

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE		HYDROLOGIC SERVICE AREA (HSA) Tulsa, Oklahoma (TSA)	
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS				REPORT FOR: MONTH March YEAR 2026	
				SIGNATURE Steven F. Piltz (Meteorologist-in-Charge)	
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283				DATE April 2, 2026	

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☒ An "X" in the box indicates no flood stages were reached in this Hydrologic Service Area (HSA) during the month above.

March 2026 was a very warm month, with the monthly average temperature across the area running 9°F -12°F above normal. Rainfall was below normal for a large portion of eastern OK and northwest AR, and combined with windy days and above normal temperatures, moderate to extreme drought was affecting the entire region by the end of the month. A storm system on the 6th resulted in nine tornadoes. This report, past E-5 reports, and monthly hydrology and climatology summaries can be found at https://www.weather.gov/tsa/climo_summary_e5list.

Monthly Summary

Using the radar-derived estimated observed precipitation from the RFCs (Fig. 1a), rainfall totals for March 2026 ranged from 0.25" to 6.5" across eastern OK and northwest AR, with much of the area receiving 1"-3". These rainfall totals correspond to 10% to 170% of the normal March rainfall with a large portion of the area receiving less than 70% of normal (Fig. 1b).

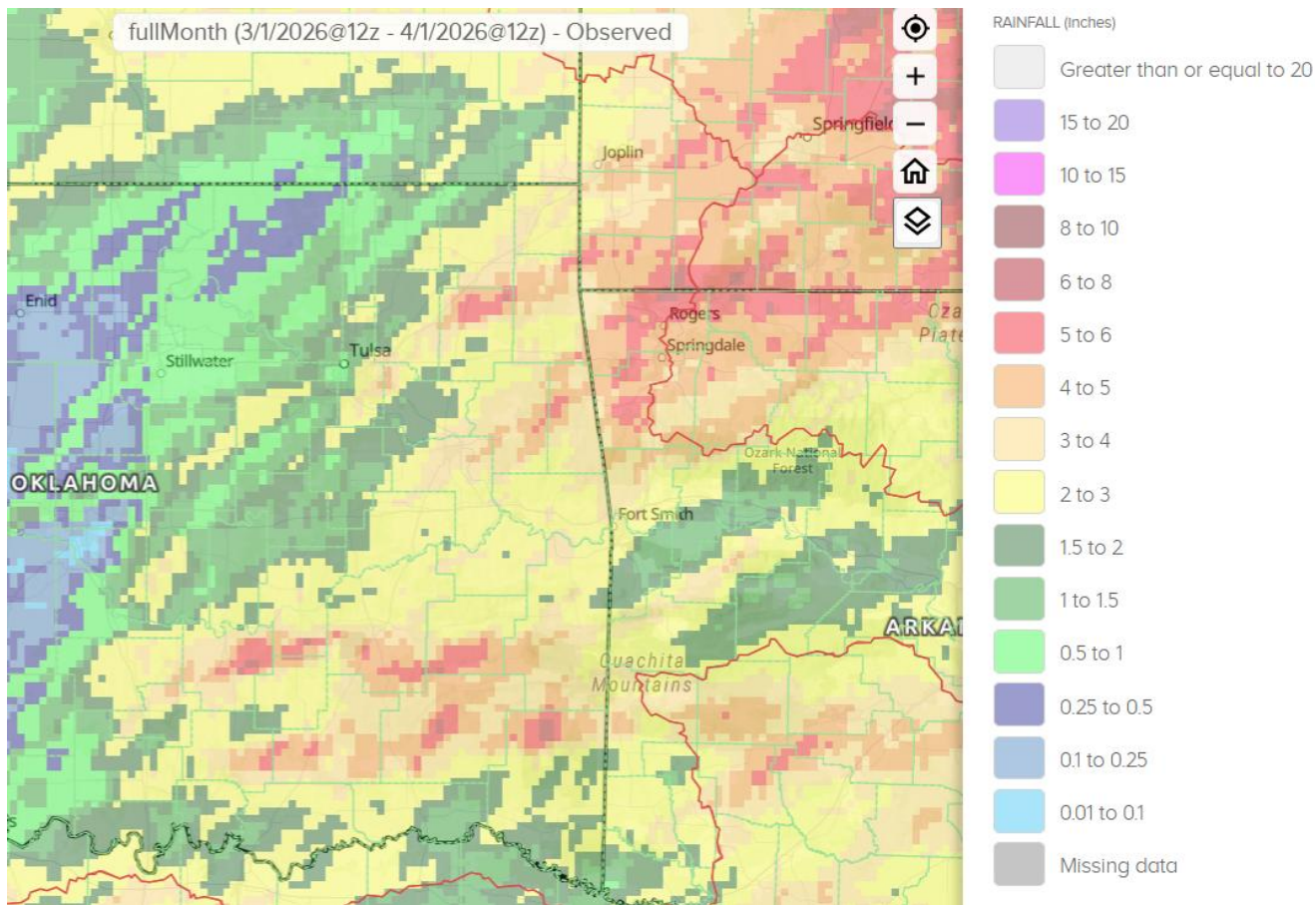


Fig. 1a. Estimated Observed Rainfall for March 2026

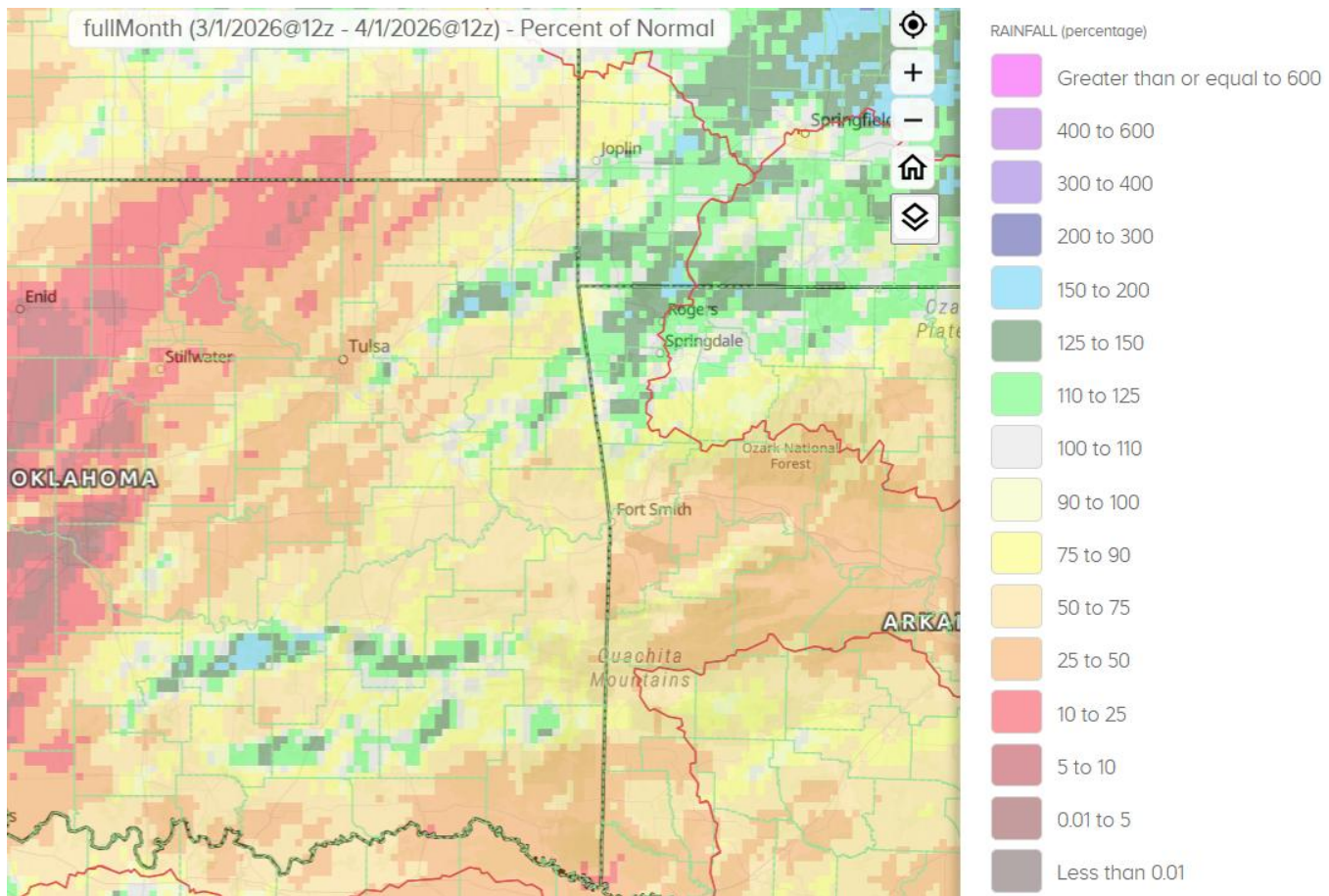


Fig. 1b. Estimated % of Normal Rainfall for March 2026

In Tulsa, OK, March 2026 ranked as the Record warmest March (61.5°F, tied 2012; since records began in 1905) and the 30th driest March (1.21", tied 2005; since records began in 1888). Fort Smith, AR had the 2nd warmest March (63.4°F; since records began in 1883) and the 56th driest March (2.57"; since records began in 1883). Fayetteville, AR had the Record warmest (60.3°F, previous record 57.9°F in 2012), the 21st wettest (5.02"), and the 27th snowiest (trace, tied numerous other years) March since records began in 1950.

Some of the larger precipitation reports (in inches) for March 2026 included:

Bella Vista 2.5SSE, AR (coco)	6.87	Eureka Springs 1.4WSW, AR(coco)	6.38	Eureka Springs 4.0NNW, AR(coco)	6.06
Rogers, AR (AWOS)	5.73	Bella Vista 2.2E, AR (coco)	5.67	Bentonville 1.6NE, AR (coco)	5.66
Bentonville 6.6SSW, AR (coco)	5.60	Centerton 1.0E, AR (coco)	5.60	Berryville 4.3N, AR (coco)	5.58

Some of the lowest precipitation reports (in inches) for March 2026 included:

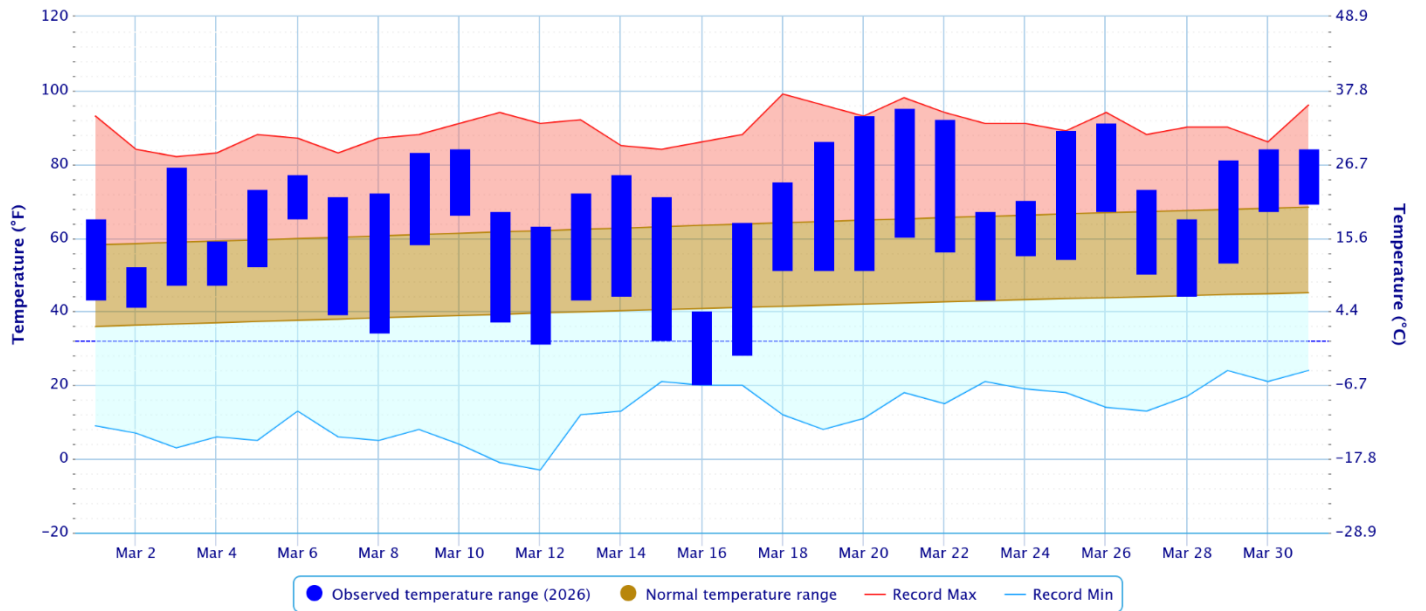
Foraker, OK (meso)	0.40	Burbank, OK (meso)	0.51	Bartlesville, OK (ASOS)	0.55
Pawnee, OK (meso)	0.58	Copan, OK (meso)	0.74	Nowata, OK (meso)	0.91
Bristow, OK (meso)	1.01	Wynona, OK (meso)	1.05	Tulsa 3.4W, OK (coco)	1.05

According to statistics from the [Oklahoma Climatological Survey](#) (OCS) Mesonet:

Rank since 1921	March 2026	Last 60 Days (Jan 31 – Mar 31)	Last 120 Days (Dec 2 – Mar 31)	Year-to-Date (Jan 1 – Mar 31)	Water Year-to-Date (Oct 1, 2025 – Mar 31, 2026)	Last 365 Days (Apr 1, 2025 – Mar 31, 2026)
Northeast OK	29 th driest	11 th driest	2 nd driest	12 th driest	11 th driest	22 nd wettest
East Central OK	43 rd driest	35 th driest	7 th driest	21 st driest	18 th driest	17 th wettest
Southeast OK	27 th driest	25 th driest	3 rd driest	23 rd driest	14 th driest	52 nd wettest
Statewide	19 th driest	11 th driest	3 rd driest	15 th driest	10 th driest	28 th wettest

Daily Temperature Data – Tulsa Area, OK (ThreadEx)

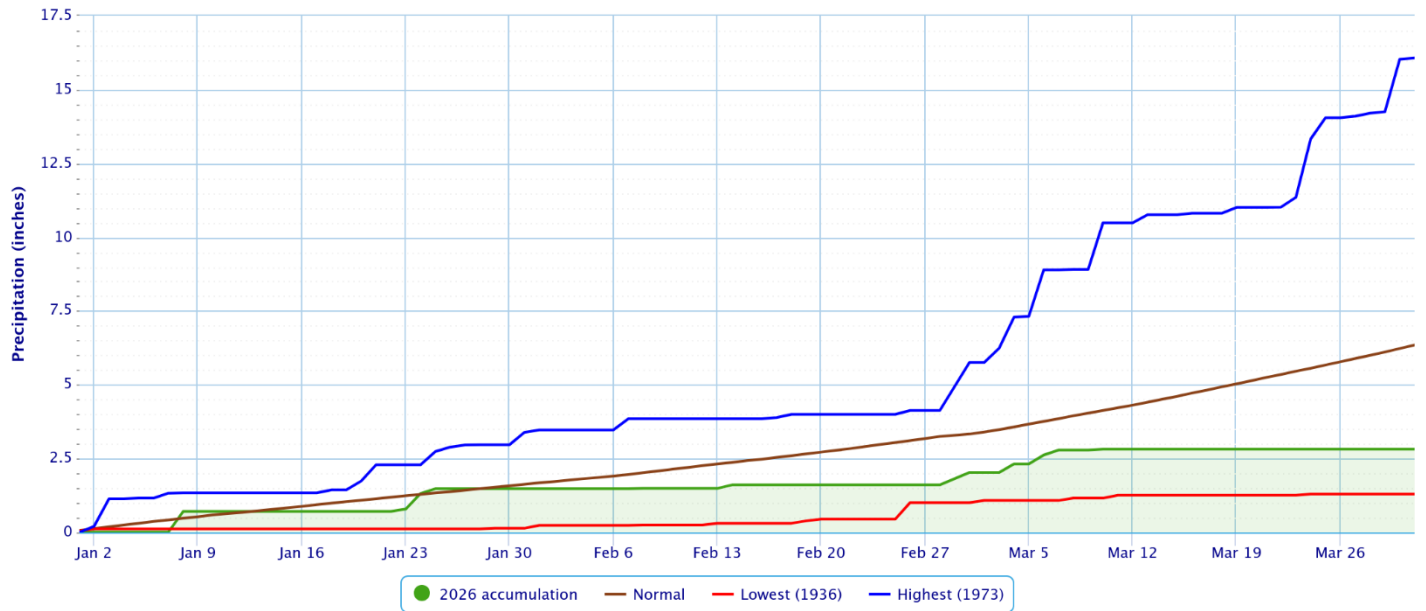
Period of Record – 1905–01–06 to 2026–03–31. Normals period: 1991–2020. Click and drag to zoom chart.



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Accumulated Precipitation – Tulsa Area, OK (ThreadEx)

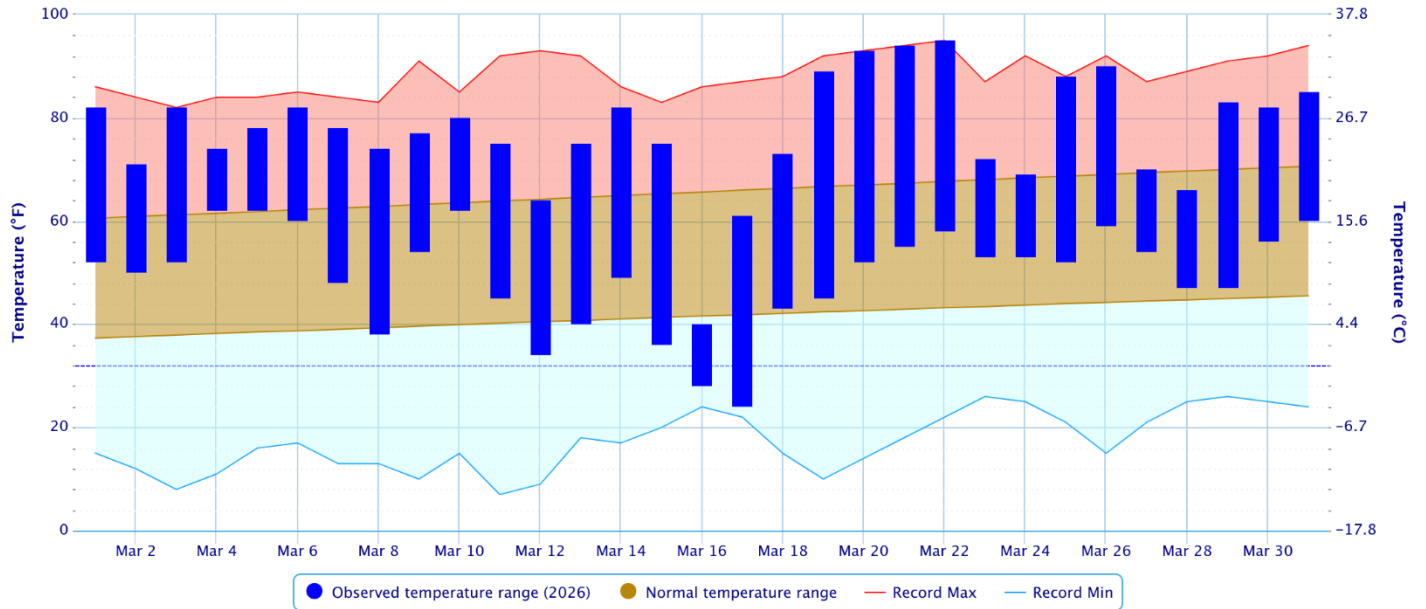
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – Fort Smith Area, AR (ThreadEx)

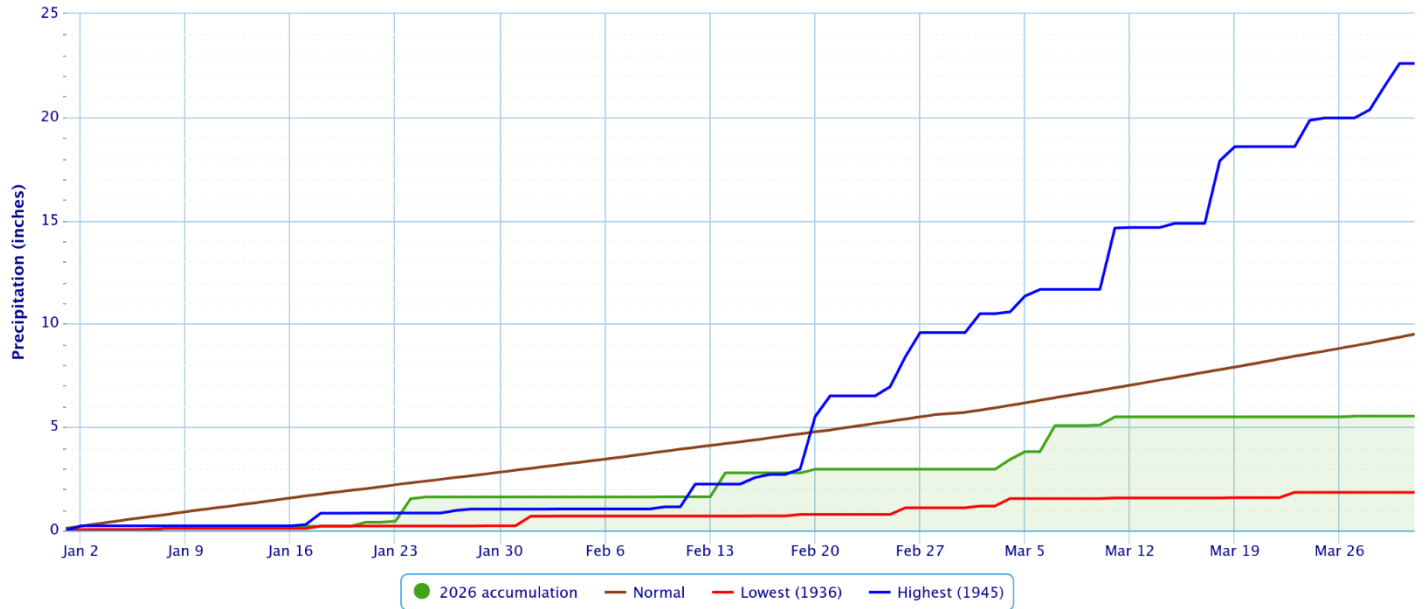
Period of Record – 1882-06-01 to 2026-03-31. Normals period: 1991-2020. Click and drag to zoom chart.



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Accumulated Precipitation – Fort Smith Area, AR (ThreadEx)

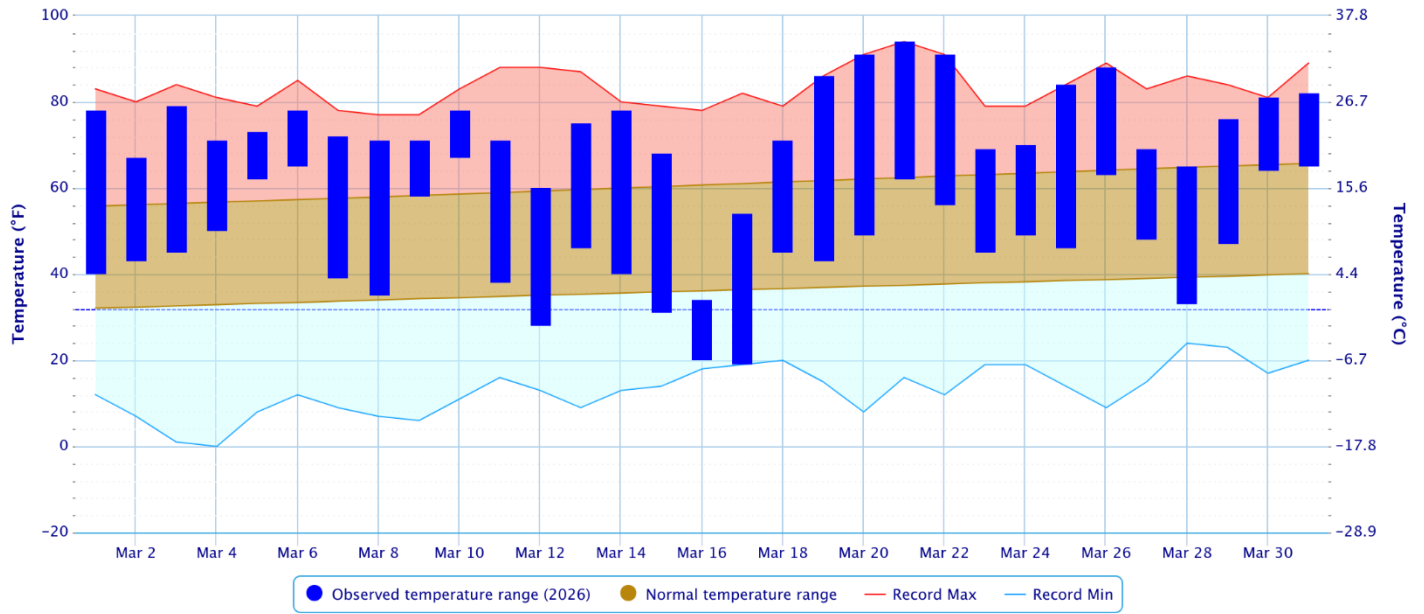
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – FAYETTEVILLE DRAKE FIELD, AR

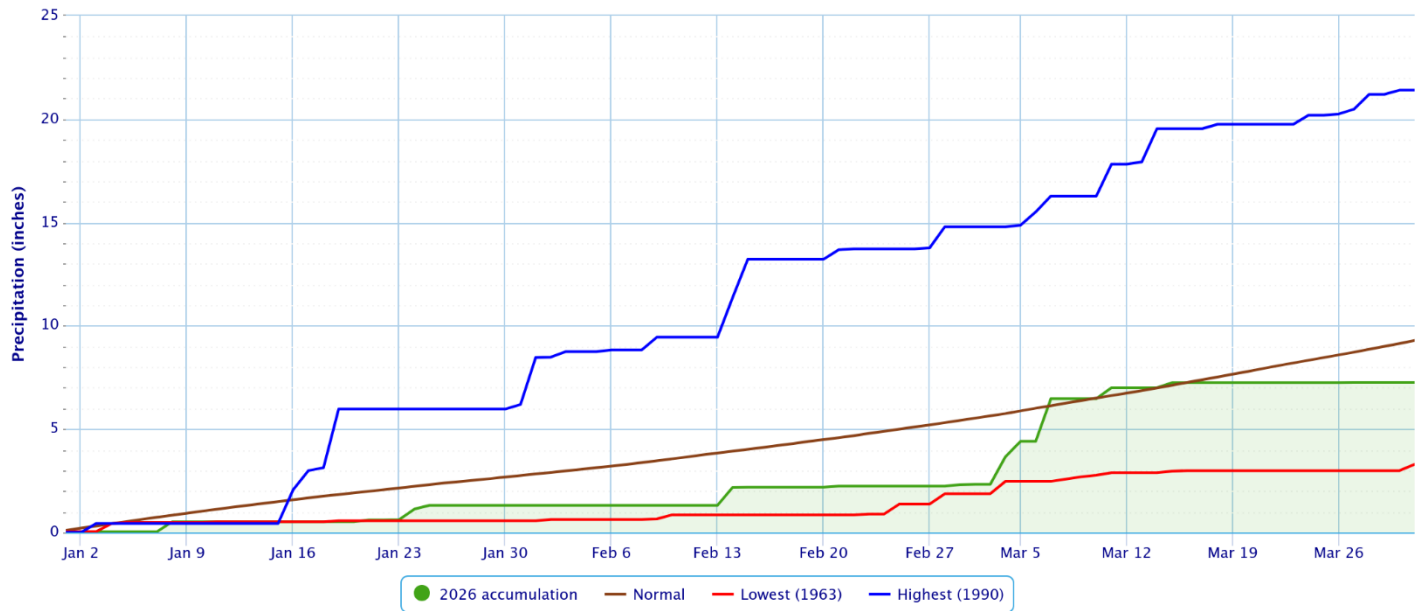
Period of Record – 1949-07-14 to 2026-03-31. Normals period: 1991-2020. Click and drag to zoom chart.



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Accumulated Precipitation – FAYETTEVILLE DRAKE FIELD, AR

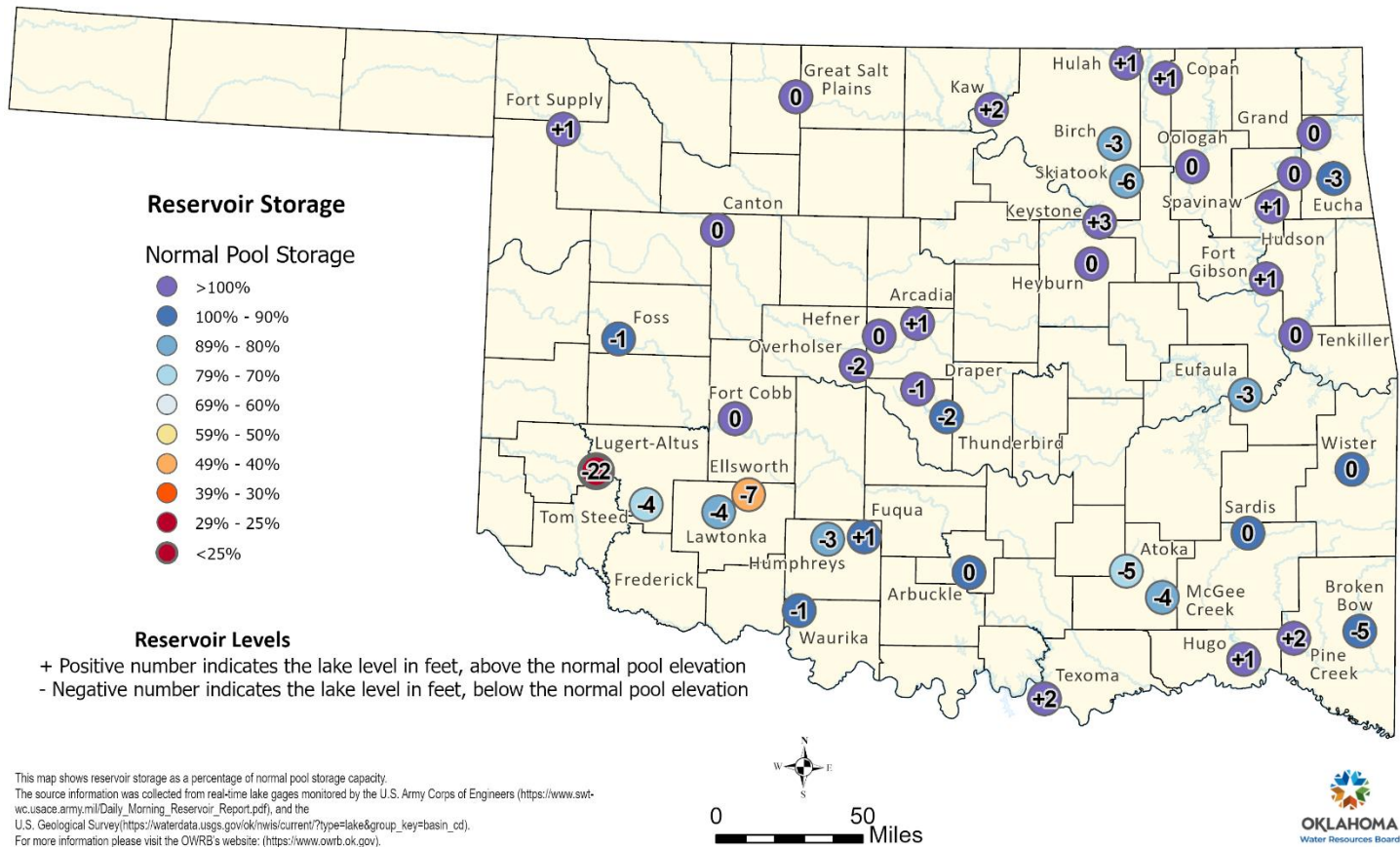
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Reservoirs

Oklahoma Reservoir Levels and Storage as of 3/30/2026



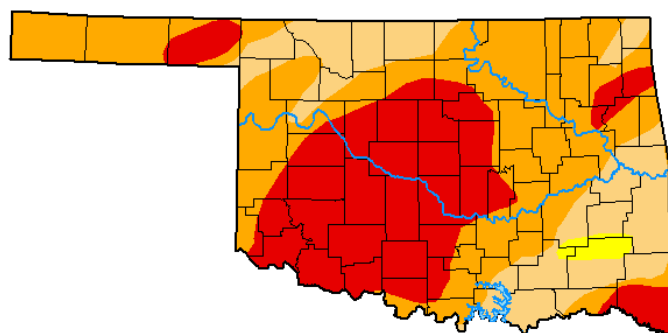
According to the USACE, a few lakes in the HSA were above 3% of the top of their conservation pools as of 3/31/2026: Kaw Lake 5%, Keystone 4%, and Hudson Lake 4%. Several lakes were more than 3% below the top of their conservation pools: Birch Lake 78%, Skiatook Lake 81%, Eufaula Lake 83%, Beaver Lake 87%, and Wister Lake 92%.

Drought

According to the [U.S. Drought Monitor](#) (USDM) from March 31, 2026 (Figs. 2, 3), Extreme (D3) Drought conditions were occurring in parts of Delaware, Mayes, Wagoner, Cherokee, and Choctaw Counties in eastern OK and Benton and Carroll Counties in northwest AR. Severe (D2) Drought conditions existed in portions of Osage, Pawnee, Creek, Okfuskee, Okmulgee, Tulsa, Washington, Rogers, Nowata, Craig, Ottawa, Mayes, Delaware, Adair, Cherokee, Wagner, Muskogee, McIntosh, Pittsburg, Choctaw, and Pushmataha Counties in eastern OK and Benton, Carroll, Madison, Washington Crawford, Sebastian, and Franklin Counties in northwest AR. Moderate (D1) Drought conditions were present in portions of Ottawa, Craig, Mayes, Delaware, Adair, Cherokee, Muskogee, Pittsburg, Haskell, Sequoyah, Le Flore, Latimer, Pushmataha, and Choctaw Counties in eastern OK. Abnormally Dry (D0) but not in drought conditions were occurring in parts of Pittsburg, Latimer, and Pushmataha Counties in eastern OK.

U.S. Drought Monitor Oklahoma

March 31, 2026
(Released Thursday, Apr. 2, 2026)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	98.77	77.67	34.77	0.00
Last Week 03-24-2026	0.00	100.00	94.29	62.17	22.49	0.00
3 Months Ago 12-30-2025	20.87	79.13	53.74	13.95	4.80	0.00
Start of Calendar Year 01-06-2026	19.15	80.85	72.77	19.38	6.92	0.00
Start of Water Year 09-30-2025	64.08	35.92	4.86	0.00	0.00	0.00
One Year Ago 04-01-2025	24.54	75.46	47.52	14.10	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

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Western Regional Climate Center

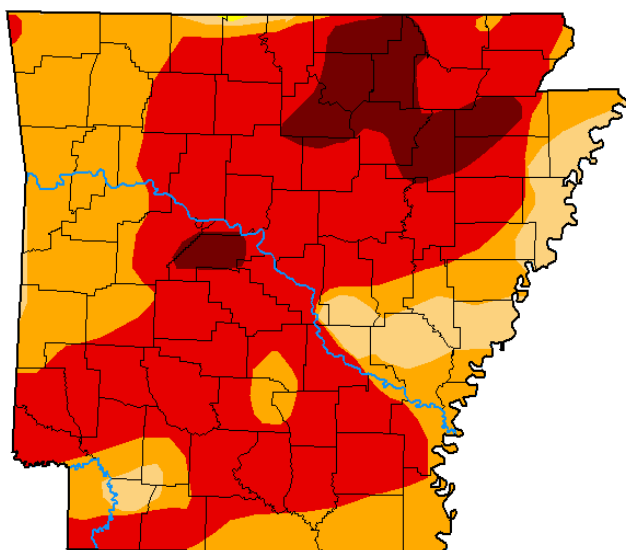


droughtmonitor.unl.edu

Fig. 2. Drought Monitor for Oklahoma

U.S. Drought Monitor Arkansas

March 31, 2026
(Released Thursday, Apr. 2, 2026)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.96	92.66	61.47	8.36
Last Week 03-24-2026	0.00	100.00	99.96	74.84	37.04	3.86
3 Months Ago 12-30-2025	0.66	99.34	69.53	15.01	0.00	0.00
Start of Calendar Year 01-06-2026	0.00	100.00	91.34	21.84	0.00	0.00
Start of Water Year 09-30-2025	19.70	80.30	48.43	20.14	0.00	0.00
One Year Ago 04-01-2025	80.64	19.36	2.97	0.73	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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Fig. 3. Drought Monitor for Arkansas

Outlooks

The [Climate Prediction Center](#) (CPC) outlook for April 2026 (issued March 31, 2026) indicates an enhanced chance for above normal temperatures and above median precipitation across all of eastern OK and northwest AR. This outlook was based on dynamical and statistical model output and long-term trends. The rainfall forecast the first week of April, with a second round of precipitation expected during the second week, heavily influenced the precipitation outlook.

For the 3-month period April-May-June 2026, CPC is forecasting an equal chance for above, near, or below median precipitation and an enhanced chance for above normal temperatures across all of eastern OK and northwest AR (outlook issued March 19, 2026). This outlook is based on long-term trends, ENSO state, soil moisture, and incorporates a suite of statistical and dynamical forecast tools. According to CPC on March 12, "A transition from La Niña to ENSO-neutral is expected in the next month, with ENSO-neutral favored through May-July 2026 (55% chance). In June-August 2026, El Niño is likely to emerge (62% chance) and persist through at least the end of 2026."

Summary of Heavy Precipitation Events Daily quality-controlled rainfall maps can be found at: http://water.weather.gov/precip/index.php?location_type=wfo&location_name=tsa

Just before noon on the 1st, showers and thunderstorms developed over northeast OK north of a retreating front as a mid-level shortwave trough approached the area. Widespread showers and isolated thunderstorms moved eastward through the afternoon and evening hours, affecting northeast OK and northwest AR along and north of I-40. The coverage diminished after midnight but didn't exit the area until the pre-dawn hours of the 2nd. Rainfall totals ranged from a few hundredths to 2", with the highest totals of 1.5"-2" occurring over Carroll County (Fig. 4).

A cold front gradually moved across eastern OK and northwest AR on the 4th. Just before sunrise on the 4th, showers and thunderstorms moved southeast out of KS and into northeast OK. After sunrise, additional elevated convection developed over northeast OK and northwest AR, and all of the precipitation moved eastward along and north of I-40 through the remainder of the morning and exited the area during the early afternoon hours. Surface-based thunderstorms developed in the late afternoon near the front/reinforced outflow boundary across southeast OK. A broken line of thunderstorms quickly developed from southeast OK into far northwest AR and moved eastward during the evening. The front then stalled, with convection continuing to redevelop across southeast OK and northwest AR through the overnight hours. Most of the rain ended in the pre-dawn hours of the 5th; however, a new cluster of showers and thunderstorms developed over southeast OK around sunrise. Precipitable water (PWAT) values were above the 95th percentile, supporting efficient rain production. 24-hour rainfall totals ending at 6am on the 5th ranged from around 0.10" to around 3.5" (Figs. 5, 6). The thunderstorm cluster affected southeast OK and west central AR through the morning, dissipating shortly after noon. This activity brought an additional 0.10" to 4" of rain (Fig. 7). Rises occurred along Flint Creek and the lower Illinois River affecting recreation but remaining below flood stage (see preliminary hydrographs at the end of this report).

Elevated showers and thunderstorms developed across north central into northeast OK, northwest of I-44 where there was moisture and instability convergence, mid-morning of the 6th as southerly winds brought 60°F+ dewpoints into the region. This activity shifted to the northeast into KS by early afternoon. Meanwhile, a 0-3km theta-E axis set up over eastern OK and northwest AR, which combined with the ongoing low-level jet and surface instability, resulted in more convection developing during the late afternoon hours from central OK into northeast OK. The convection increased during the evening, and several supercells developed within the strongly sheared 40-50 kt south-southwesterly deep-layer mean flow. Two long-lived supercells produced nine tornadoes across eastern OK during the evening, including an EF-3 in Beggs, OK and an EF-2 near Collinsville, OK (see <https://arcg.is/0S1KGa2> for details). A broken line of thunderstorms continued to move east through the evening hours, affecting the remainder of eastern OK and northwest AR. Shortly after midnight on the 7th, a second line of showers and thunderstorms along a cold front moved southeast into northeast OK. This quasi-linear convective system (QLCS) stretched from KS/MO through OK and AR and into TX as it marched east-southeast through the region during the overnight hours. The leading edge of this line, where the strongest convection was, pushed east of the area around sunrise on the 7th, with the trailing

showers and thunderstorms exiting by late morning. However, light to moderate rain continued across southeast OK and west central AR through the afternoon and evening hours due to overrunning. PWAT values were well above climatology, resulting in higher rainfall totals where training of storms occurred. 24-hour rainfall totals through 6 am March 7 ranged from 0.10" to near 4", with the highest totals in the vicinity of I-44 in northeast OK (Fig. 8). After 6 am, an additional 0.10" to around 1" of rain fell (Fig. 9). This active weather period resulted in several pockets of 2"-5" of rain (Fig. 10).

A cluster of showers and thunderstorms developed over far southeast OK before sunrise on the 9th in response to a weak, low-amplified shortwave trough moving across the area. This activity moved east-northeast into west central AR by mid-morning and then exited the region shortly after noon. Rainfall totals from these storms ranged from 0.10" to 1.5" (Fig. 11).

Elevated showers and thunderstorms moved north out of TX into southeast OK late morning of the 10th. This activity moved northeast across west central AR through early afternoon. Isolated to widely scattered thunderstorms that had developed along the dryline in western OK moved into eastern OK during the late evening hours and then transitioned into an eastward-moving line of storms that stretched from KS to TX as a cold front moved in. By midnight, the QLCS entered into AR. These storms continued to progress east through the overnight hours and exited the region before sunrise on the 11th. Rainfall totals ranged from 0.25" to around 2" (Figs. 12, 13).

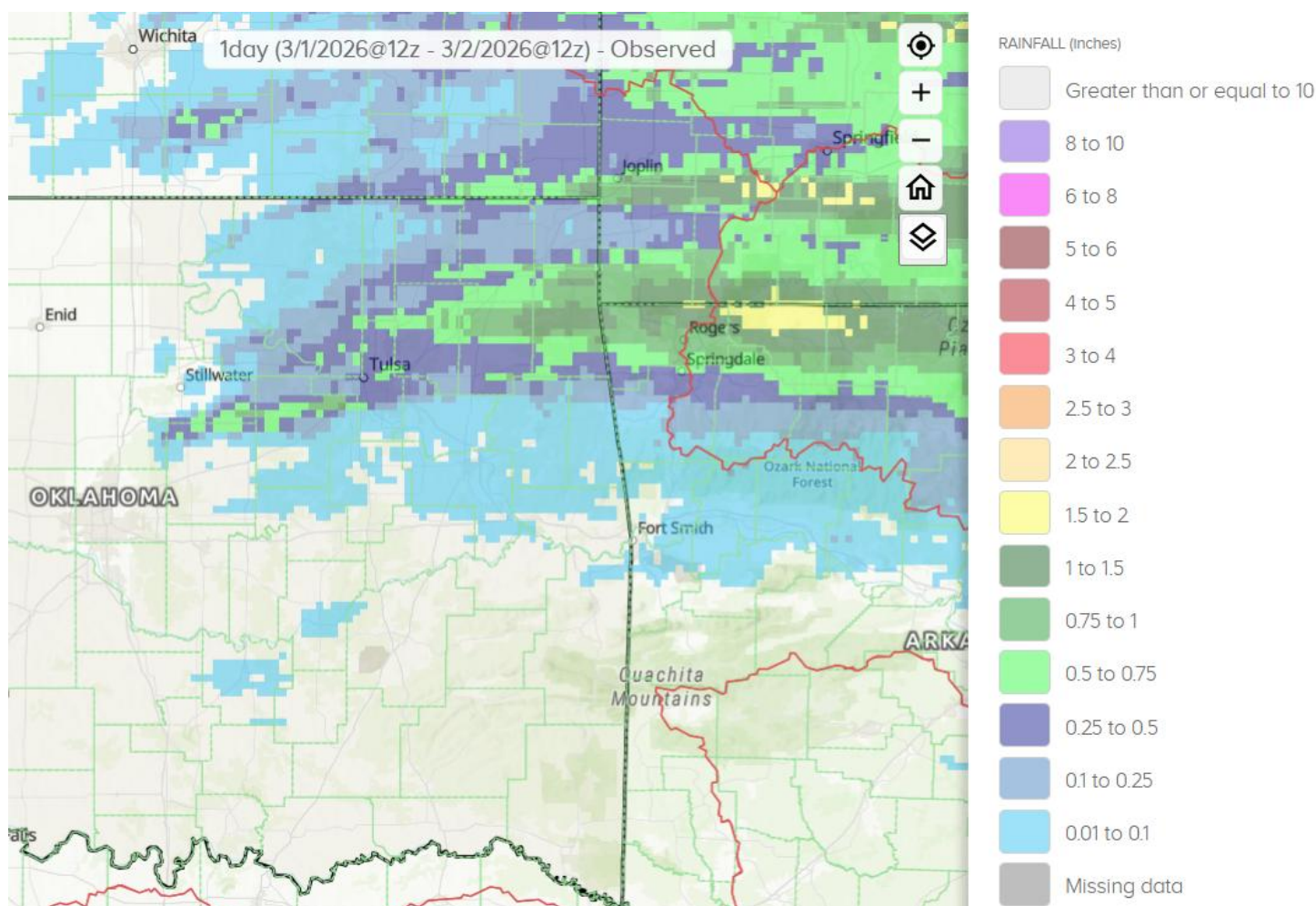


Fig. 4. 24-hour Estimated Observed Rainfall ending at 6am CST 3/02/2026.

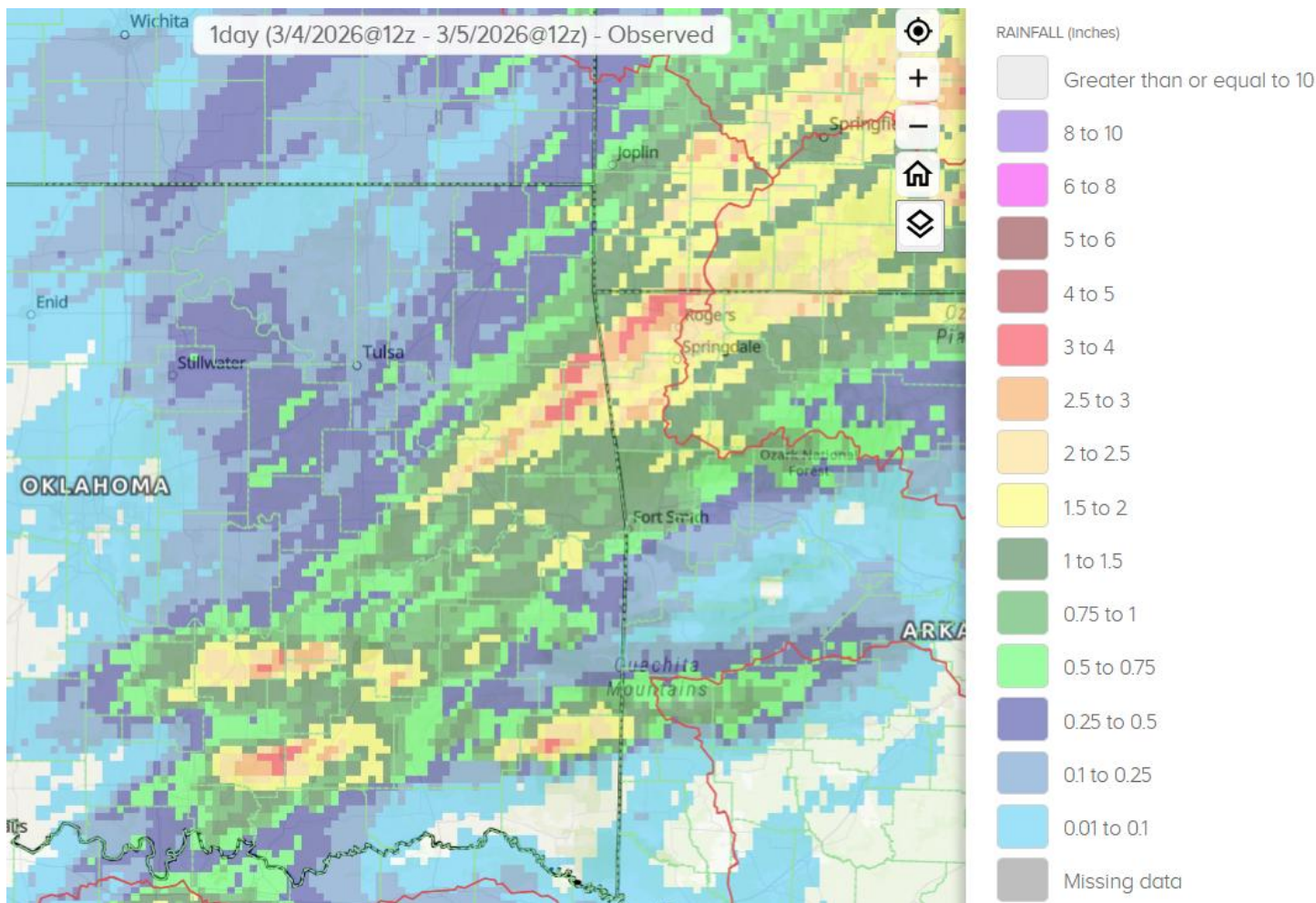


Fig. 5. 24-hour Estimated Observed Rainfall ending at 6am CST 3/05/2026.

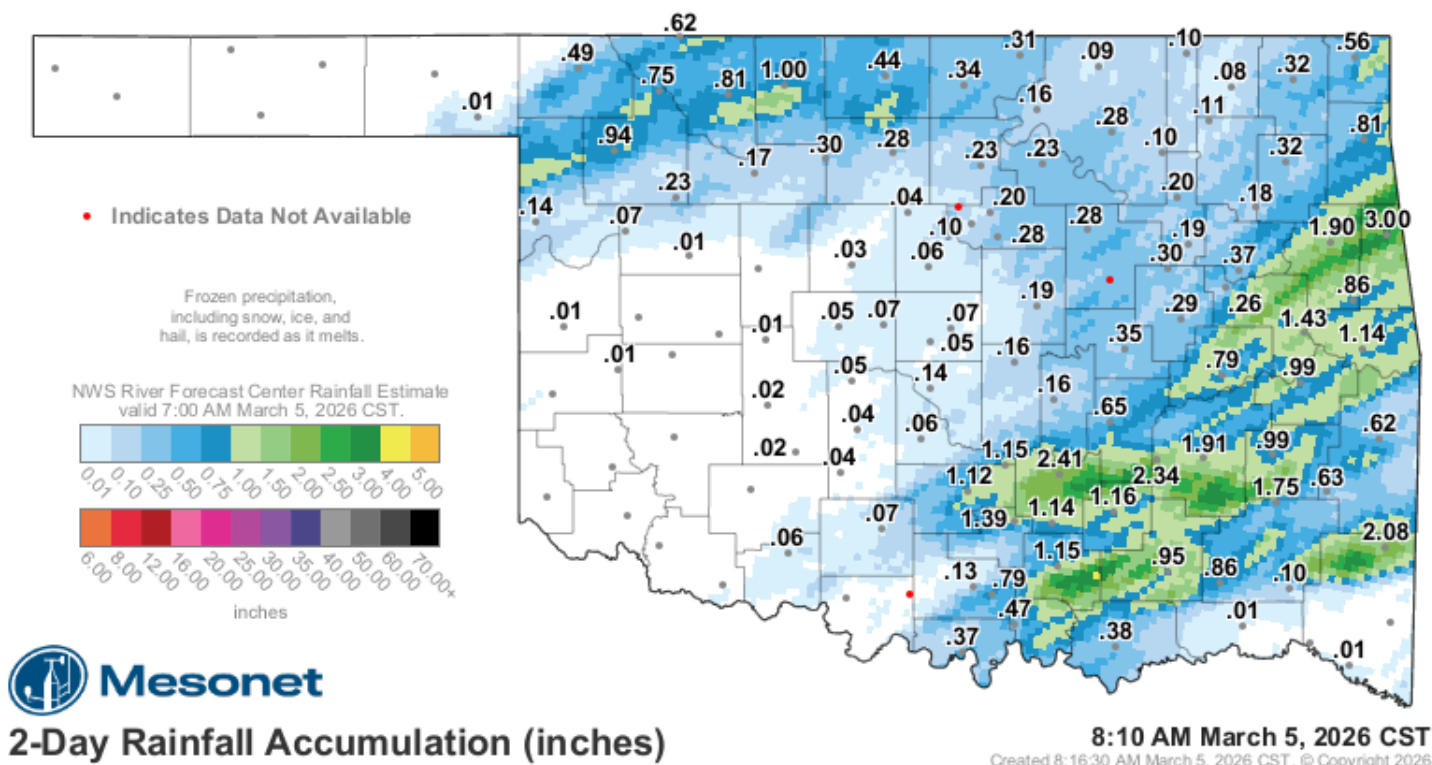


Fig. 6. OK Mesonet (values) and NWS RFC rainfall estimate (image) 48-hour rainfall ending at 8:10 am CST 3/05/2026.

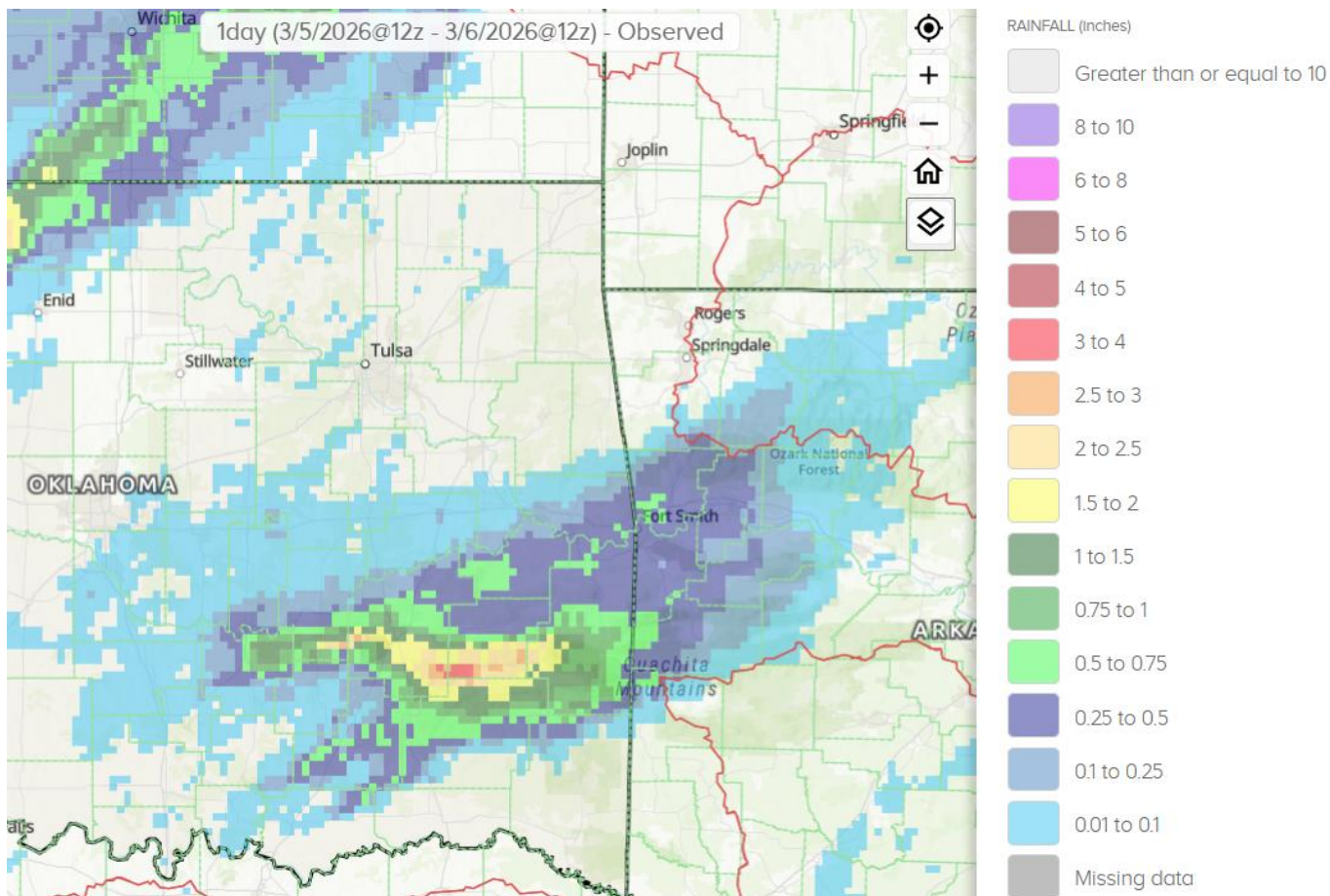


Fig. 7. 24-hour Estimated Observed Rainfall ending at 6am CST 3/06/2026.

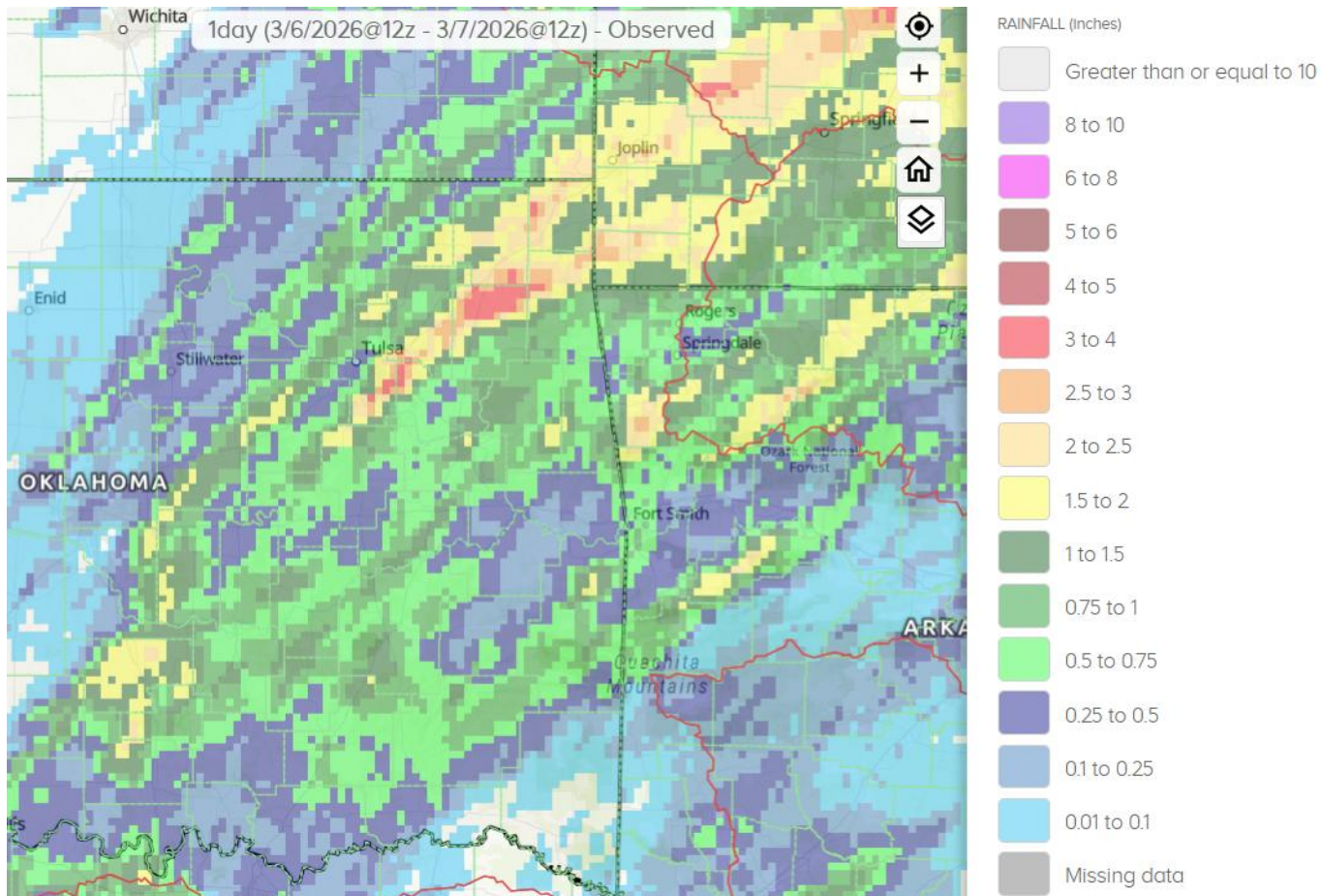


Fig. 8. 24-hour Estimated Observed Rainfall ending at 6am CST 3/07/2026.

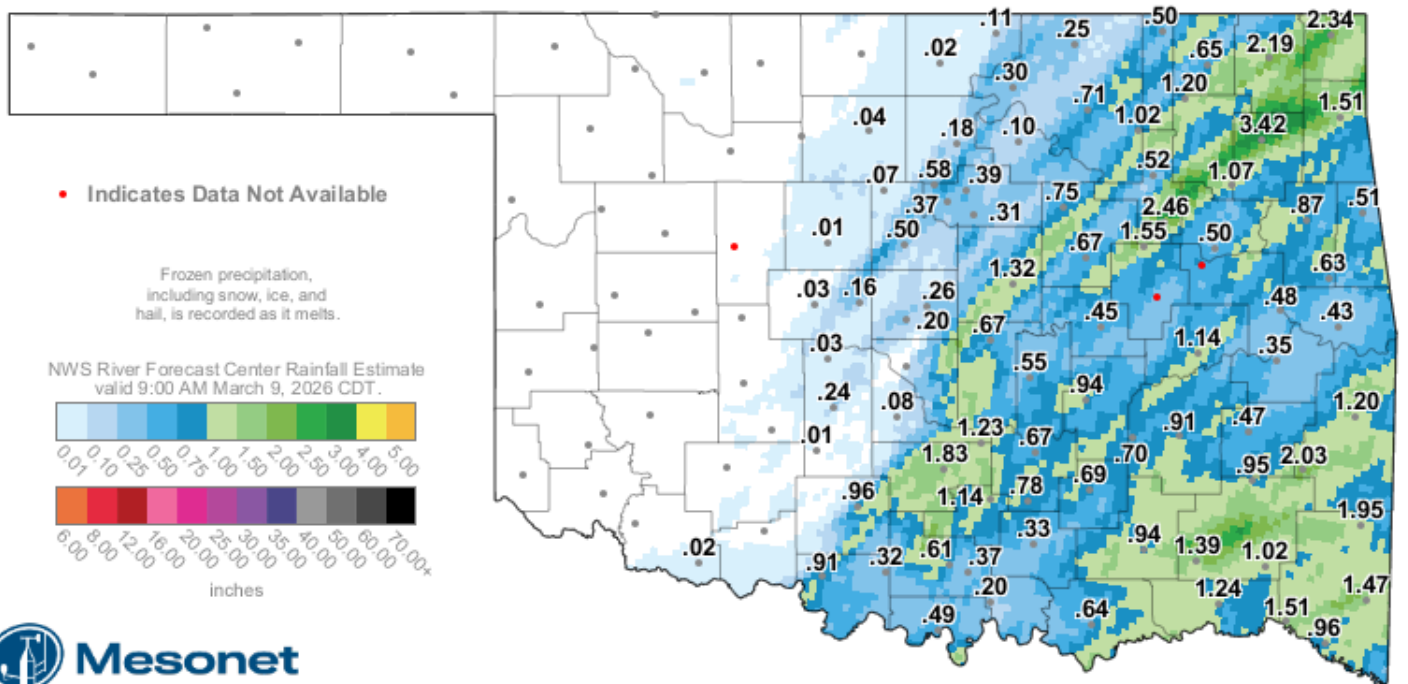


Fig. 9. OK Mesonet (values) and NWS RFC rainfall estimate (image) 72-hour rainfall ending at 9:45 am CDT 3/09/2026.

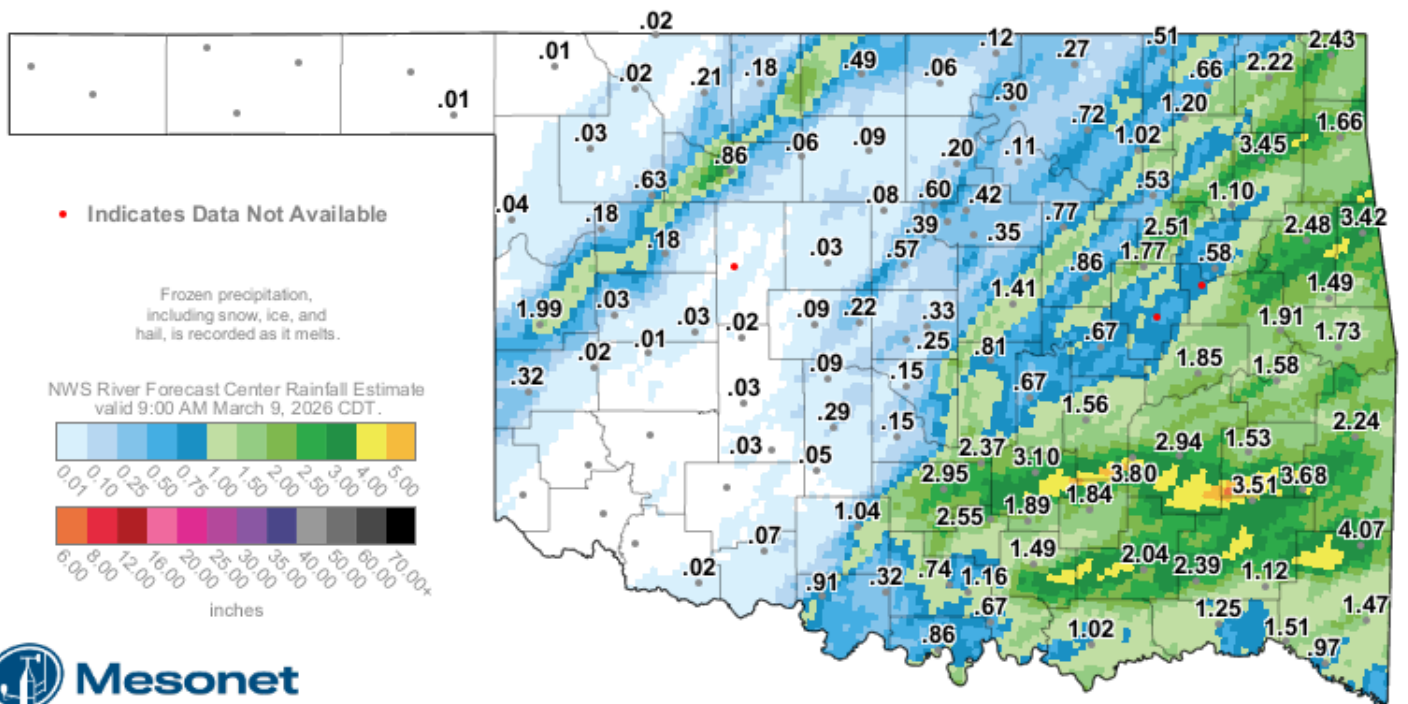


Fig. 10. OK Mesonet (values) and NWS RFC rainfall estimate (image) 5-day rainfall ending at 9:45 am CDT 3/09/2026.

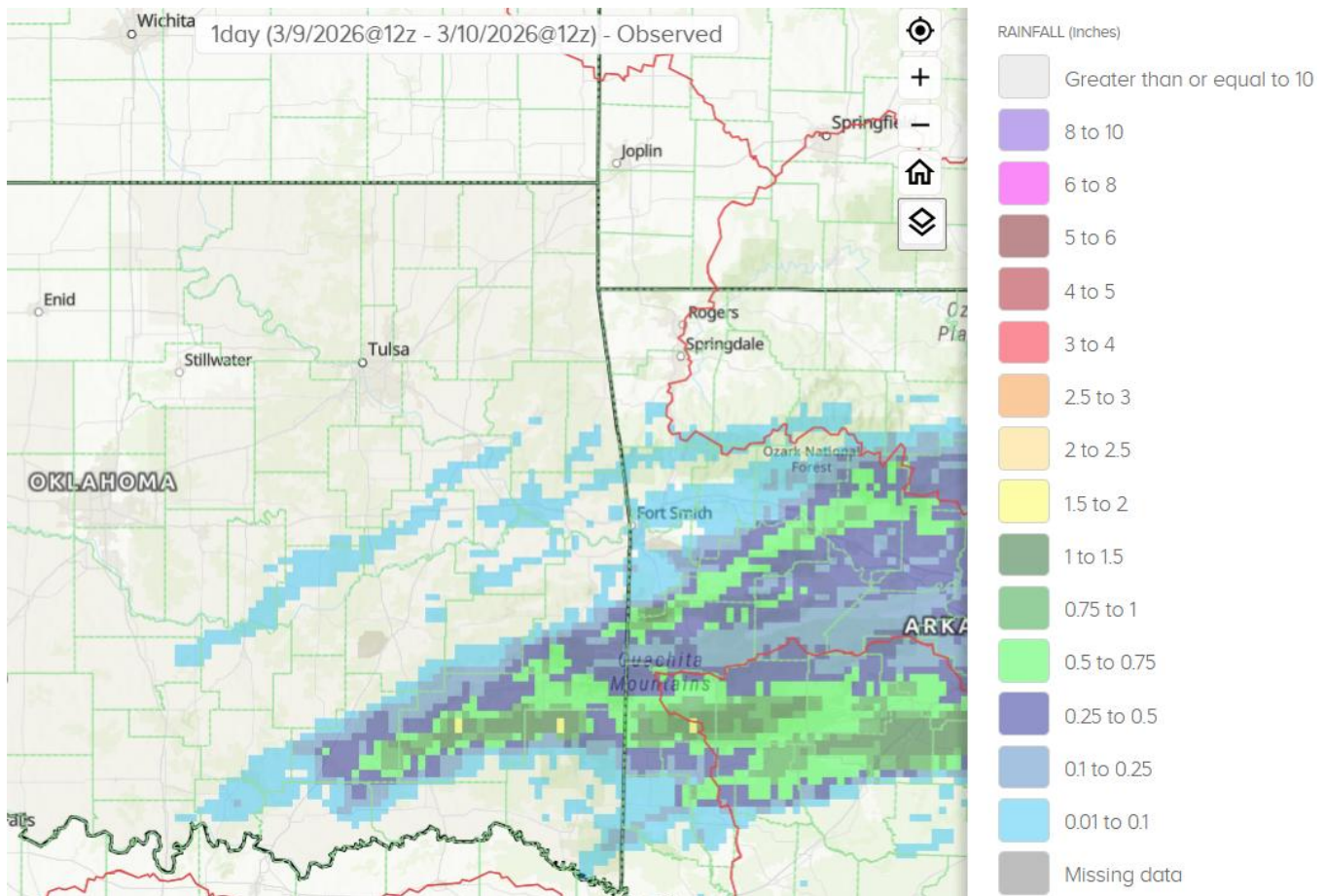


Fig. 11. 24-hour Estimated Observed Rainfall ending at 7am CDT 3/10/2026.

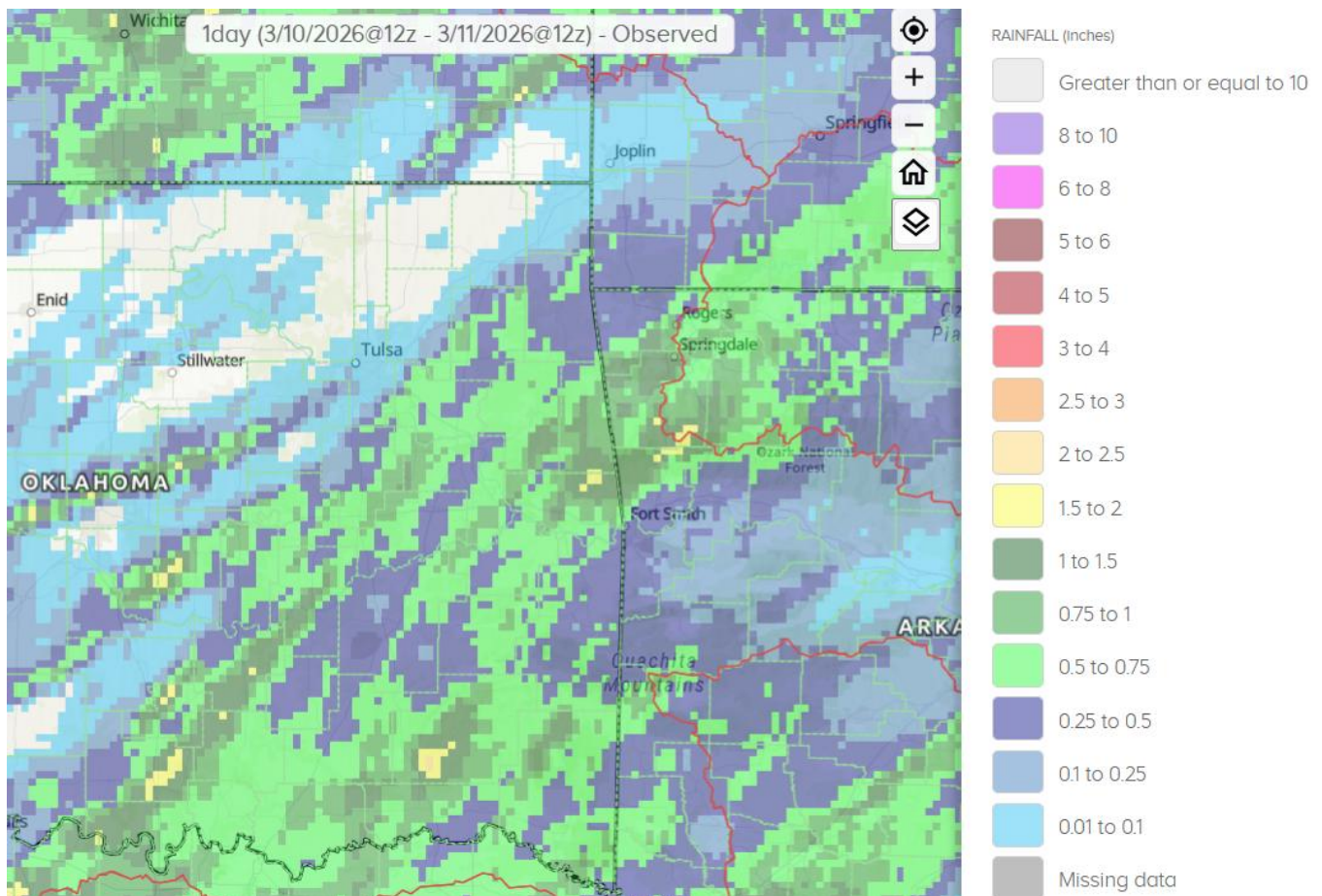


Fig. 12. 24-hour Estimated Observed Rainfall ending at 7am CDT 3/11/2026.

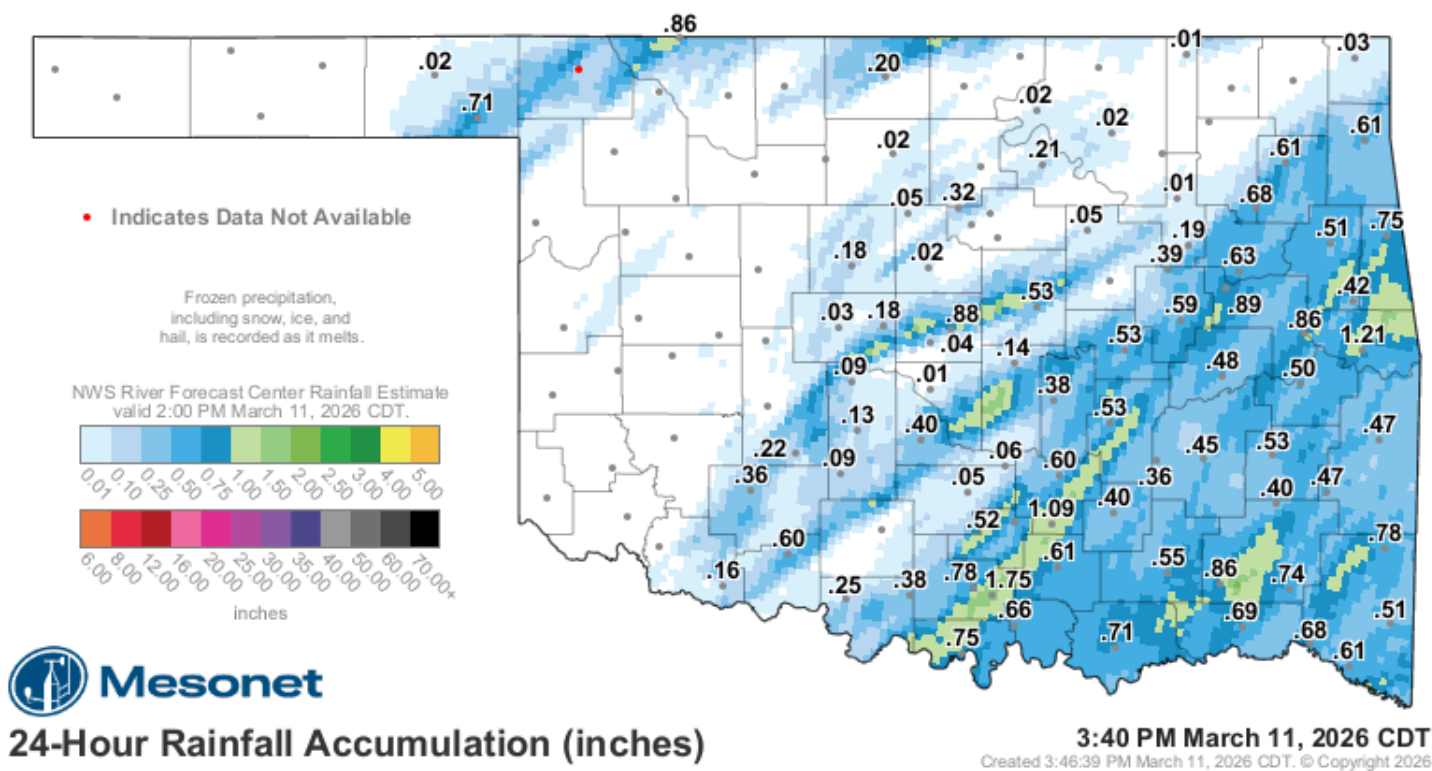


Fig. 13. OK Mesonet (values) and NWS RFC rainfall estimate (image) 24-hour rainfall ending at 3:40 pm CDT 3/11/2026.

Written by:

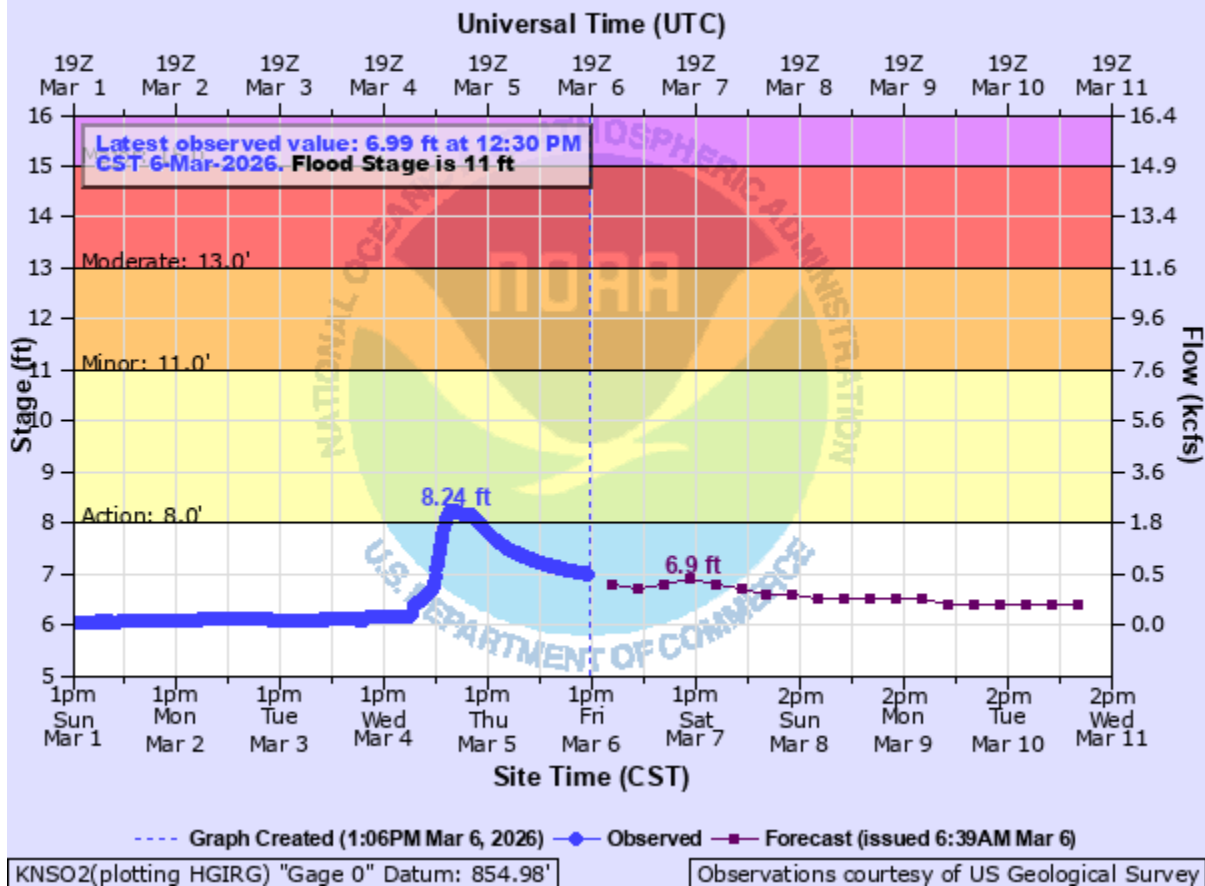
Nicole McGavock
Service Hydrologist
WFO Tulsa

Products issued in March 2026:

- 3 Flash Flood Warnings (FFW)
- 4 Flash Flood Statements (FFS)
- 0 Flash/Areal Flood Watches (FFA) (0 Watch FFA CON/EXT/EXA/EXB/CAN)
- 14 Urban and Small Stream Advisories (FLS)
- 0 Areal Flood Warnings (FLW)
- 0 Areal Flood Statements (FLS)
- 0 River Flood Warnings (FLW) (includes category increases)
- 0 River Flood Statements (FLS)
- 5 River Flood Advisories (FLS) (10 Advisory FLS CON/EXT/CAN)
- 0 River Flood Watches (FFA) (0 Watch FFA CON/EXT/CAN)
- 0 River Statements (RVS)
- 0 Hydrologic Outlooks (ESF)
- 1 Drought Information Statements (DGT)

Preliminary Hydrographs:

FLINT CREEK (OK) NEAR KANSAS



ILLINOIS RIVER (AR OK) NEAR TAHLEQUAH

