



Drought Information Statement for Eastern OK & Northwestern AR

Valid December 8, 2023

Issued By: WFO Tulsa, OK

Contact Information: sr-tsa.webmaster@noaa.gov

- This product will be updated ~Jan. 19, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/tsa/DroughtInformationStatement> for previous statements.



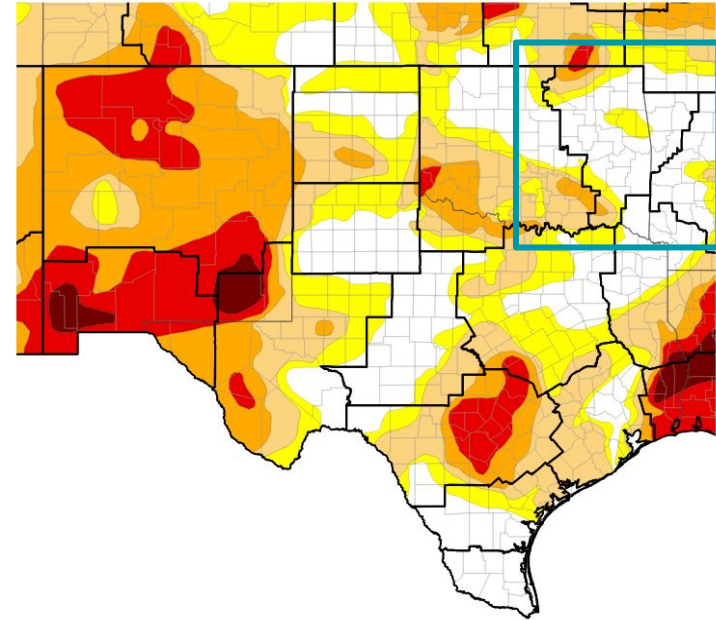


U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for the southern U.S.

- Moderate (D1) to Extreme (D3) Drought conditions continue across northeast OK and southeast OK as of December 5, 2023.
- Drought intensity and Extent
 - D3 (Extreme Drought): Osage County in eastern OK.
 - D2 (Severe Drought): Washington and Osage, Pushmataha, and Choctaw Counties in eastern OK.
 - D1 (Moderate Drought): Nowata, Washington, Osage, Pawnee, Pittsburg, Pushmataha, and Choctaw Counties in eastern OK.
 - D0: (Abnormally Dry): Ottawa, Craig, Nowata, Washington, Osage, Pawnee, Rogers, Mayes, Wagoner, Cherokee, Adair, Pittsburg, Latimer, Pushmataha, and Choctaw Counties in eastern OK and Washington and Crawford Counties in northwest AR.

U.S. Drought Monitor



U.S. Drought Monitor



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 12/05/23



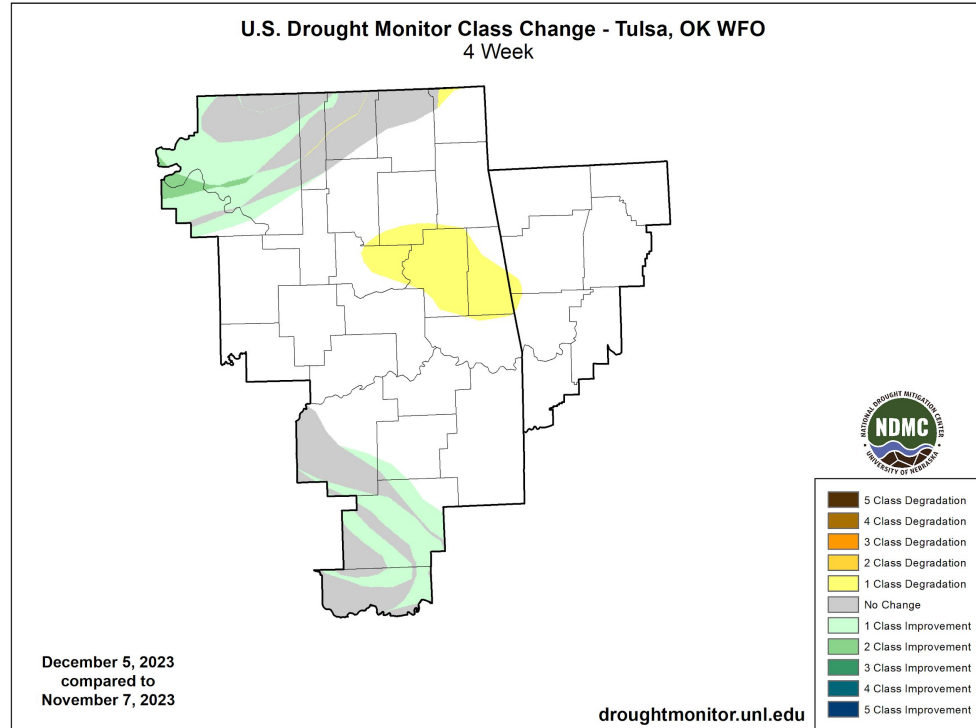


Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for eastern Oklahoma and northwestern Arkansas

Four Week Drought Monitor Class Change:

- Drought Worsened: Ottawa, Wagoner, Rogers, Mayes, Cherokee, and Adair Counties in eastern OK and Washington and Crawford Counties in northwest AR.
- Drought Improved: Osage, Pawnee, Washington, Nowata, Pittsburg, Latimer, Pushmataha, and Choctaw Counties in eastern OK.
- No Change: Osage, Pawnee, Washington, Rogers, Nowata, Craig, Ottawa, Pittsburg, Pushmataha, and Choctaw Counties in eastern OK.

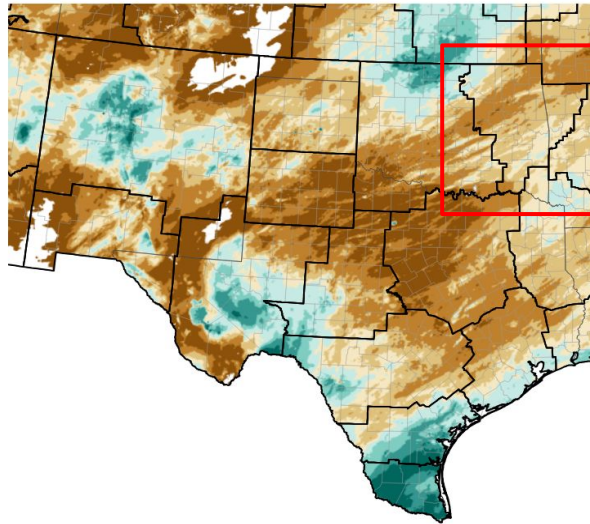




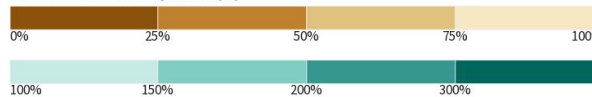
Precipitation

- For the 7-day period through the morning of Dec. 8, 2023, 0 to 0.10 inches of rain has fallen across eastern OK and northwest AR.
- For the last 30 days through the morning of Dec. 8, 2023, rainfall totals across the area ranged from 0.5” to near 6”, with much of the area receiving 1”-4”. This is below normal rainfall for nearly all of eastern OK and northwest AR.

30-Day Percent of Normal Precipitation

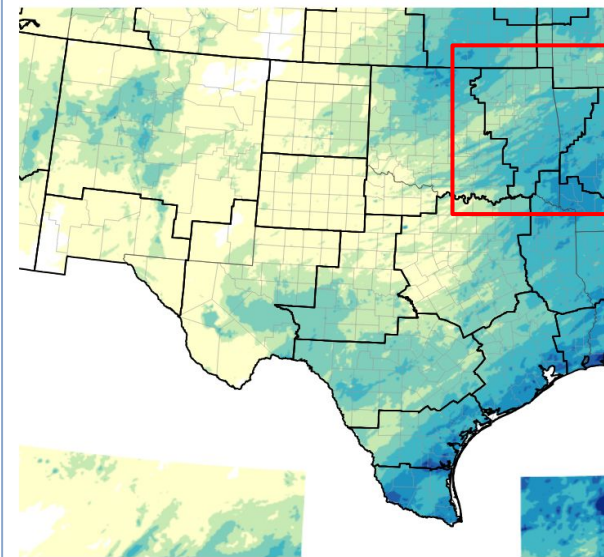


Percent of Normal Precipitation (%)



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov Last Updated: 12/07/23

30-Day Precipitation Accumulations (Inches)



Inches of Precipitation



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov Last Updated: 12/07/23





Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- Below normal streamflow and lake levels were present across portions of eastern OK and northwest AR.
- According to the USACE, as of early November 2023, Copan Lake's water level is the lowest recorded since completion of the dam in 1983.

Agricultural Impacts

- Below normal soil moisture was occurring across far northeast OK.
- Producers in west central AR are reporting poor range conditions, with pastures providing marginal feed and supplemental feeding is required. These producers are also reporting low pond conditions and the need to sell off livestock.

Fire Hazard Impacts

- There are no known impacts at this time; however, wildfire potential will be influenced by daily weather conditions.

Recreational Impacts

- According to the USACE, the receding Copan Lake level has negatively affected their recreation mission, resulting in the closure of the swim beach, the designated area for swimming, and campgrounds as of October 31, 2023 due to safety concerns related to low lake levels.

Mitigation Actions

- The Town of Copan, OK remains under an Emergency Proclamation that was declared on Sep. 13, 2023 due to a water shortage as the water supply at Copan Lake has reached a critically low level, threatening the town's ability to take in water for treatment and distribution. This proclamation impacts water customers in the Town of Copan, Washington County Rural Water District #7, and Hulah Water District #20.
- The City of Bartlesville, OK is also under water restrictions according to Stage 3 of the Water Shortage Ordinance as of December 4, 2023.

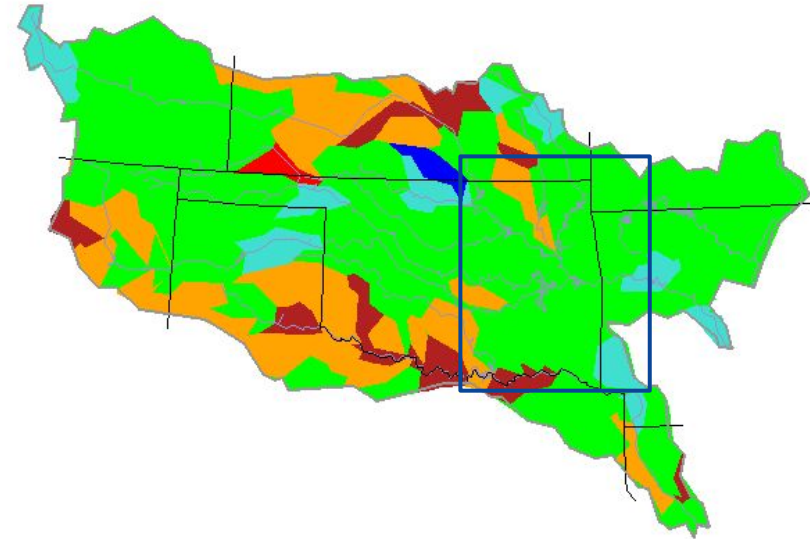




Hydrologic Conditions and Impacts

- According to the USGS, the [7-day average streamflow](#) was below below normal across the Verdigris River basin in eastern OK (image on the right).
- According to the USACE, the following reservoirs were more than 3% below the top of their conservation pools as of December 8, 2023:
 - Copan Lake 34%
 - Skiatook Lake 70%
 - Birch Lake 70%
 - Beaver Lake 78%
 - Hulah Lake 79%
 - Eufaula Lake 81%
 - Keystone Lake 84%
 - Heyburn Lake 89%
 - Oologah Lake 94%

Thursday, December 07, 2023



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Caption: USGS 7-day average streamflow HUC map valid December 7, 2023

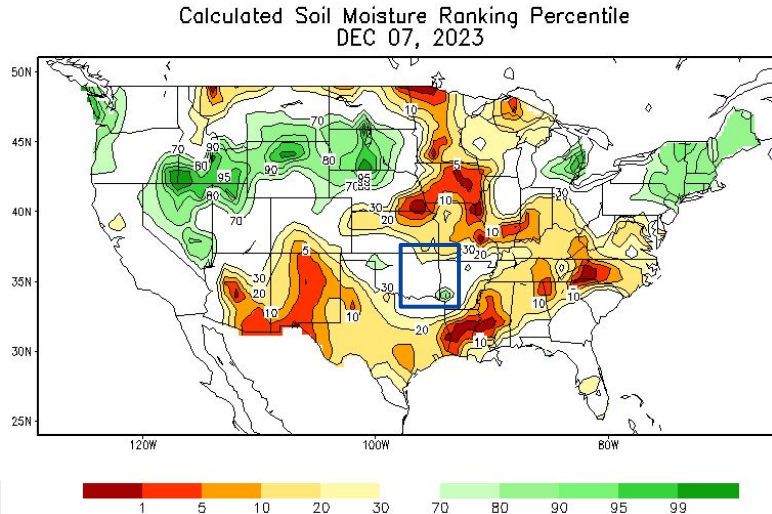
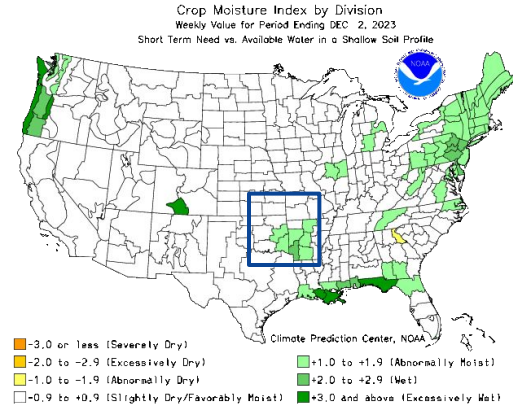




Agricultural Impacts

Links to the [OK Mesonet Soil Moisture](#) and [Arkansas-Red Basin River Forecast Center modeled zonal soil moisture](#).

- According to the CPC, soil moisture was below normal in far northeast OK as of Dec. 7, 2023 (left image).
- The CPC weekly Crop Moisture Index was abnormally moist in east central and southeast OK and west central AR as of Dec. 2, 2023 (right image).
- Producers in Crawford and Sebastian Counties in west central AR are reporting poor range conditions, with pastures providing marginal feed and supplemental feeding is required. These producers are also reporting low pond conditions and the need to sell off livestock.





Seven-Day Precipitation Forecast

Link to the latest [7-day Forecast for Eastern OK and northwest AR](#)

- There is a 40% chance of showers and thunderstorms tonight across far eastern OK and northwest AR.
- Widespread heavy rain is not expected tonight.
- Dry weather is expected tomorrow through the middle of next week.

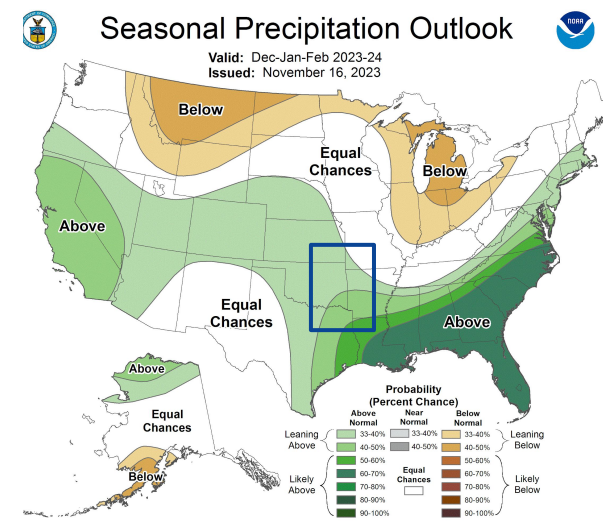
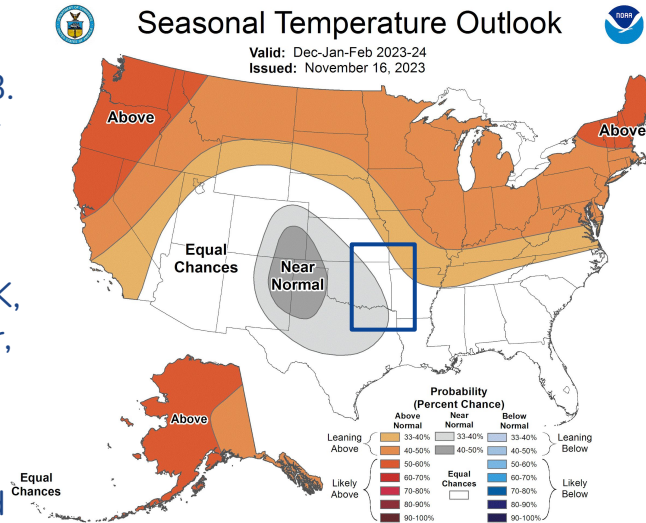




Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [Climate Prediction Center \(CPC\) homepage](#)

- According to the Climate Prediction Center (CPC), there is an enhanced chance for above normal temperatures and above median rainfall for all of eastern OK and northwest AR for December 2023.
- In the longer term, the outlook for the 3-month period of Dec-Jan-Feb 2023-24 calls for an enhanced chance of near normal temperatures across southeast OK, and equal chances for above, near, and below normal temperatures across the remainder of eastern OK and northwest AR. This outlook also calls for an enhanced chance for above median precipitation for eastern OK and northwest AR.



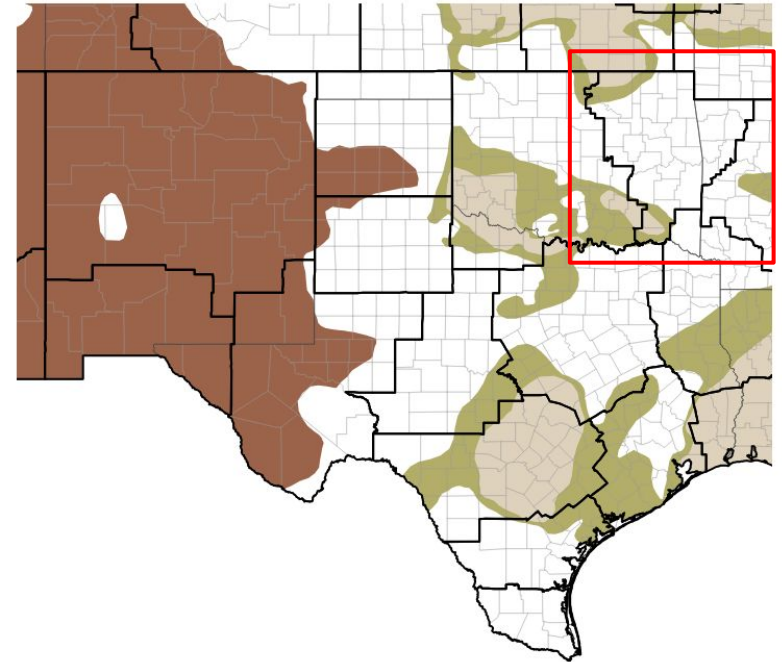


Drought Outlook

The latest monthly and seasonal outlooks can be found on the [Climate Prediction Center \(CPC\) homepage](#)

- The CPC Seasonal Drought Outlook valid December 1, 2023 through February 29, 2024 indicates that while drought conditions are expected to remain in eastern OK, these drought conditions are expected to improve.

Seasonal (3-Month) Drought Outlook



Drought Is Predicted To...



Source(s): Climate Prediction Center; image courtesy of Drought.gov

Data Valid: 11/30/23

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce