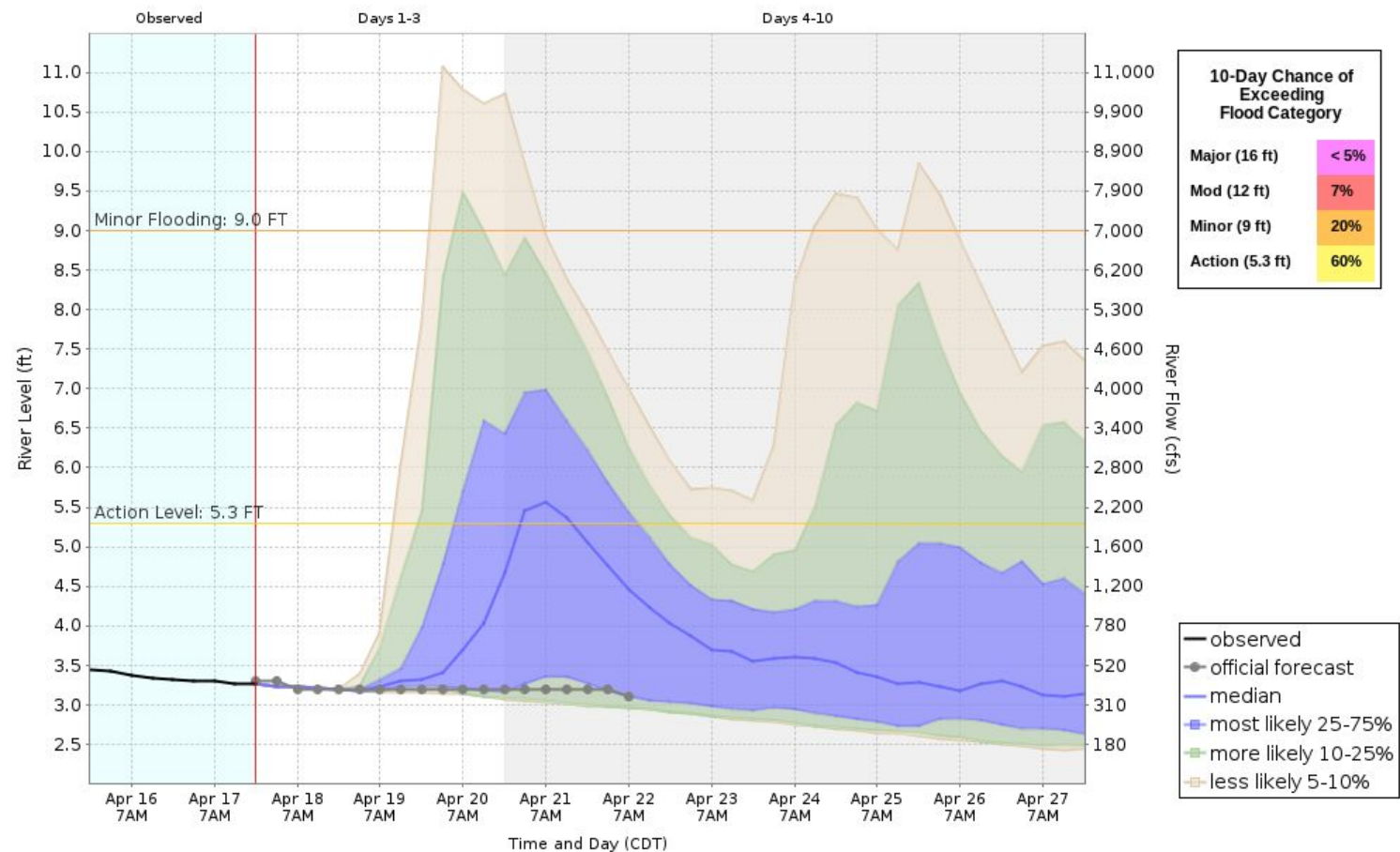
****Not a Hydrograph - Probability of Occurrence**
Marmaton River at Nevada

HEFS - 10 Day River Level Probabilities

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Used to Estimate the Range of Possible River Levels



Apr 18 - Apr 28, 2025
JACKS FORK RIVER AT ALLEY SPRING



Model runtime: 07:00 PM CDT Apr 17 2025
Lower Mississippi River Forecast Center

****Not a Hydrograph - Probability of Occurrence**
Jacks Fork River at Alley Spring



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River Flood Potential

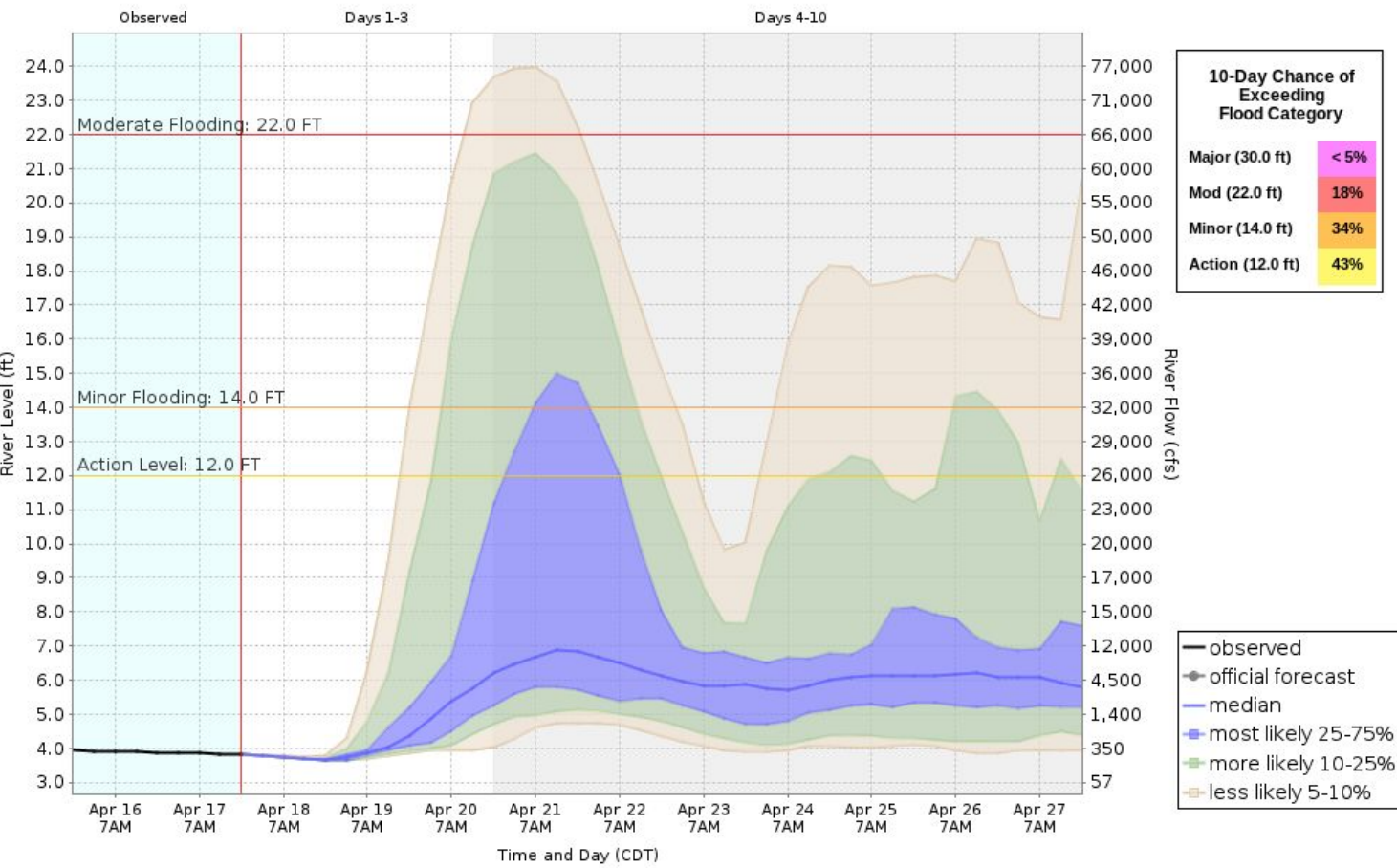
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Used to Estimate the Range of Possible River Levels



Apr 18 - Apr 28, 2025
BXTK1 - SPRING RIVER AT BAXTER SPRINGS



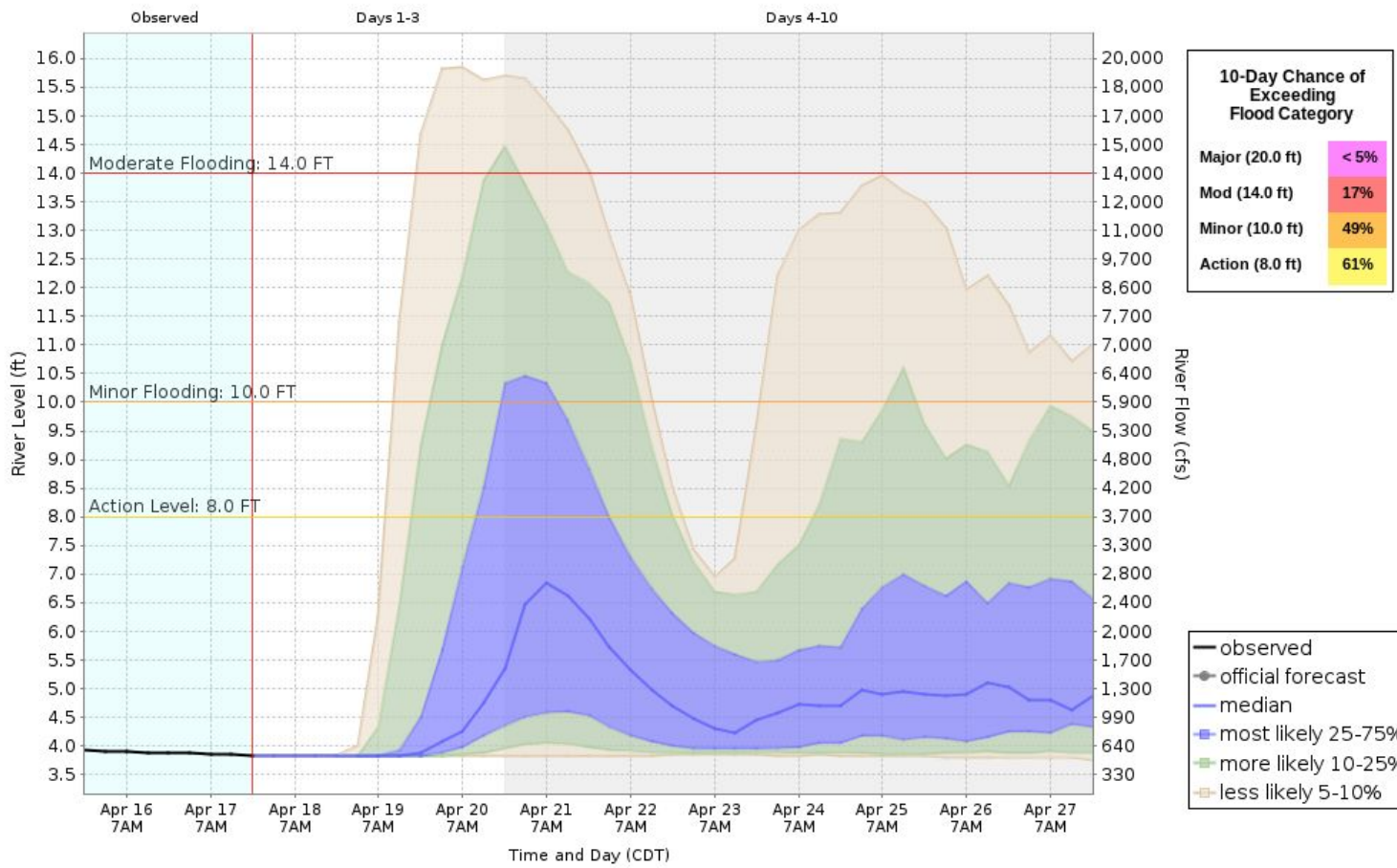
Model runtime: 07:00 PM CDT Apr 17 2025
Arkansas-Red Basin RFC

HEFS - 10 Day River Level Probabilities

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Apr 18 - Apr 28, 2025
CHTM7 - SPRING RIVER AT CARTHAGE 1N



Model runtime: 07:00 PM CDT Apr 17 2025
Arkansas-Red Basin RFC

****Not a Hydrograph - Probability of Occurrence**
Spring River at Baxter Springs, Kansas

****Not a Hydrograph - Probability of Occurrence**
Spring River at Carthage



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River Flood Potential

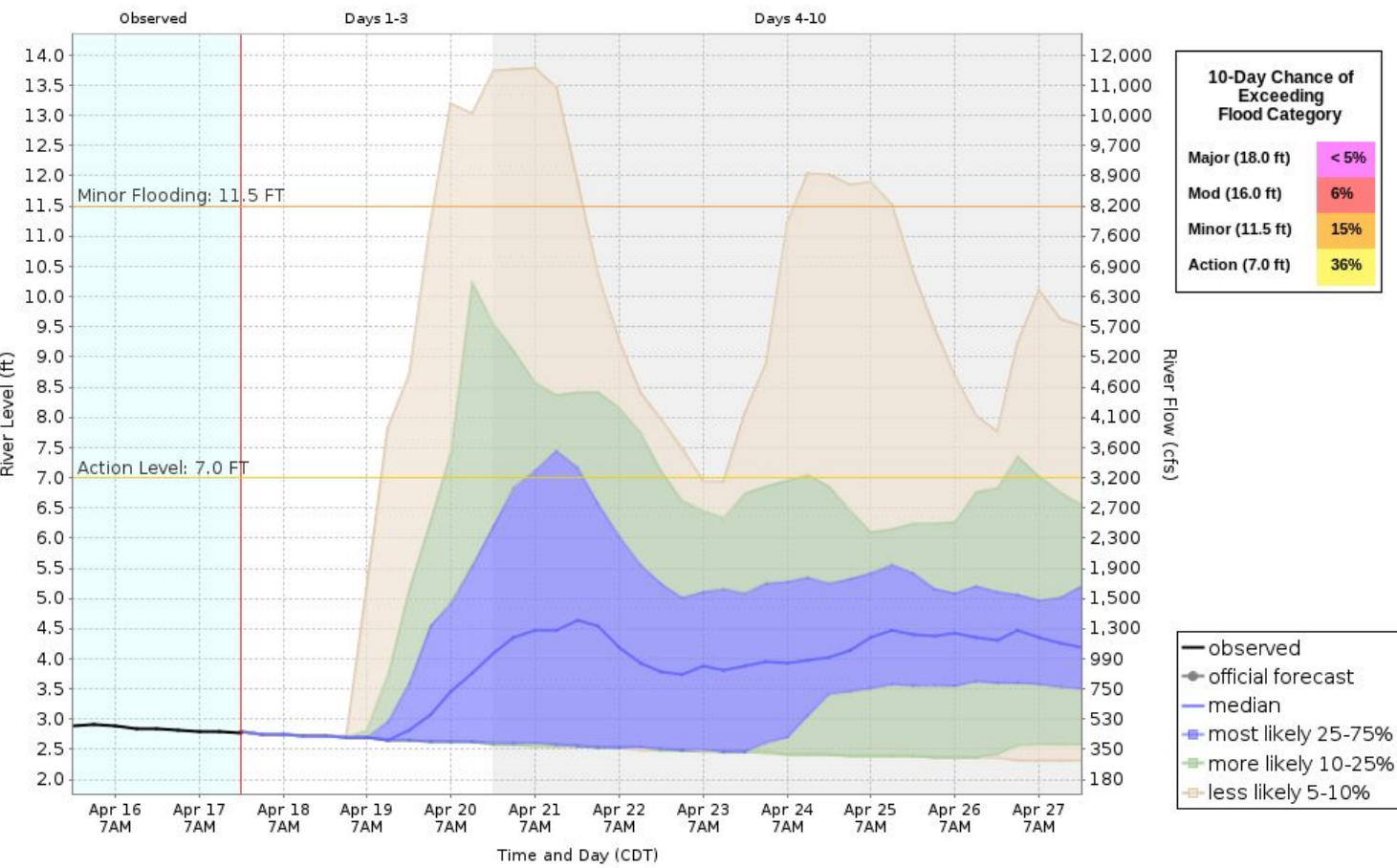
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HEFS - 10 Day River Level Probabilities

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Apr 18 - Apr 28, 2025
JOPM7 - SHOAL CREEK AT JOPLIN



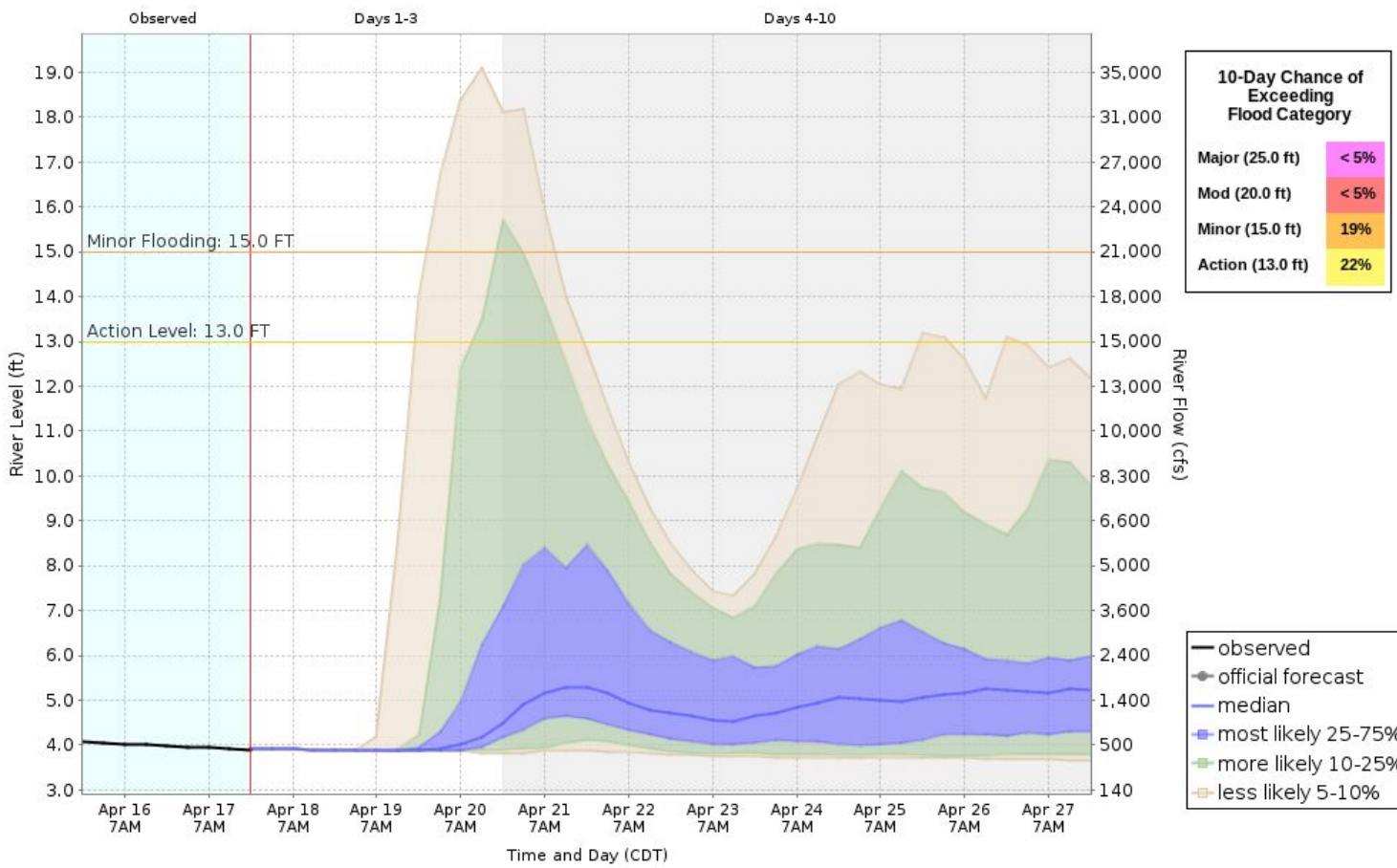
Model runtime: 07:00 PM CDT Apr 17 2025
Arkansas-Red Basin RFC

HEFS - 10 Day River Level Probabilities

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



Apr 18 - Apr 28, 2025
TIFM7 - ELK RIVER AT TIFF CITY



Model runtime: 07:00 PM CDT Apr 17 2025
Arkansas-Red Basin RFC

****Not a Hydrograph - Probability of Occurrence**
Shoal Creek at Joplin

****Not a Hydrograph - Probability of Occurrence**
Elk River at Tiff City



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Confidence Levels

April 18, 2025
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Severe Hazards and Expectations



Flooding Potential This Weekend



Timing of Rainfall/Storms



Lightning Occurring over the Weekend



Confidence Details

- Confidence is high that showers and thunderstorms will occur intermittently throughout the weekend.
- Confidence is medium in the exact details and expectations of severe thunderstorms with the cold front moving through the area.
- Confidence is increasing in the potential for heavy rain and flooding.





Additional Resources

April 18, 2025
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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](#)

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!

weather.gov

PREPARE FOR FLOODS BEFORE THEY HAPPEN



Flooding can occur any time of year. Are you prepared?



Find out if you're in a floodplain.
Visit [floodsmart.gov](https://www.floodsmart.gov) to learn more.



Determine the roads likely to flood
so that you can plan alternate routes.



Identify the fastest way to higher ground.



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