



ACOG DROUGHT CONDITIONS

IN CENTRAL OKLAHOMA

Benjamin Matsumura

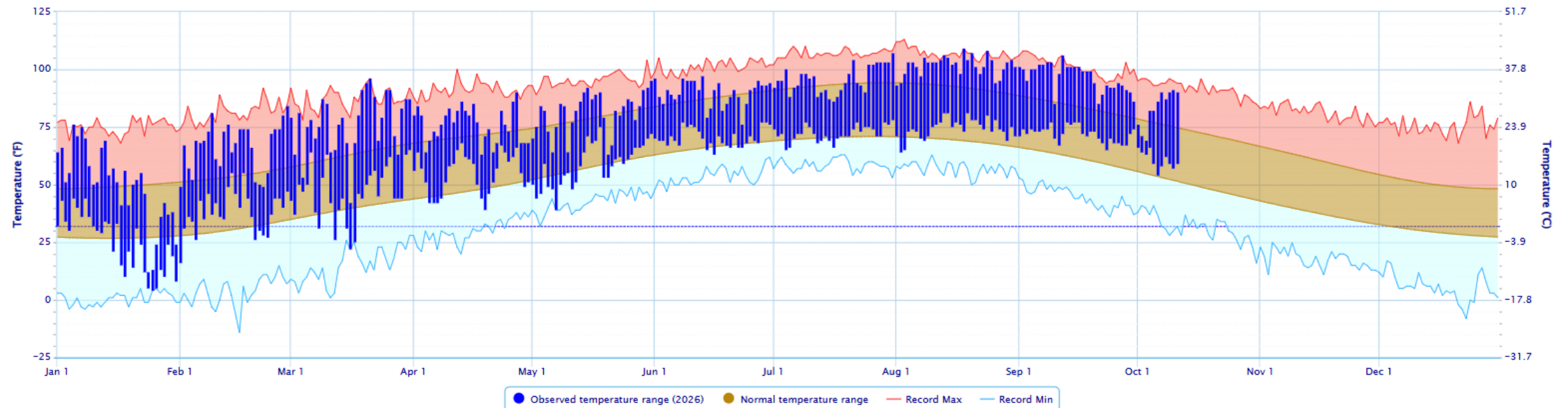
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OCTOBER 2026

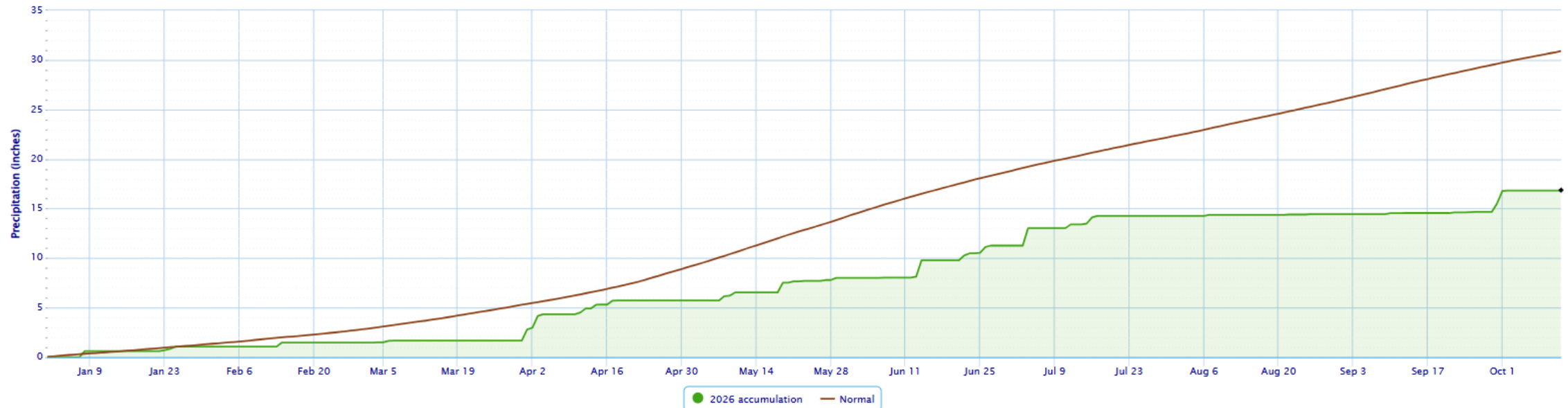
TEMPERATURE PLOT FOR OKLAHOMA CITY, OK - 2026



MONTHLY TEMPERATURE TREND:

September stayed exceptionally warm, with the state's average temperature roughly 10° above normal. This is now the warmest September on Oklahoma record.

PRECIPITATION PLOT FOR OKLAHOMA CITY, OK - 2026



Powered by ACIS

MONTHLY PRECIPITATION TREND:

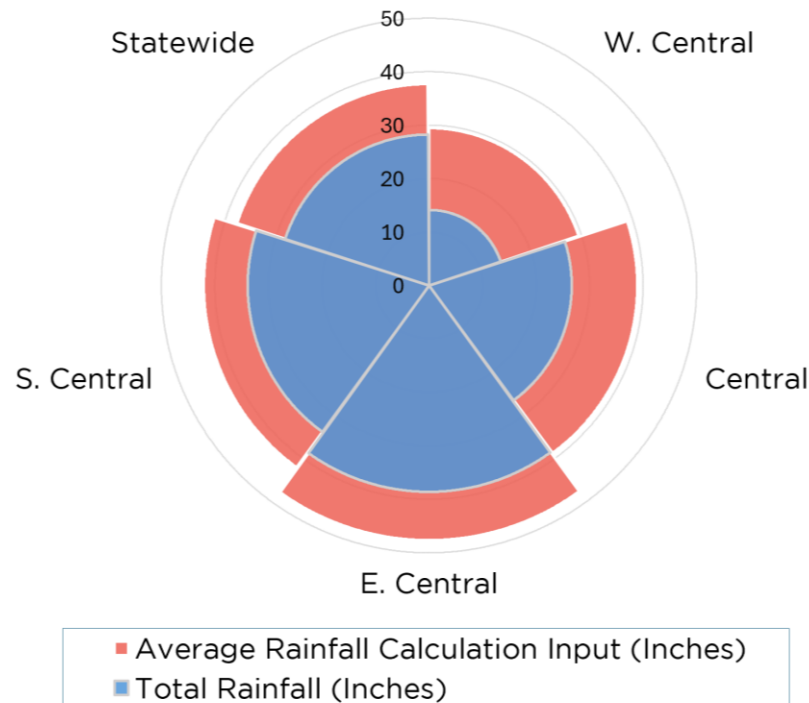
Central Oklahoma stayed mostly dry once again, with heavy rain sneaking in just before the end of the month. The statewide average was 1 inch below normal.

WATER YEAR RAINFALL SUMMARY



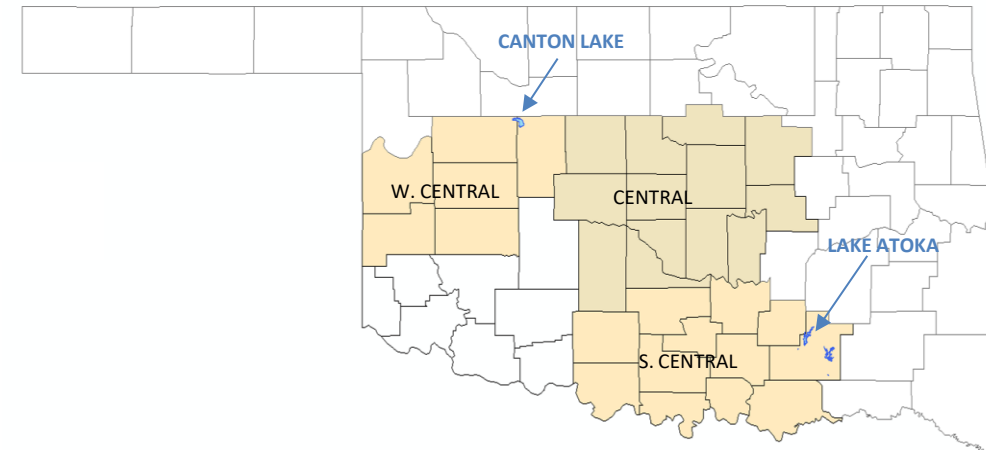
WATER YEAR RAINFALL CHART

Oct 1, 2025 - Oct 11, 2026



CENTRAL OKLAHOMA TAKEAWAY:

- This water year ends with us firmly in the red. For West Central Oklahoma, this is now the driest year on record. For all the other regions, this year made the top 25.
- Ideally, our “Super” El Niño will help make the coming water year much better.



NOAA ONE-MONTH TEMPERATURE OUTLOOK



OCTOBER TEMPERATURE OUTLOOK:

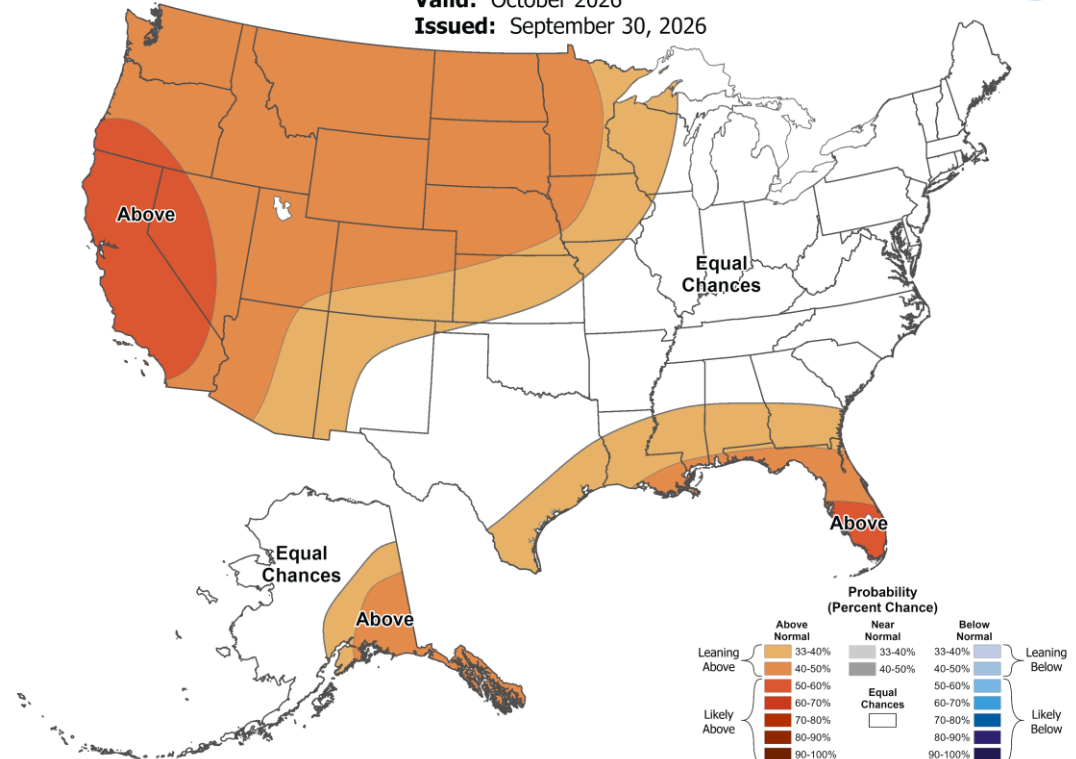
- White areas shown as EC (Equal Chance) on these maps represent areas with no strong climate signals based on current data.
- September's outlook was spot on, and October's EC prediction matches the seasonal variability we're beginning to see.



Monthly Temperature Outlook

Valid: October 2026

Issued: September 30, 2026

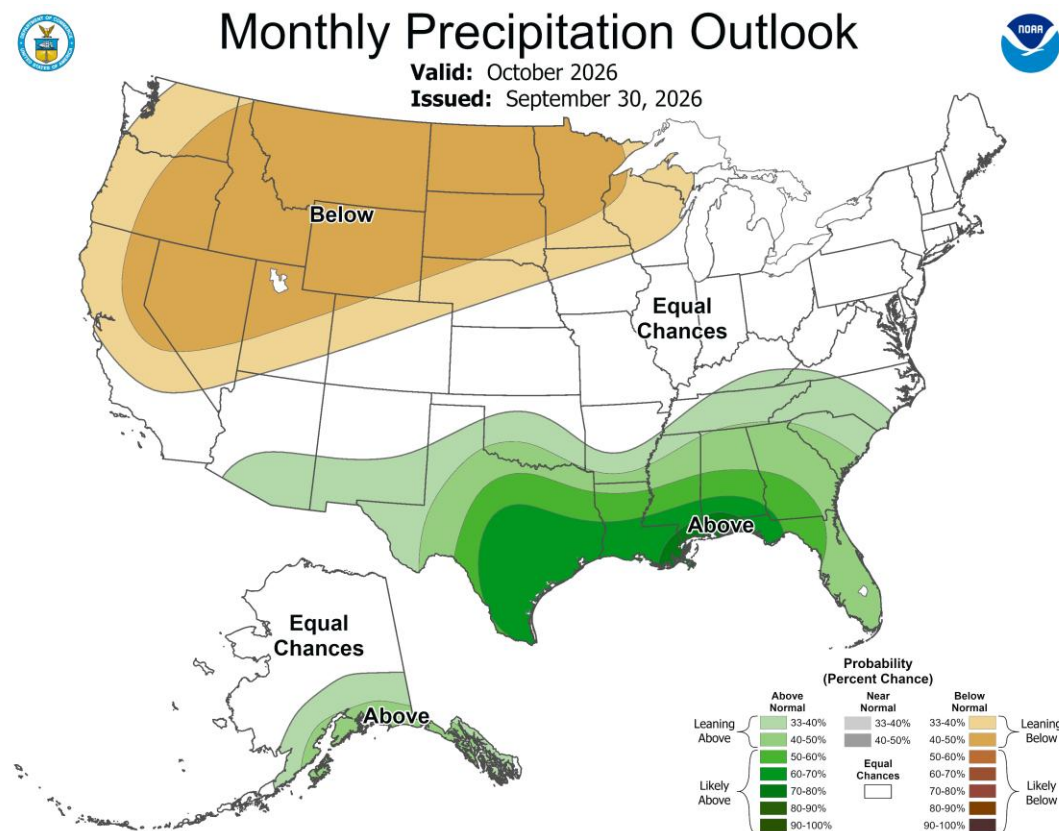


NOAA ONE-MONTH PRECIPITATION OUTLOOK

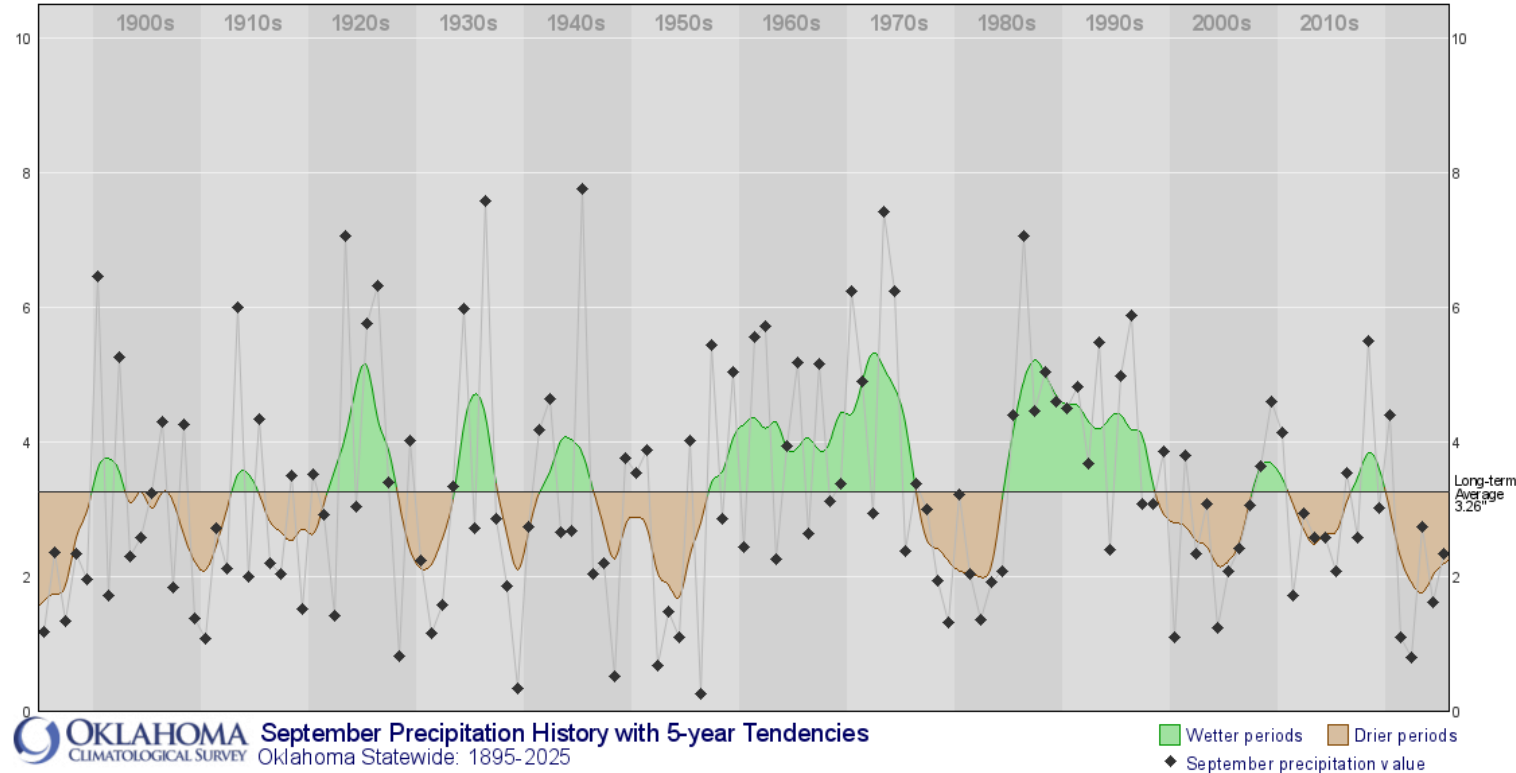


OCTOBER PRECIPITATION OUTLOOK:

- White areas shown as EC (Equal Chance) on these maps represent areas with no strong climate signals based on current data.
- Oklahoma is finally expected to see more precipitation this month. Even if it isn't consistent rainfall, expect a positive shift.



SEPTEMBER PRECIPITATION HISTORY WITH 5-YEAR TENDENCIES



HISTORICAL RAINFALL TRENDS:

- This September continued the dry trend that started in 2020. While a few areas received good rainfall, statewide is still lacking.

U.S. DROUGHT MONITOR - OKLAHOMA

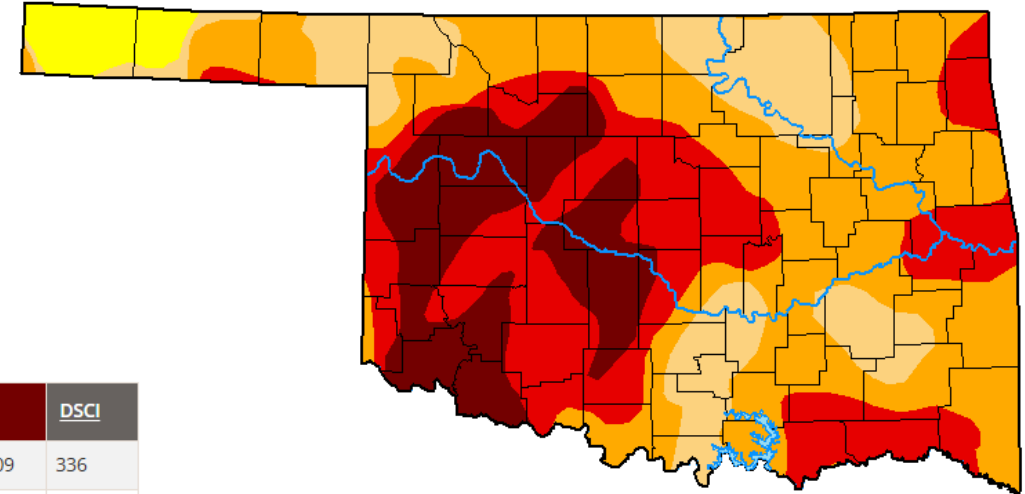


STARTING FROM ONE-HUNDRED:

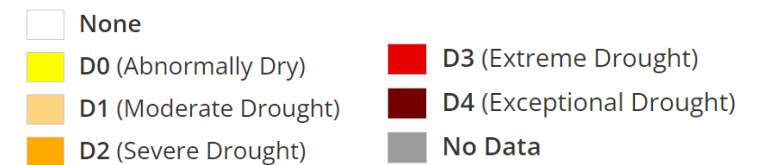
Last water year kicked off with 64.08% of Oklahoma in the no drought category. This year we're starting at 100% in at least D0-D4 levels - but rain these past weeks reduced some drought.

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2026-10-06	0.00	100.00	96.70	80.38	42.54	16.09	336
Last Week to Current	2026-09-29	0.00	100.00	99.82	92.40	55.43	24.39	372
3 Months Ago to Current	2026-07-07	35.42	64.58	43.81	35.33	16.33	1.75	162
Start of Calendar Year to Current	2025-12-30	20.87	79.13	53.74	13.95	4.80	0.00	152
Start of Water Year to Current	2026-09-29	0.00	100.00	99.82	92.40	55.43	24.39	372
One Year Ago to Current	2025-10-07	47.87	52.13	12.10	0.00	0.00	0.00	64

Estimated Population in Drought Areas: **3,742,371**



Intensity

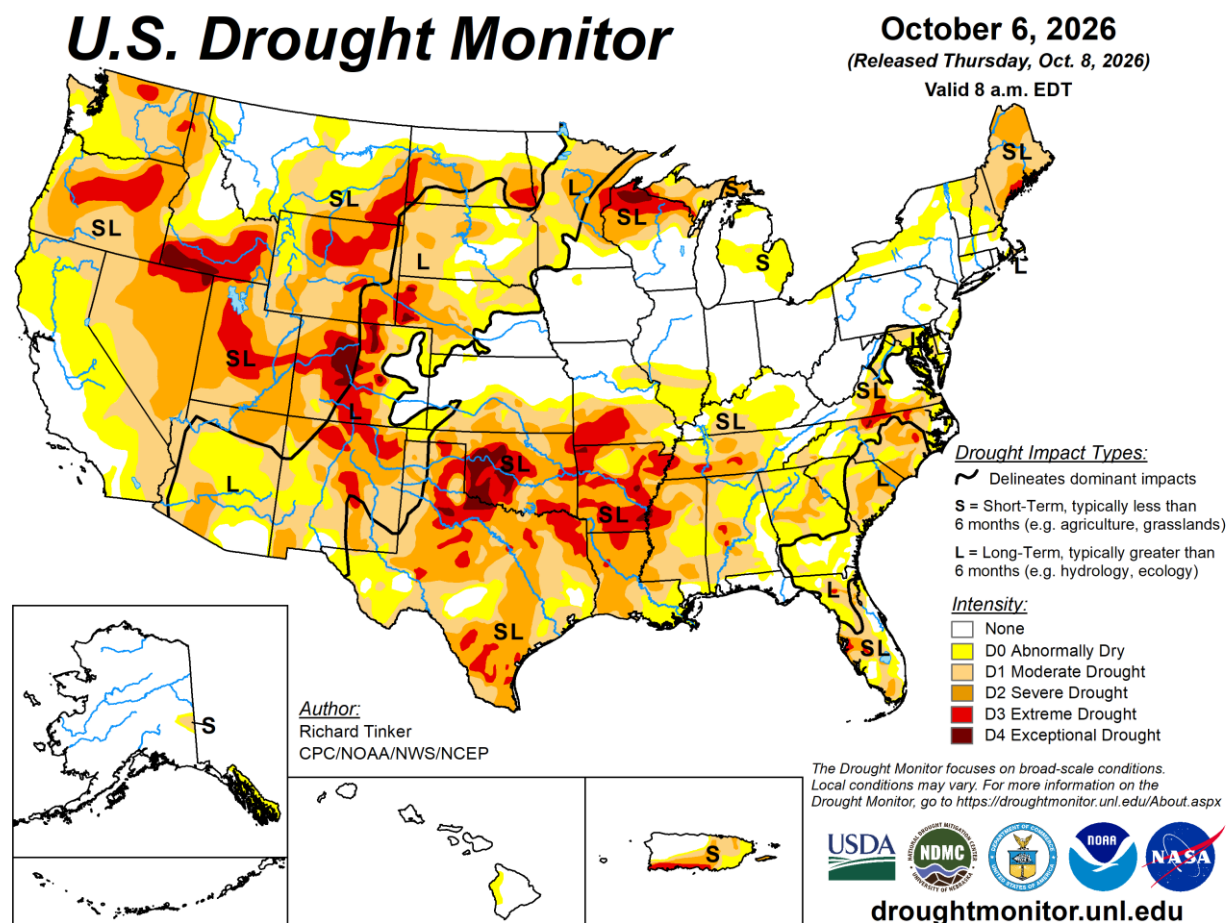


U.S. DROUGHT MONITOR – NATIONWIDE MAP



NATIONAL DROUGHT IMPACTS:

- The national drought coverage has shifted, but overall amounts and intensities remain mostly unchanged.
- Oklahoma is just one of many states hoping to see relief from the emerging El Niño storms.

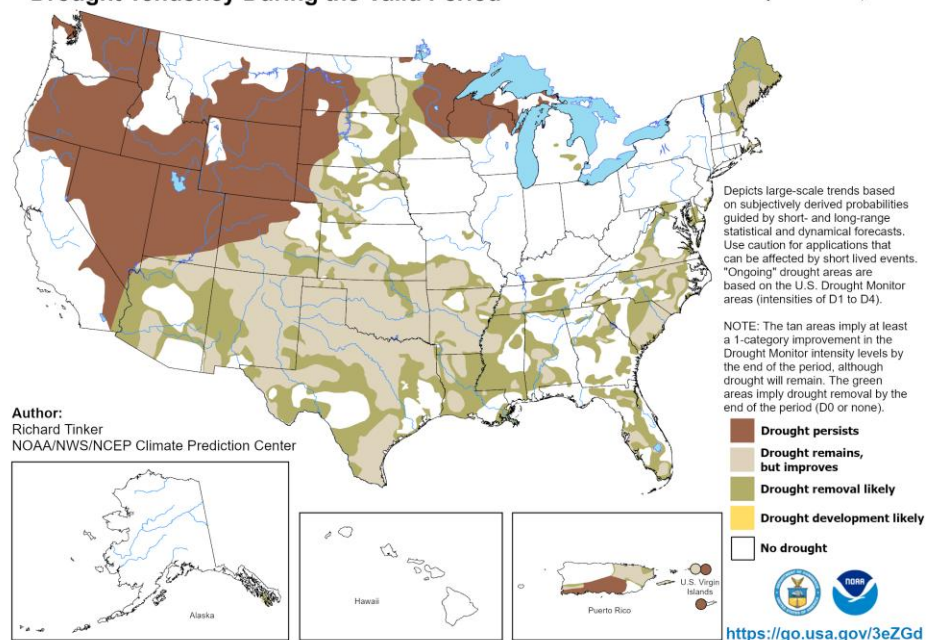


U.S. DROUGHT OUTLOOK MAPS



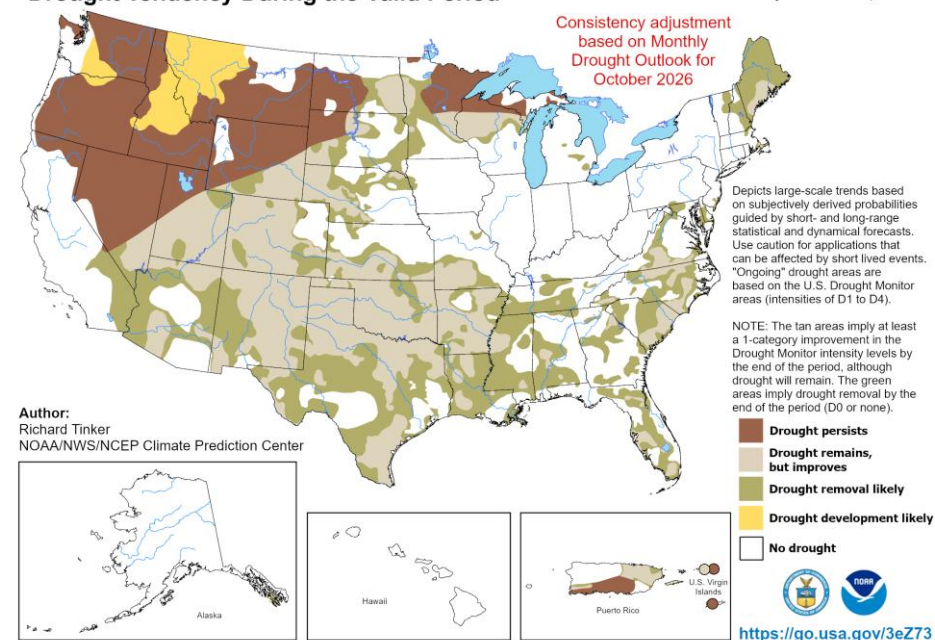
U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for October 2026
Released September 30, 2026



U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for October 1 - December 31, 2026
Released September 30, 2026



U.S. DROUGHT OUTLOOK SUMMARY:

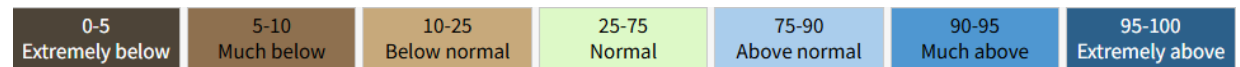
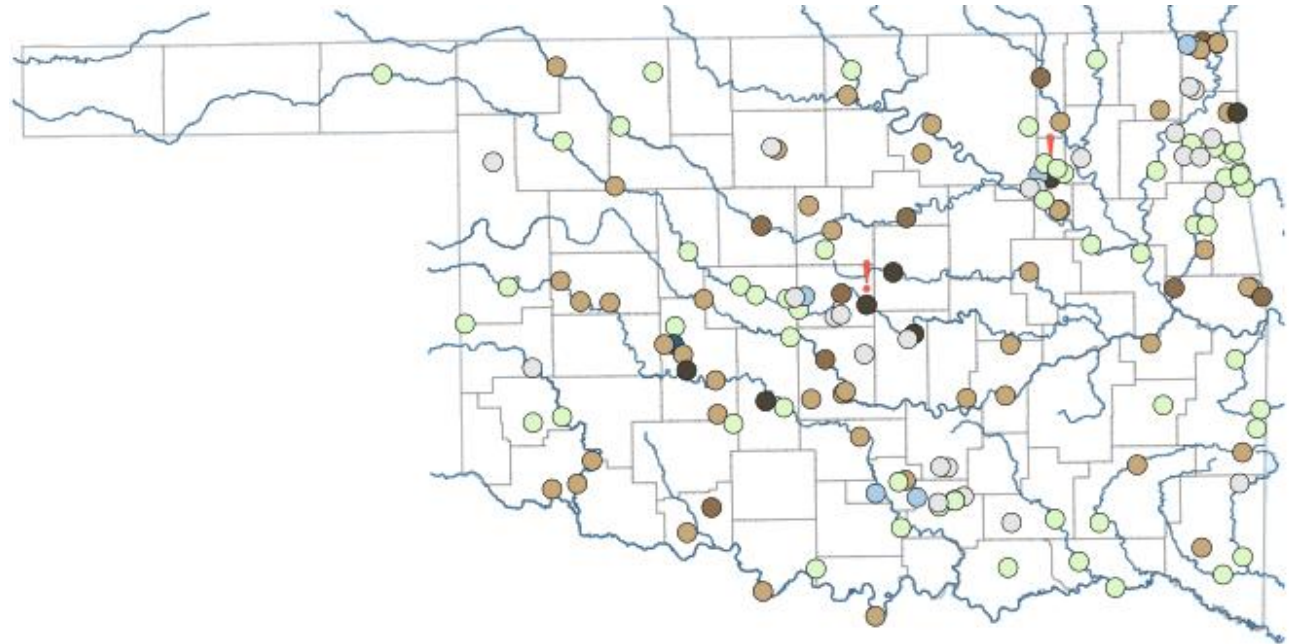
The monthly and seasonal drought outlook maps look very promising, with large swaths of drought expected to improve throughout October.

USGS STREAMFLOW DATA

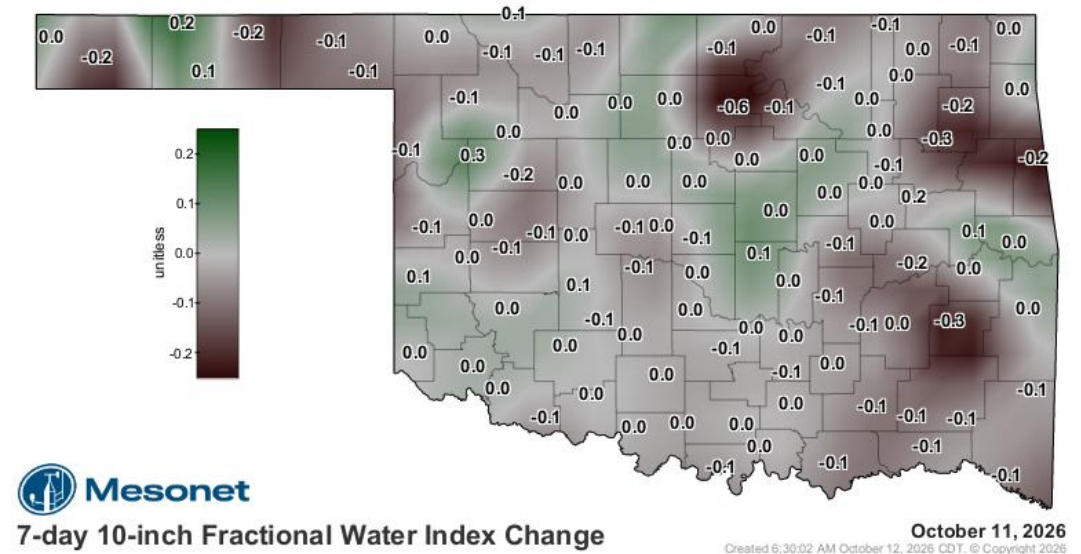
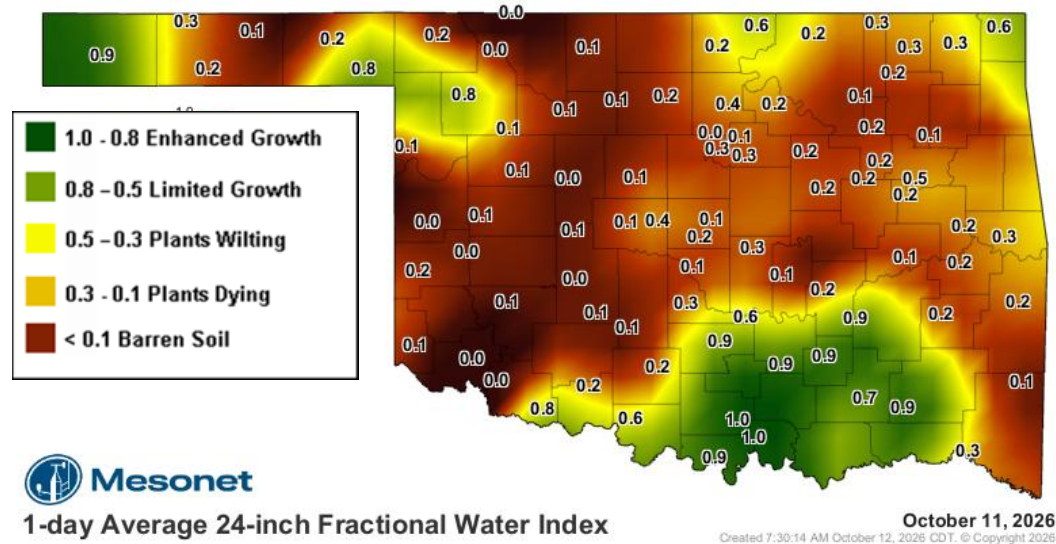


STREAMFLOW CONDITIONS:

- Streamflow ratings are made by comparing current readings against historic 120-day readings.
- Roughly half the streams across Oklahoma remain below their standard conditions.
- Thankfully, rain at the tail end of September has improved flows.



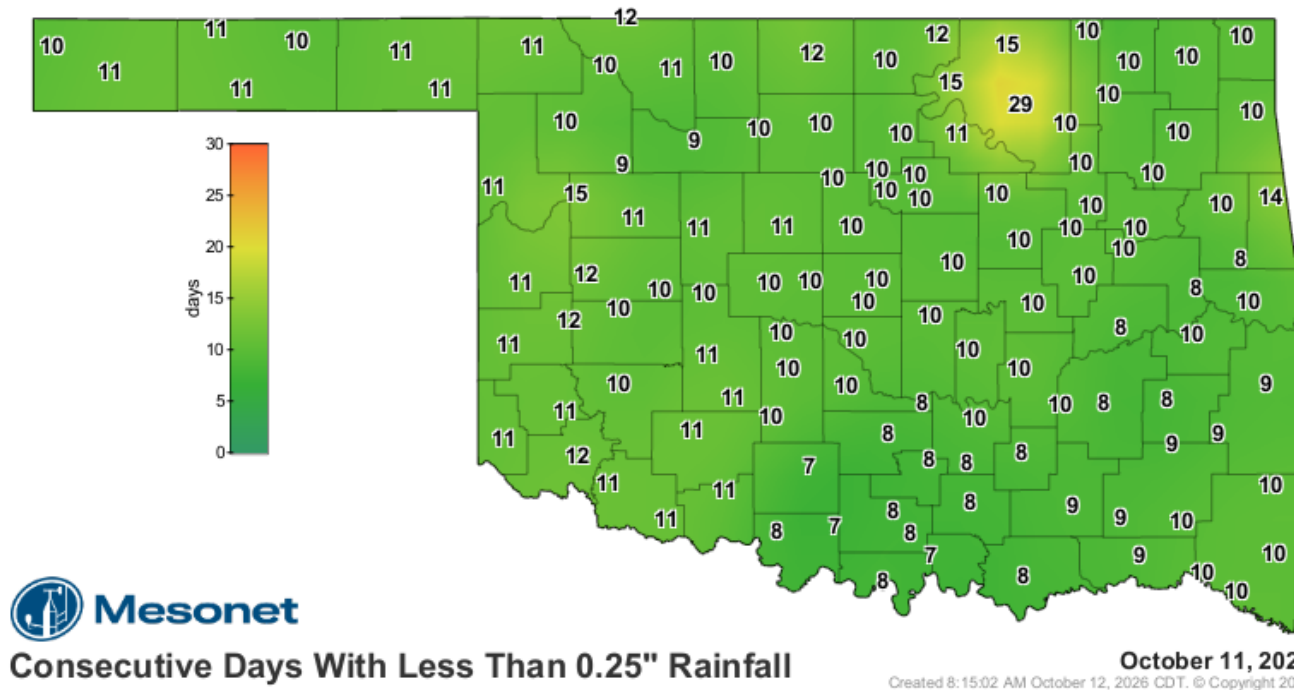
SOIL MOISTURE MAPS



SHORT-TERM SOIL MOISTURE STATUS:

Although we finally received some rainfall at the end of September, it is still not enough to fully rehydrate our dry soil. If October forecasts hold true, we should see great moisture improvements at depth.

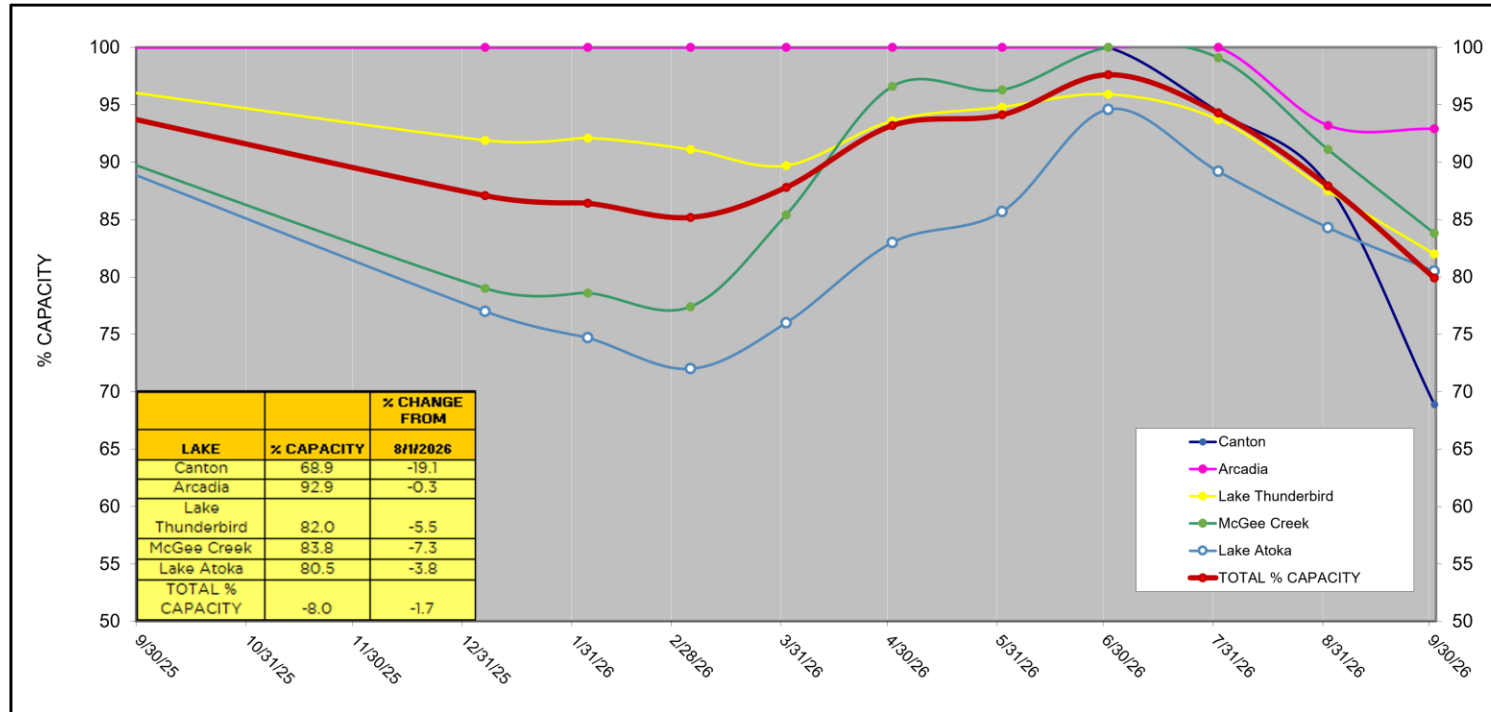
DAYS SINCE LAST RAINFALL



GREEN ONCE AGAIN:

- The late-September showers managed to reach nearly every part of Oklahoma.
- October rain and cooling temperatures may finally lift us out of severe drought, if these improved conditions remain consistent.

SURFACE WATER CONSERVATION CAPACITY – CENTRAL OK RESERVOIRS



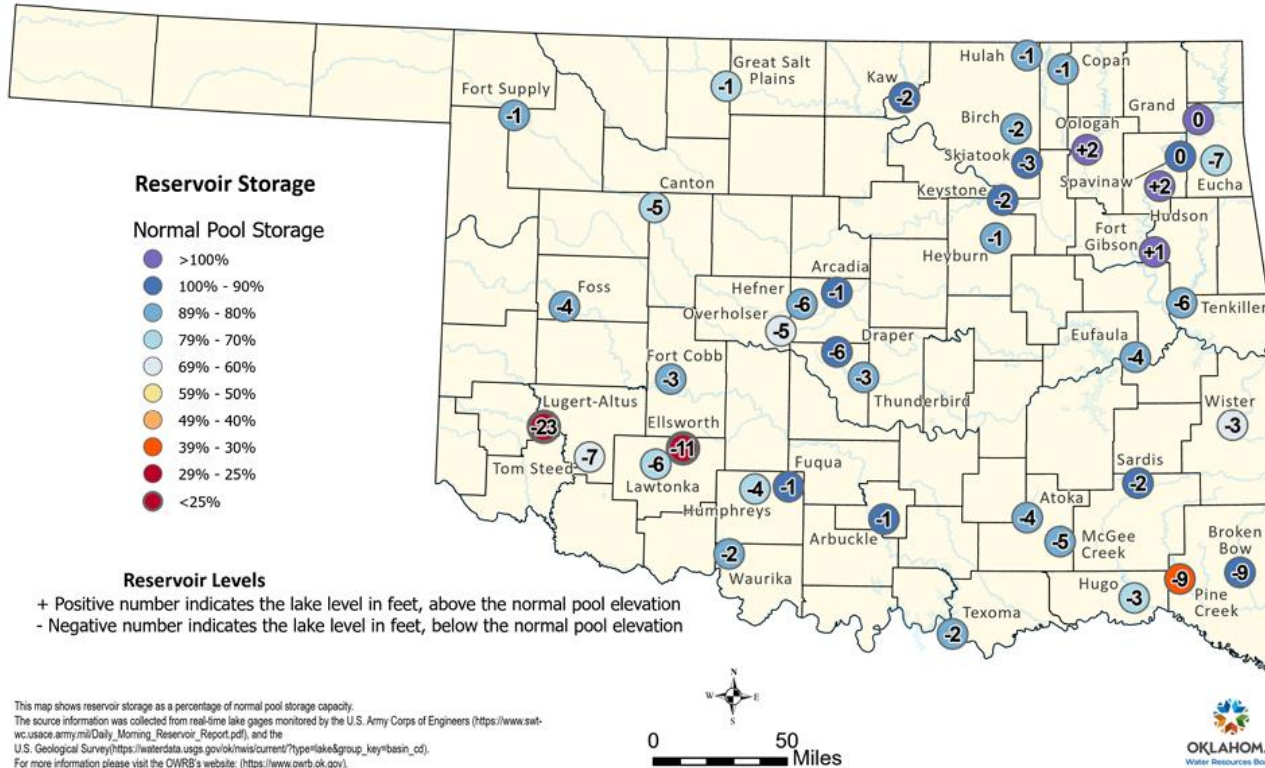
RESERVOIR TRENDS:

- Most notable in September's graph is the release from Canton Lake in Lake Hefner.
- While not as dramatic, our other reservoirs also remain in decline thanks to the drought and heat.

OKLAHOMA RESERVOIR LEVELS AND STORAGE



Oklahoma Reservoir Levels and Storage as of 10/5/2026



CURRENT RESERVOIR CONDITIONS:

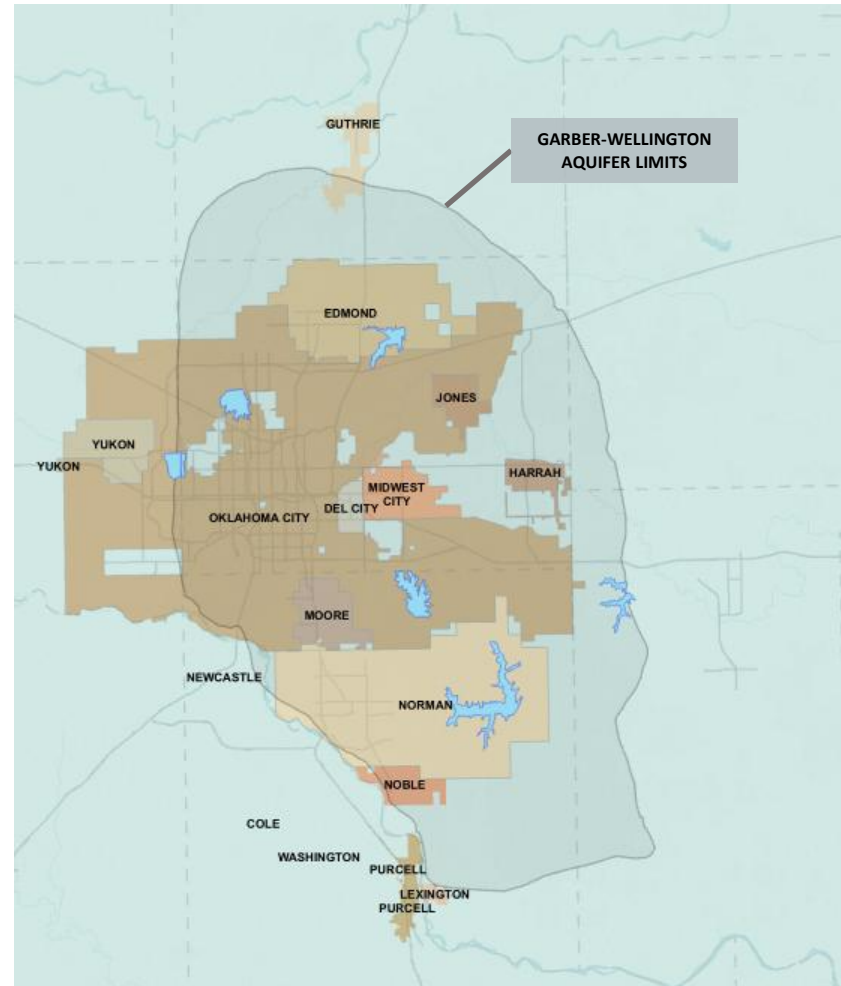
- September continued August's trend of decreasing reservoir levels across the state.
- If the forecasts hold true, we should see these levels improve as October brings stronger rain throughout Oklahoma.

MONTHLY AQUIFER RECHARGE

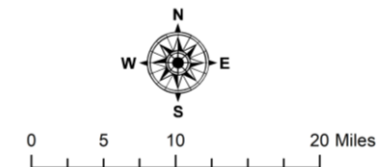
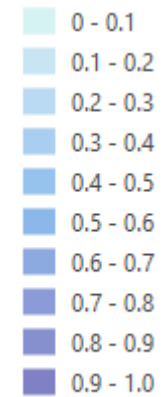


FEELING (LIGHT) BLUE:

- The heat and lack of rain have culminated in zero recharge everywhere on our map.
- We may start seeing limited recharge on next month's map, but it will take time to rehydrate our soils and get water flowing to our aquifer.



Recharge in Inches

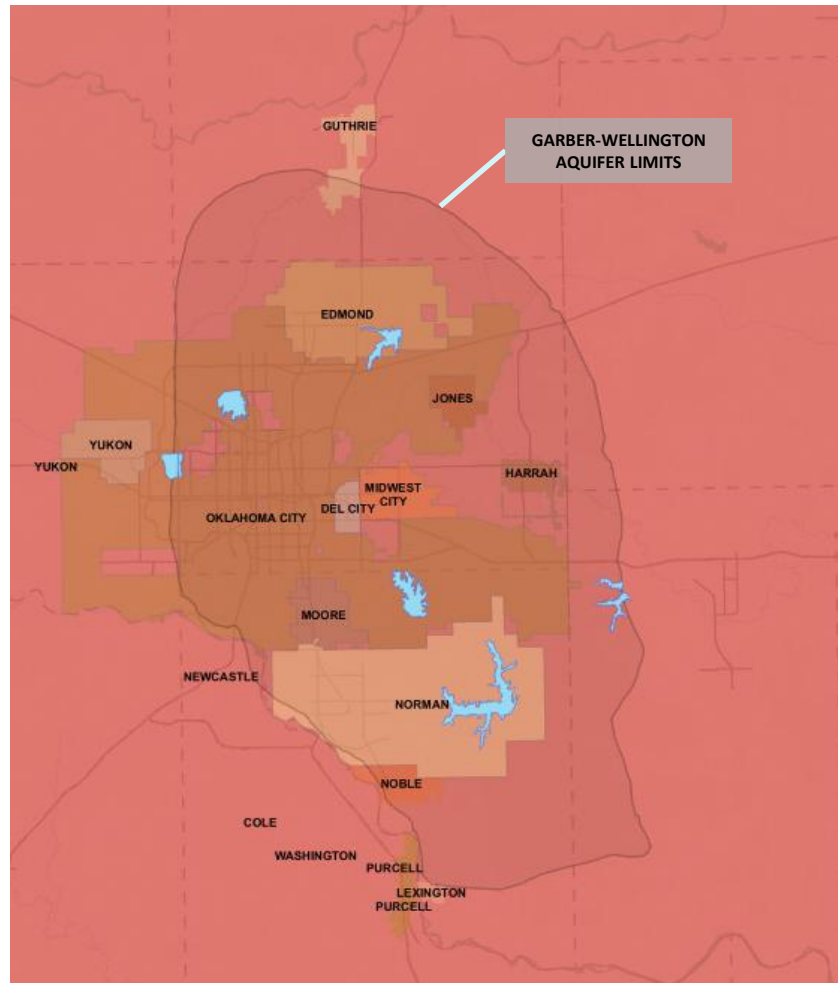


12-MONTH CUMULATIVE AQUIFER RECHARGE

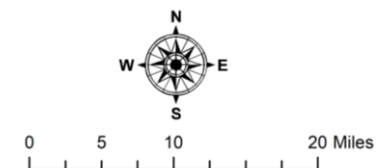
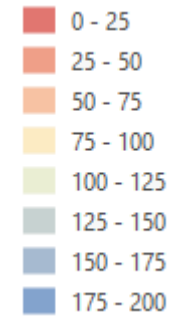


ZERO AVERAGE:

- Any signs of aquifer recharge have unfortunately exited our cumulative map.
- If the weather wasn't a good enough reminder, this map shows just how volatile Oklahoma's climate can be. The same map last year was all 75% or above.



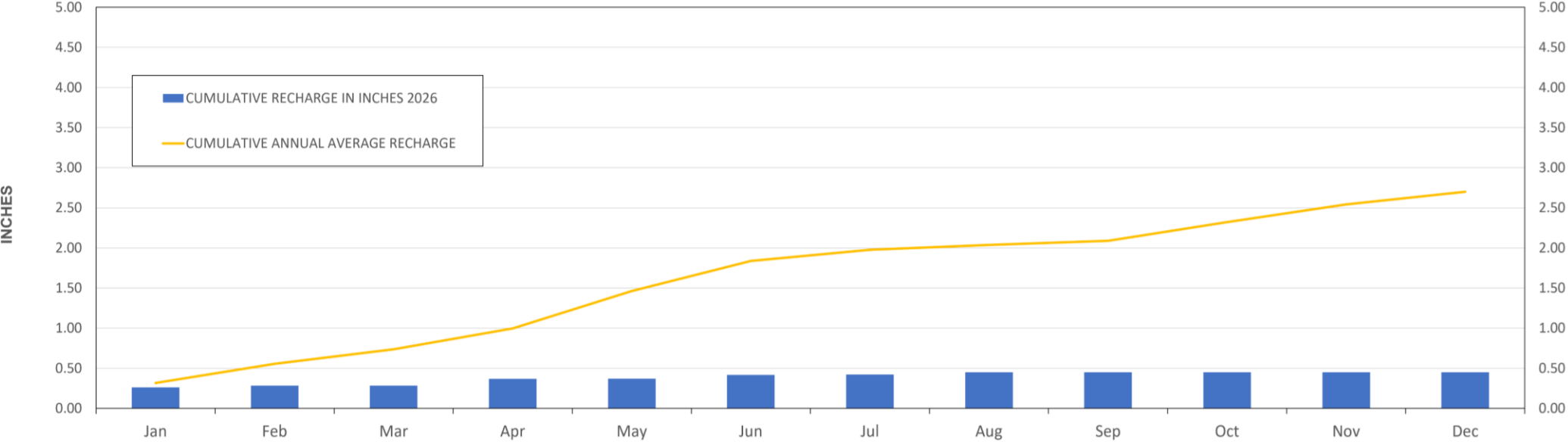
Percent of
Cumulative
Recharge



RECHARGE CHARTS: CENTRAL OKLAHOMA AQUIFER SYSTEM



CUMULATIVE RECHARGE FOR THE CENTRAL OKLAHOMA AQUIFER

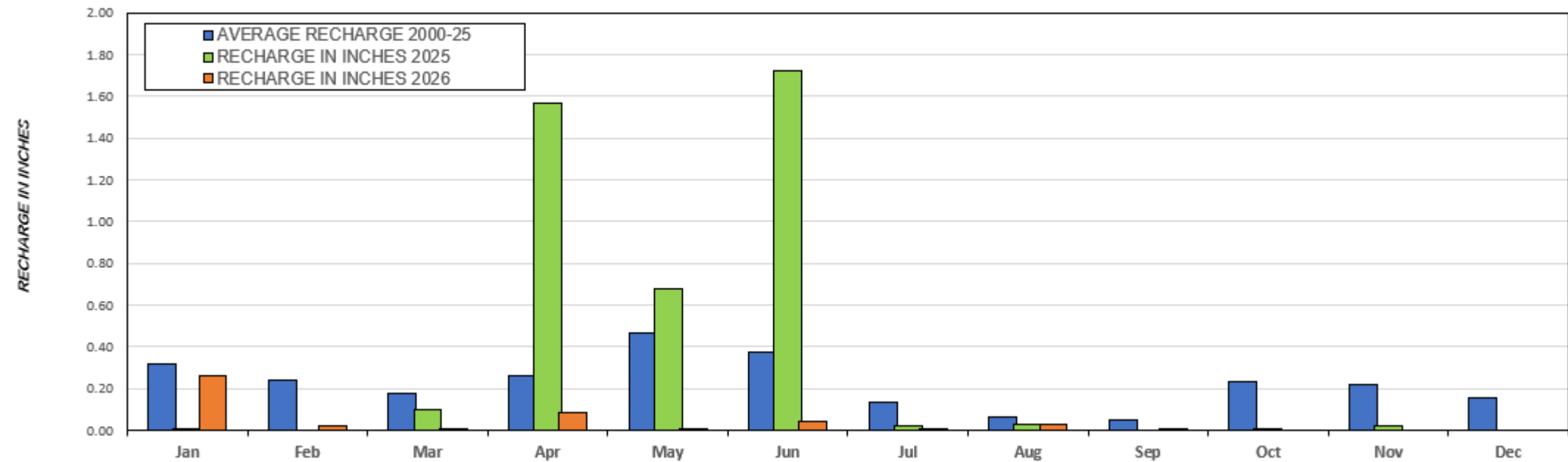


You won't see any change on September's bar, as the aquifer received a whopping 0.000171 inches of recharge. This is what a drought looks like in graph form.

RECHARGE CHARTS: CENTRAL OKLAHOMA AQUIFER SYSTEM CONT.

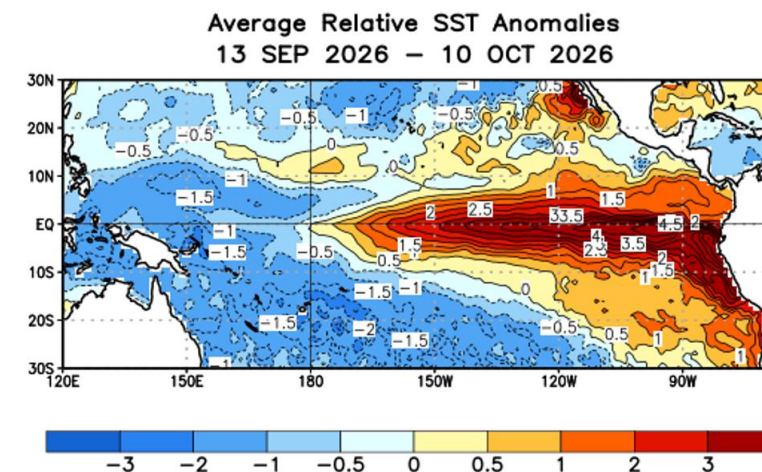
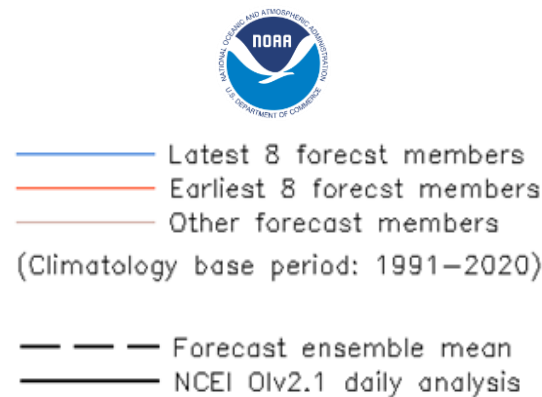
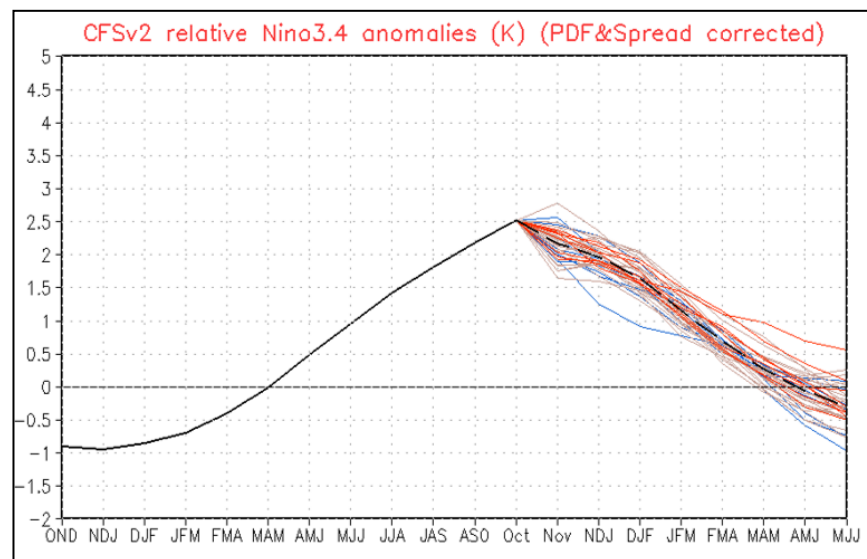


MONTHLY AQUIFER RECHARGE 2026



September has historically been our lowest month for aquifer recharge, and this year is no exception. But with help from El Niño, we could beat the averages on our final months of 2026.

ENSO CYCLE – CURRENT PATTERNS AND PREDICTIONS



CLIMATE PATTERN UPDATE (ENSO):

El Niño is still expected to reach historic levels by the end of the year. Hopefully, that means historic drought relief for Oklahoma.



SURVIVING SEPTEMBER

- September's statewide temperature average was lower than August's, but only by 4°. That made this September the warmest on Oklahoma record.
- The October predictions are still looking promising, and we've already seen some rain come through this month. But it will take more than a few storms to recover from our drought.
- El Niño is still on track to reach historic levels by the end of this year and is expected to stick around through part of 2027. Ideally, that will bring plenty of Winter and Spring moisture.
- Oklahoma's location creates an interesting, variable climate. Next year is looking better, but we must continue planning for dry years like this. If this drought exposed challenges in your systems, reach out so we can get them fixed!

THANK YOU!

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ASSOCIATION OF
CENTRAL OKLAHOMA
GOVERNMENTS

