Oklahoma Water Resources Bulletin

Summary of Current Conditions

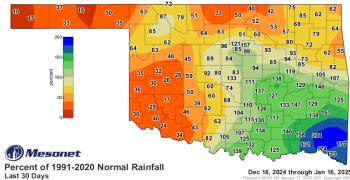
January 17, 2025

Precipitation

Last 30 Days: December 18, 2024, through January 16, 2025

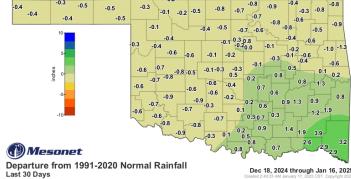
Last 365 Days: January 18, 2024, through January 16, 2025

Climate Division	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	Rank Since 1921	Climate Division	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	RANK SINCE 1921		
PANHANDLE	0.24"	-0.41"	37%	41st driest	PANHANDLE	23.48"	+2.92"	114%	24th wettest		
N. CENTRAL	0.69"	-0.29"	70%	52nd wettest	N. CENTRAL	28.41"	-2.97"	91%	47th driest		
NORTHEAST	1.29"	-0.65"	67%	47th driest	NORTHEAST	39.66"	-2.95"	93%	51st driest		
W. CENTRAL	0.38"	-0.57"	40%	36th driest	W. CENTRAL	25.31"	-3.06"	89%	50th driest		
CENTRAL	1.54"	+0.02"	102%	38th wettest	CENTRAL	35.52"	-2.06"	95%	51st wettest		
E. CENTRAL	2.79"	+0.18"	107%	26th wettest	E. CENTRAL	47.70"	+1.64"	104%	31st wettest		
SOUTHWEST	0.45"	-0.66"	41%	37th driest	SOUTHWEST	26.91"	-3.32"	89%	44th driest		
S. CENTRAL	2.64"	+0.48"	122%	22nd wettest	S. CENTRAL	40.64"	-0.01"	100%	37th wettest		
SOUTHEAST	5.75"	+2.59"	182%	10th wettest	SOUTHEAST	50.32"	-0.18"	100%	47th wettest		
STATEWIDE	1.70"	+0.04"	103%	35th wettest	STATEWIDE	35.30"	-1.12"	97%	45th wettest		

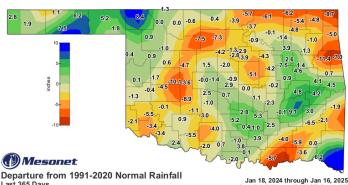


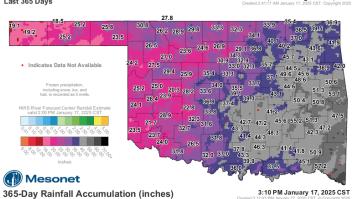
Percent of 1991-2020 Normal Rainfall Last 30 Days











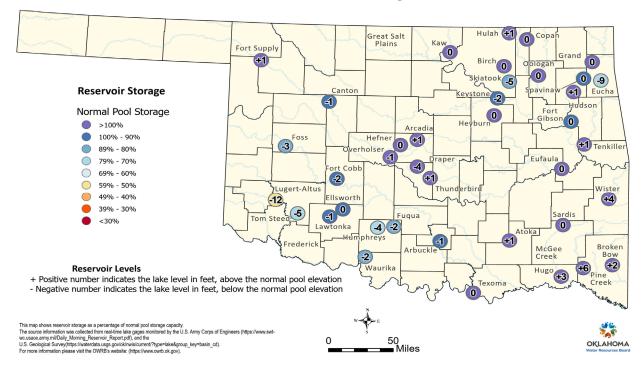
3:10 PM January 17, 2025 CST

Mesonet

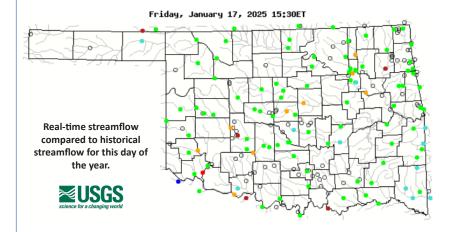
30-Day Rainfall Accumulation (inches)

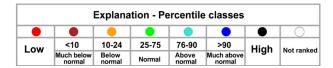
Reservoir Levels

Oklahoma Reservoir Levels and Storage as of 1/14/2025



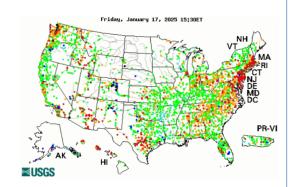
Streamflow



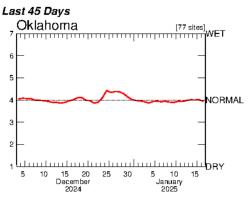


 $\label{thm:constraints} \mbox{Visit} \ \underline{\mbox{waterwatch.usgs.gov}} \ \mbox{for additional real-time streamflow information.}$

Visit the OWRB's <u>Water Data and Analysis Portal</u> for continuous and discrete water quality and quantity data for Oklahoma lakes, streams, and aquifers across the state.

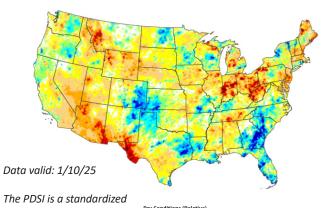


Average Streamflow Index



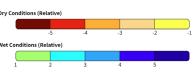
Drought Conditions

Palmer Drought Severity Index (PDSI)



index based on a simplified soil water balance and estimates relative soil

moisture conditions.



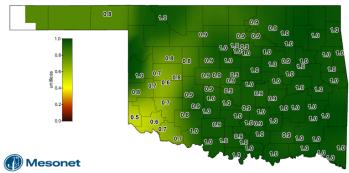
Standardized Precipitation Index (SPI) **Through December 2024**

Climate Division	3-month	12-month	24-month	
PANHANDLE	Moderately Moist	Abnormally Moist	Very Moist	
NORTH CENTRAL	Moderately Moist	Near Normal	Near Normal	
NORTHEAST	Moderately Moist	Near Normal	Near Normal	
WEST CENTRAL	Moderately Moist	Near Normal	Abnormally Moist	
CENTRAL	Very Moist	Abnormally Moist	Moderately Moist	
EAST CENTRAL	Moderately Moist	Abnormally Moist	Abnormally Moist	
SOUTHWEST	Moderately Moist	Near Normal	Near Normal	
SOUTH CENTRAL	Abnormally Moist	Abnormally Moist	Abnormally Moist	
SOUTHEAST	Abnormally Moist	Near Normal	Abnormally Moist	

exceptionally dry	extremely dry	severely dry	moderately dry	abnormally dry	near normal	abnormally moist	moderately moist	very moist	extremely moist	exceptionally moist
-2.00 and below	-1.99 to	-1.59 to	-1.29 to	-0.79 to	-0.50 to	+0.51 to	+0.80 to	+1.30 to	+1.60 to	+2.0 and
	-1.60	-1.30	-0.80	-0.51	+0.50	+0.79	+1.29	+1.59	+1.99	above

The SPI provides a comparison of precipitation over several specified time periods with totals from the periods for all years in the historical record. Through December 2024, all regions were abnormally moist or wetter.

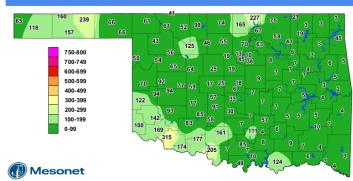
Soil Moisture



1-day Average 4-inch Bare Soil Fractional Water Index

The 1-day Average 4-inch Bare Soil Fractional Water Index map displays the 24-houraveraged soil moisture at 4 inches under bare soil for the previous day. Fractional water index ranges from 0 (as dry as the sensor can read) to 1.0 (as wet as the sensor can read). Soil moisture cannot be measured if the soils are frozen, which may cause maps to have large areas of missing data during the winter months.

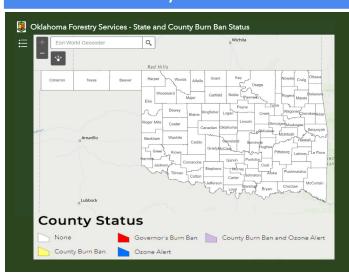
Keetch-Byram Drought Index



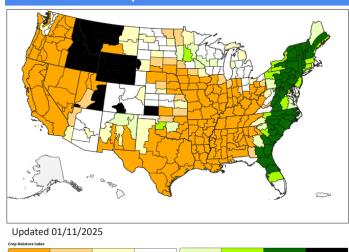
Keetch-Byram Drought Index

The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values > 600 are often associated with severe drought and increased wildfire occurrence.

State & County Burn Ban Status



Crop Moisture Index



Drought.gov

Oklahoma Drought Monitor 65th 47th ~123,100

primary counties with USDA Drought Disaster Designations, according to the USDA Farm Service

Statistics valid as of 1/14/25

droughtmonitor.unl.edu

Author: Brad Pugh, NOAA/CPC

USDA

Oklahoma residents in areas of drought, according to the Drought Monitor

wettest December on record (since 1895)

1.49 in. total precipitation ◆ 0.23 in. from normal

wettest January— December on record (since 1895)

precipitation

↑ 2.52 in. from normal

January 14, 2025 (Released January 16, 2025) Valid 8 a.m. EDT

Intensity:



D4 Exceptional Drought

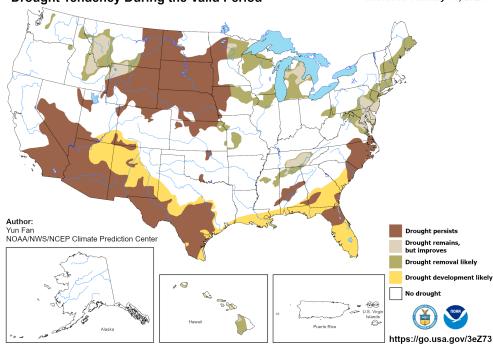
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2025-01-14	75.12	24.88	5.24	0.33	0.00	0.00	30
Last Week to Current	2025-01-07	70.28	29.72	5.52	0.33	0.00	0.00	36
3 Months Ago to Current	2024-10-15	14.41	85.59	70.97	52.37	31.44	0.00	240
Start of Calendar Year to Current	2024-12-31	70.28	29.72	5.52	0.33	0.00	0.00	36
Start of Water Year to Current	2024-10-01	22.82	77.18	61.31	37.39	11.50	0.00	187
One Year Ago to Current	2024-01-16	65.81	34.19	15.01	1.67	0.00	0.00	51

Drought Probability

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

Valid for January 16 - April 30, 2025 Released January 16, 2025



The map depicts large-scale trends based on subjectively derived probabilities guided by short- and longrange statistical and dynamical forecasts. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4). Tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. Green areas imply drought removal by the end of the period.

- Crops are stressed (wheat, canola, alfalfa, pecans); winter wheat germination is delayed
- Stock pond levels decline

D1 - Moderate Drought

- Summer crop and forage yields are reduced
 Wildfire risk increases
 Lake recreation activities are affected; deer reproduction is poor age yields are reduced

- D2 Severe Drought

 Dryland crops are severe

 Cattle are stressed

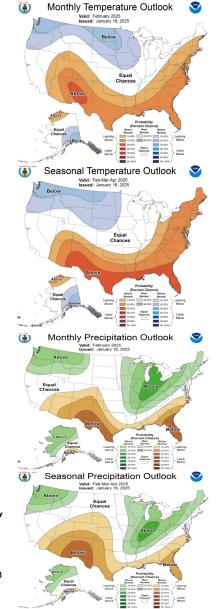
 Burn bans begin

- Wildfires are increasing in number and severity; air quality is poor, with dust storms and smoke

D4 - Exceptional Drought

- rs are balling failed crops or abandoning fields; pastures are
- · Cost of hay and water is high and supplies are scarce; producers are liquidating herds

Monthly/Seasonal Outlook



NOAA/ National Weather Service National Centers for Environmental Prediction Climate Prediction Center