



Drought Information Statement for Eastern OK & Northwestern AR

Valid October 27, 2023

Issued By: WFO Tulsa, OK

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

- This product will be updated ~Dec. 8, 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.





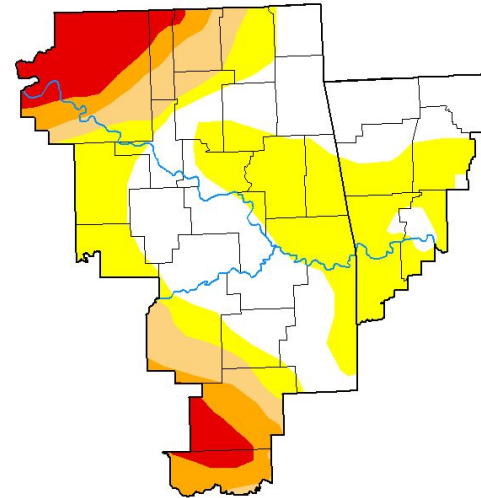
U.S. Drought Monitor

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.
- Drought intensity and Extent
 - D3 (Extreme Drought): Osage, Washington, Pawnee, Nowata, Pushmataha, and Choctaw Counties in eastern OK.
 - D2 (Severe Drought): Nowata, Washington, Osage, Pawnee, Pittsburg, Pushmataha, and Choctaw Counties in eastern OK.
 - D1 (Moderate Drought): Craig, Nowata, Washington, Osage, Pawnee, Tulsa, Rogers, Pittsburg, Latimer, and Pushmataha Counties in eastern OK.
 - D0: (Abnormally Dry): Ottawa, Craig, Osage, Pawnee, Tulsa, Rogers, Mayes, Wagoner, Cherokee, Adair, Sequoyah, Muskogee, Creek, Okfuskee, McIntosh, Pittsburg, Latimer, Pushmataha, and Le Flore Counties in eastern OK and Washington, Madison, Crawford, Franklin, and Sebastian Counties in northwest AR.

U.S. Drought Monitor Tulsa, OK WFO

October 24, 2023
(Released Thursday, Oct. 26, 2023)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme 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:
Rocky Blotiga
NCEI/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 7am CDT October 24, 2023.





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: Osage, Pawnee, Creek, Tulsa, Rogers, Nowata, Craig, Wagoner, Sequoyah, Adair, and Okfuskee Counties in eastern OK and Washington, Madison, Crawford, and Franklin Counties in northwest AR.
 - Drought Improved: Haskell, Le Flore, Latimer, Pittsburg, Pushmataha, and Choctaw Counties in eastern OK, and Franklin and Crawford Counties in northwest AR.
 - No Change: Osage, Washington, Rogers, Nowata, Craig, Mayes, Wagoner, Cherokee, Adair, Muskogee, Sequoyah, Le Flore, Okfuskee, Pittsburg, Latimer, Pushmataha, and and Choctaw Counties in eastern OK, and Crawford, Madison, Franklin, and Sebastian Counties in northwest AR.

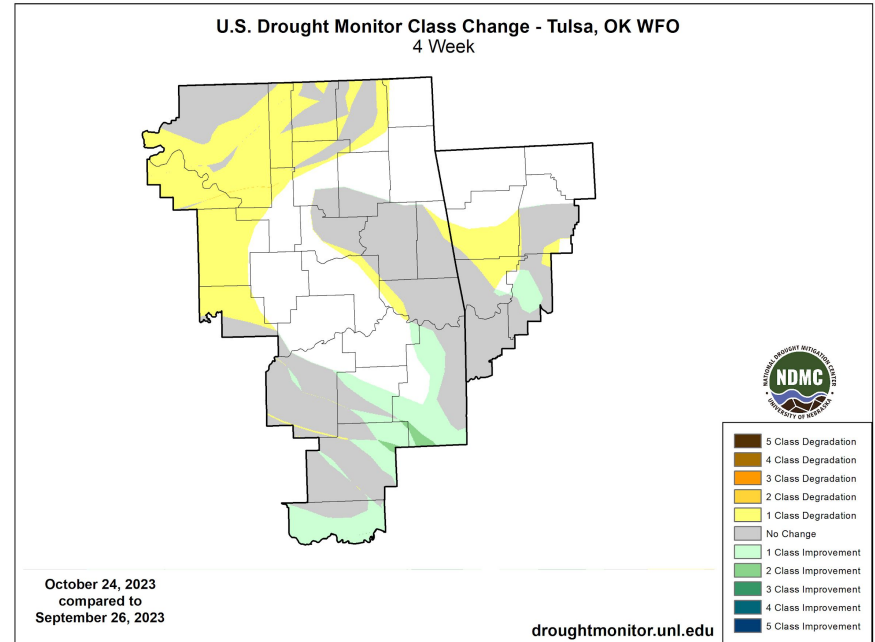


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT October 24, 2023.

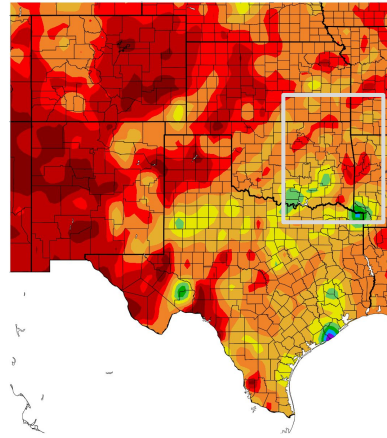




Precipitation

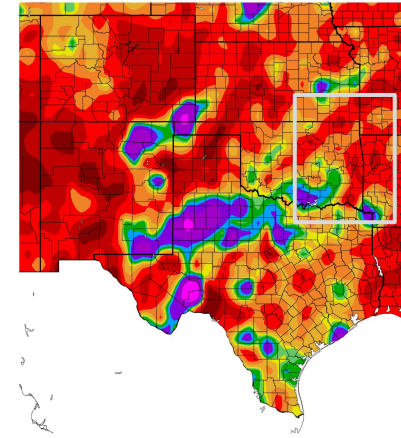
- For the 7-day period ending the morning of Oct. 27, 2023, 0.50" to 5" inches of rain has fallen across eastern OK and northwest AR.
- For the last 30 days ending the morning of Oct. 27, 2023, rainfall totals across the area ranged from around 1" to near 8", with much of the area receiving 1.5"-3". This is only 10%-90% of the normal rainfall for most of the area.

Precipitation (in)
9/27/2023 - 10/26/2023



Generated 10/27/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)
9/27/2023 - 10/26/2023



NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate

Image Captions:
 Left - Precipitation Amount for the Southern Plains
 Right - Percent of Normal Precipitation for the Southern Plains]
 Data Courtesy High Plains Regional Climate Center.
 Data over the past 30 days ending October 26, 2023





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.

Agricultural Impacts

- Below normal soil moisture was occurring across west central AR.
- Wildlife habitats have been reduced by drought, which could impact hunting of waterfowl and quail.

Fire Hazard Impacts

- There are no known impacts at this time.

Other Impacts

- There are no known impacts at this time.

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.

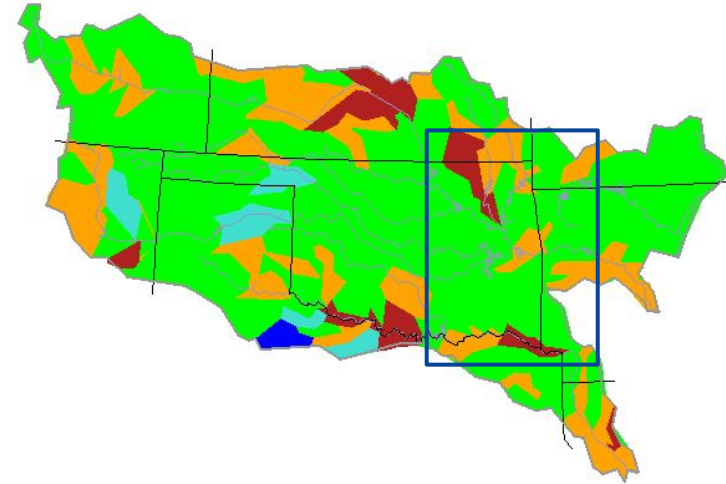




Hydrologic Conditions and Impacts

- According to the USGS, the [7-day average streamflow](#) was below to much below normal across portions of eastern OK and west central AR (image on the right).
- According to the USACE, the following reservoirs were more than 3% below the top of their conservation pools as of October 27, 2023:
 - Copan Lake 36%
 - Skiatook Lake 71%
 - Birch Lake 73%
 - Beaver Lake 82%
 - Hulah Lake 86%
 - Keystone Lake 86%
 - Heyburn Lake 89%
 - Wister Lake 93%
 - Eufaula Lake 94%
 - Fort Gibson Lake 94%

Thursday, October 26, 2023



USGS

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 October 26, 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 west central AR as of October 26, 2023 (left image).
- The CPC weekly Crop Moisture Index was near normal for all of eastern OK and northwest AR as of October 21, 2023 (right image).
- According to the OK Farm Report, OK habits for waterfowl have been impacted by the drought, and the 2023 populations are down 9% from historic average for this time of year. This could impact hunting season. The northern bobwhite quail habit (grassland) has also been impacted by the drought.

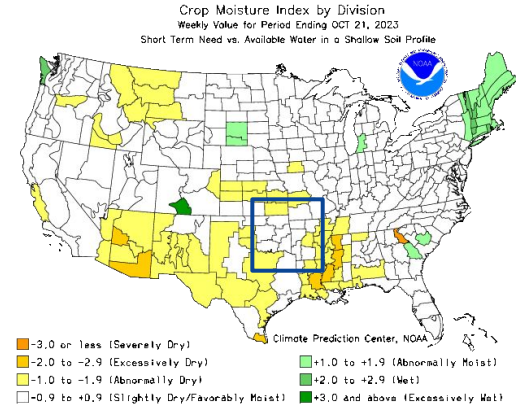
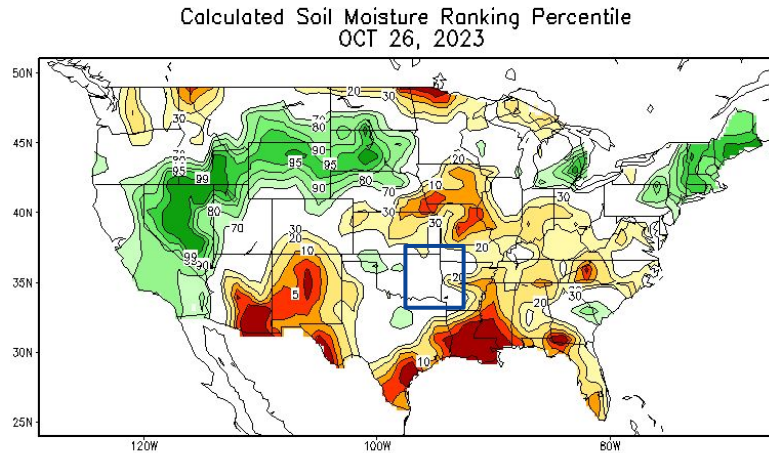


Image Captions:
 Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid October 26, 2023
 Right: [Crop Moisture Index by Division](#). Weekly value for period ending October 21, 2023





Seven-Day Precipitation Forecast

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

- Widespread showers and thunderstorms are expected to bring heavy rain to eastern OK and northwest AR through October 30, 2023.
- Widespread 1”-4” of rain is expected.
- Some locations could receive 4”-6” of rain through October 30, 2023.

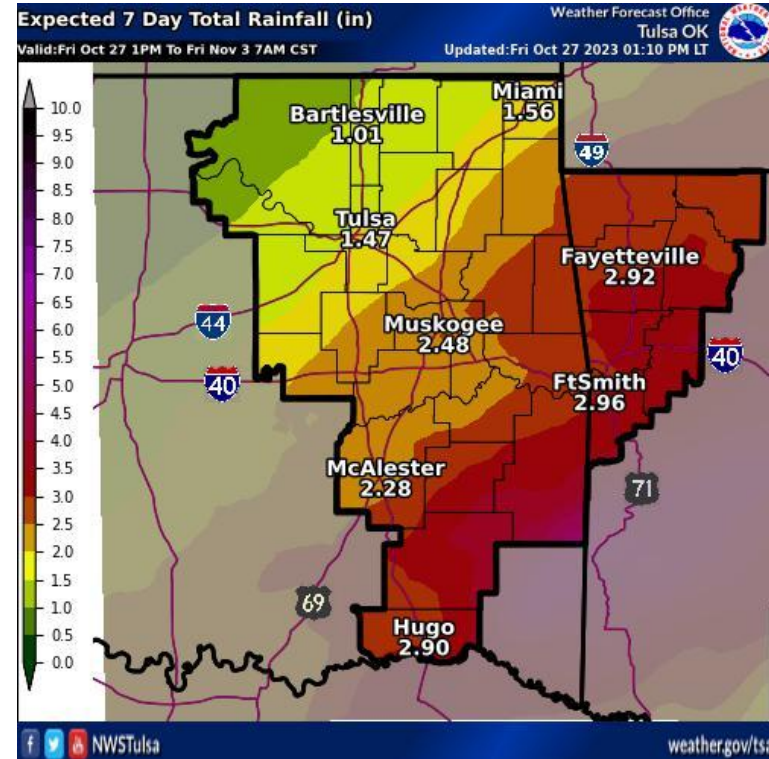


Image Caption: NWS Tulsa 7-day precipitation forecast valid October 27 thru 7 am November 3, 2023





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 equal chances for above, near, and below median rainfall for all of eastern OK and northwest AR for November 2023.
- In the longer term, the outlook for the 3-month period of Nov-Dec-Jan 2023-24 calls for an enhanced chance of above normal temperatures across far northeast OK and northwest AR, and equal chances for above, near, and below normal temperatures elsewhere. This outlook also calls for an enhanced chance for above median precipitation for eastern OK and northwest AR.

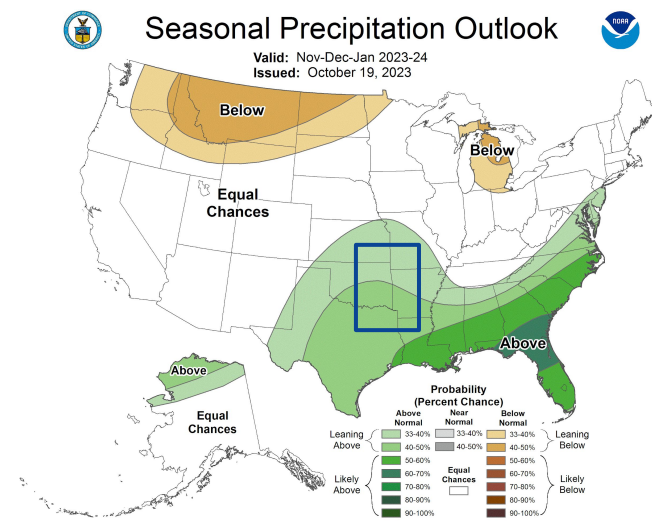
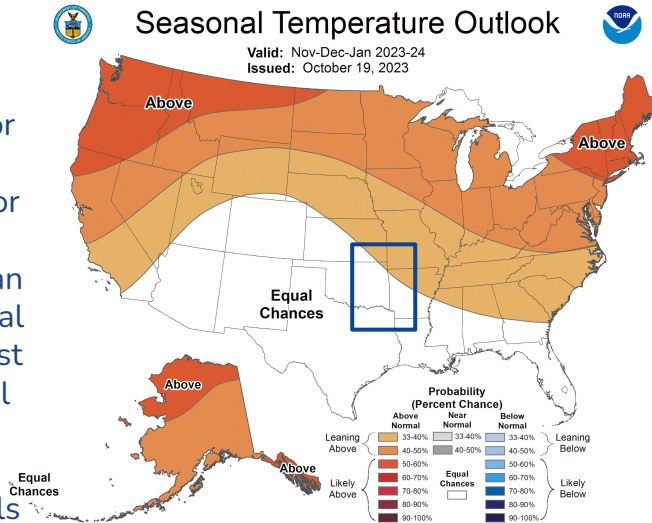


Image Captions:

Left - [Climate Prediction Center Seasonal Temperature Outlook](#),

Right - [Climate Prediction Center Seasonal Precipitation Outlook](#),

Valid November 2023-January 2024





Drought Outlook

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

- The CPC Seasonal Drought Outlook for October 19, 2023-January 31, 2024 indicates that while drought conditions are expected to remain in eastern OK and northwest AR, these drought conditions are expected to improve.

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

Valid for October 19, 2023 - January 31, 2024
Released October 19, 2023

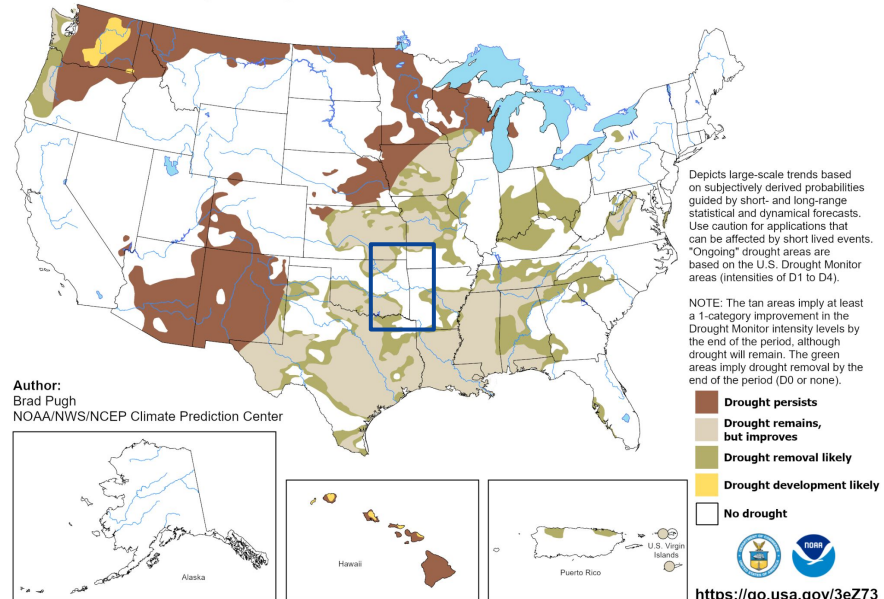


Image Caption:

Climate Prediction Center Seasonal Drought Outlook Released October 19, 2023 valid for October 19, 2023-January 31, 2024

Links to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)

