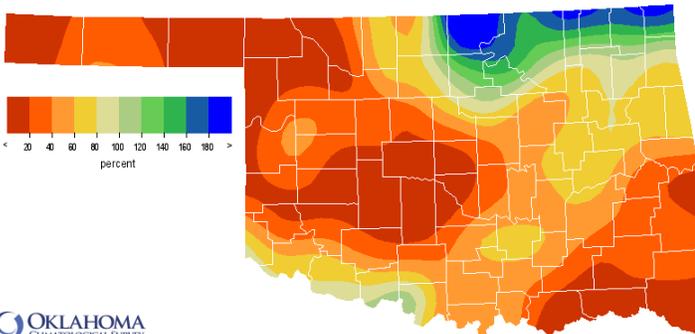


October 28, 2016

PRECIPITATION

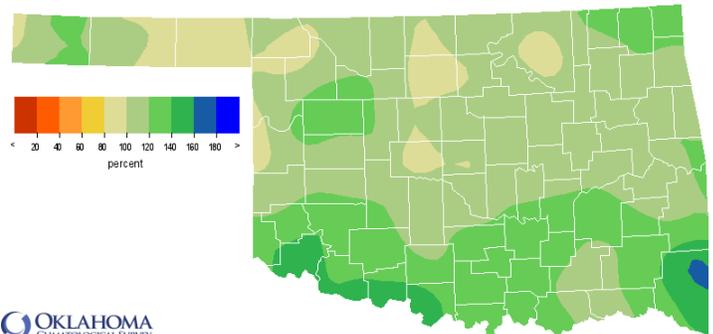
Statewide Precipitation

Climate Division	Last 30 Days September 28, 2016 – October 27, 2016				Last 365 Days October 29, 2015 – October 27, 2016			
	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	Rank Since 1921	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	RANK SINCE 1921
PANHANDLE	0.25"	-1.48"	15%	14th driest	21.09"	+0.55"	103%	37th wettest
NORTH CENTRAL	2.37"	-0.55"	81%	38th wettest	33.41"	+2.07"	107%	25th wettest
NORTHEAST	4.55"	+0.86"	123%	30th wettest	47.97"	+5.41"	113%	17th wettest
WEST CENTRAL	0.79"	-2.01"	28%	18th driest	33.38"	+5.06"	118%	15th wettest
CENTRAL	1.41"	-2.25"	39%	26th driest	40.17"	+2.65"	107%	22nd wettest
EAST CENTRAL	2.51"	-1.77"	59%	38th driest	53.52"	+7.52"	116%	11th wettest
SOUTHWEST	1.20"	-1.87"	39%	26th driest	40.25"	+10.08"	133%	4th wettest
SOUTH CENTRAL	2.11"	-1.99"	52%	38th driest	51.38"	+10.82"	127%	7th wettest
SOUTHEAST	0.96"	-3.74"	20%	12th driest	66.40"	+15.99"	132%	5th wettest
STATEWIDE	1.85"	-1.59"	54%	30th driest	42.69"	+6.33"	117%	11th wettest



OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1981-2010 Normal Rainfall
Last 30 Days

Sep 28, 2016 through Oct 27, 2016
Created 2016-10-28 10:01:25 UTC. Copyright © 2016

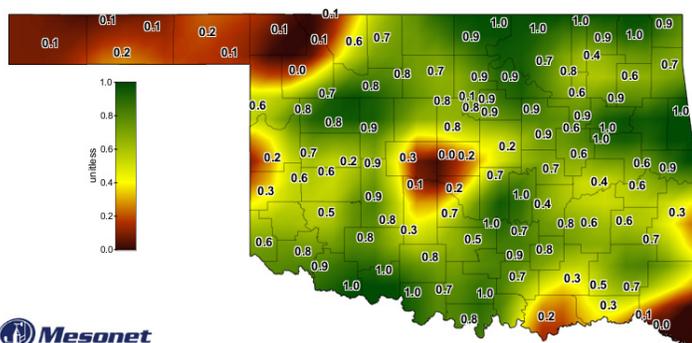


OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1981-2010 Normal Rainfall
Last 365 Days

Oct 29, 2015 through Oct 27, 2016
Created 2016-10-28 10:03:02 UTC. Copyright © 2016

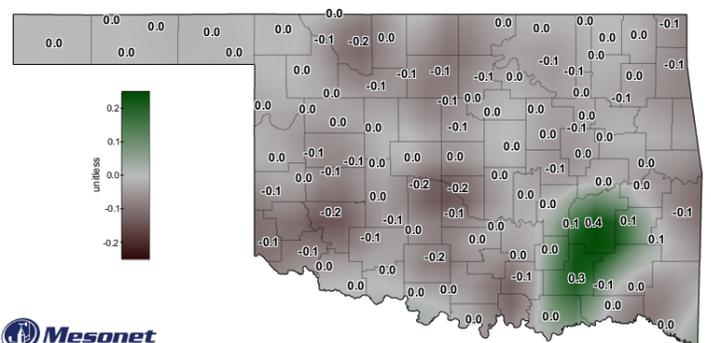
SOIL MOISTURE

Fractional Water Index October 27, 2016



Mesonet
1-day Average 10-inch Fractional Water Index

October 27, 2016
Created 7:30:14 AM October 28, 2016 (216). © Copyright 2016



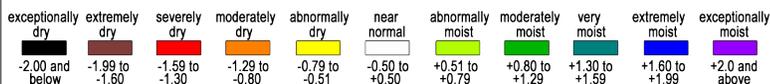
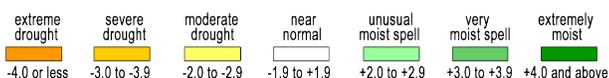
Mesonet
7-day 10-inch Fractional Water Index Change

October 27, 2016
Created 6:30:01 AM October 28, 2016 (216). © Copyright 2016

The Fractional Water Index ranges from very dry soil having a value of 0 to soil at field capacity illustrated by a value of 1. [1.0-0.8 = Enhanced Growth; 0.8-0.5 = Limited Growth; 0.5-0.3 = Plants Wilting; 0.3-0.1 = Plants Dying; <0.1 = Barren Soil.]

DROUGHT INDICES

Palmer Drought Severity Index (PDSI)					Standardized Precipitation Index (SPI) Through September 2016		
Climate Division	Status 10/22/16	Value 9/24 10/22		Change in Value	3-month	12-month	24-month
NORTHWEST	Near Normal	1.65	0.19	1.46	Near Normal	Moderately Moist	Exceptionally Moist
NORTH CENTRAL	Near Normal	1.67	1.5	0.17	Moderately Moist	Abnormally Moist	Moderately Moist
NORTHEAST	Near Normal	-1.44	-0.32	-1.12	Near Normal	Abnormally Moist	Moderately Moist
WEST CENTRAL	Near Normal	2.1	1.1	1	Moderately Moist	Moderately Moist	Exceptionally Moist
CENTRAL	Near Normal	-0.58	-1.16	0.58	Near Normal	Abnormally Moist	Extremely Moist
EAST CENTRAL	Near Normal	-1.14	-1.27	0.13	Near Normal	Moderately Moist	Exceptionally Moist
SOUTHWEST	Unusual Moist Spell	3.7	2.57	1.13	Moderately Moist	Extremely Moist	Exceptionally Moist
SOUTH CENTRAL	Near Normal	0.38	-0.28	0.66	Near Normal	Extremely Moist	Exceptionally Moist
SOUTHEAST	Near Normal	0.81	-0.45	1.26	Near Normal	Extremely Moist	Exceptionally Moist



The PDSI is based upon precipitation, temperature, and soil moisture, and is considered most effective for unirrigated cropland. According to the latest PDSI, all climate divisions in the state were classified as Near Normal except the Southwest region, which experienced an Unusual Moist Spell.

The SPI provides a comparison of precipitation over several specified periods with totals from the same periods for all years included in the historical record. All climate divisions had Near Normal precipitation or wetter for all 3 time periods shown. The Northwest, West Central, East Central, Southwest, South Central, and Southeast regions were classified as Exceptionally Moist (the wettest category) for the 24-month time period.

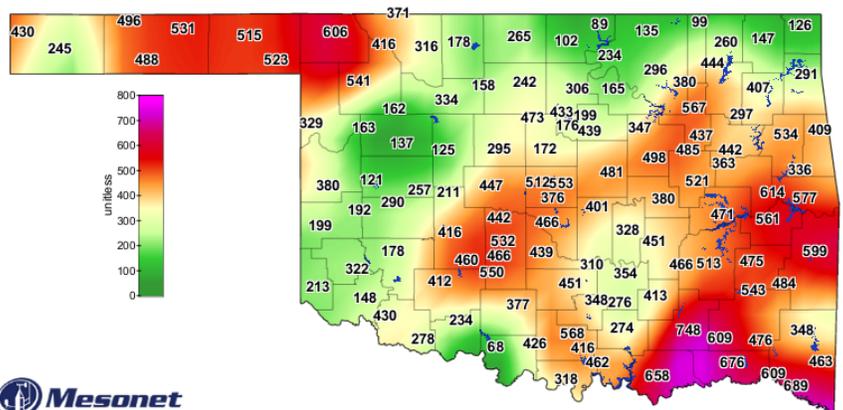
Keetch-Byram Drought Fire Index

October 28--eight stations are above 600. The highest four are listed below:

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE
Lane	South Central	748
Idabel	Southeast	689
Hugo	Southeast	676
Durant	South Central	658

Four stations were above 600 on September 29.

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 of 600 and above are often associated with more severe drought and increased wildfire occurrence.



Keetch-Byram Drought Index

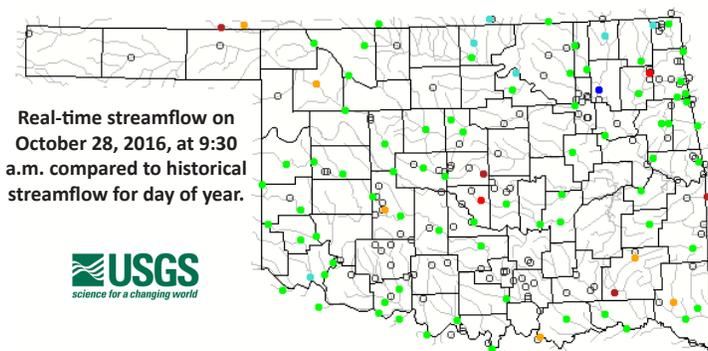
9:00 AM October 28, 2016 CDT
Created 9:44:04 AM October 28, 2016 CDT. © Copyright 2016

STREAMFLOW CONDITIONS

October 28, 2016

Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Visit waterwatch.usgs.gov for real-time streamflow information.

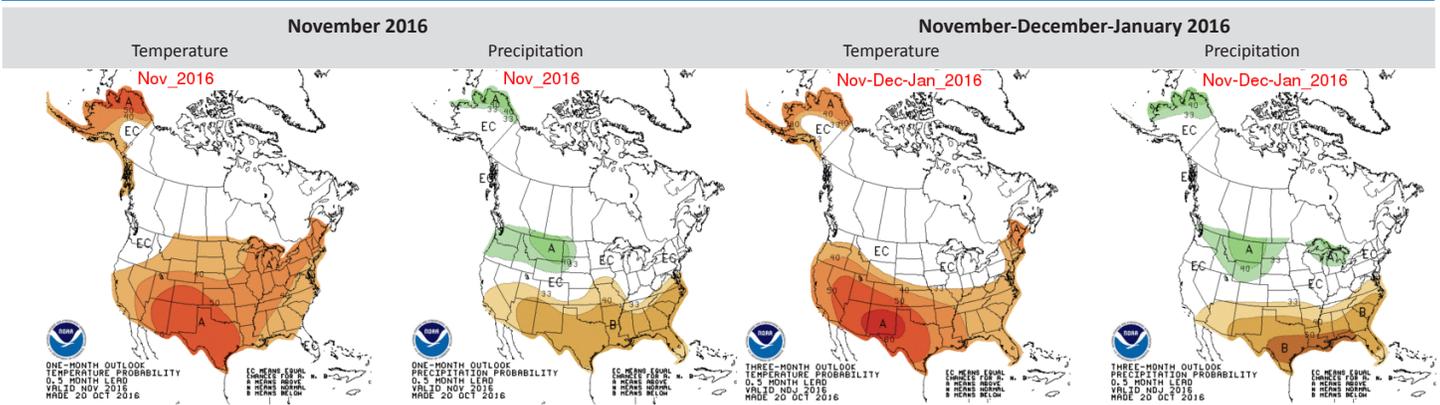


Real-time streamflow on October 28, 2016, at 9:30 a.m. compared to historical streamflow for day of year.



WEATHER/DROUGHT FORECAST

Seasonal Outlook

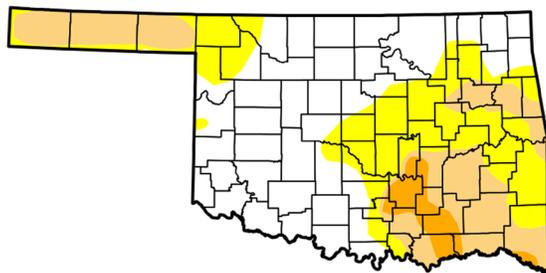


The contours on the maps show the total probability of three categories—above, indicated by the letter “A”; below, indicated by the letter “B”; and the middle category, indicated by the letter “N”. “EC” stands for “Equal Chances” for A, N, or B

Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

October 25, 2016
(Released Thursday, Oct. 27, 2016)
Valid 8 a.m. EDT



Author:
David Simeral
Western Regional Climate Center



<http://droughtmonitor.unl.edu/>

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	47.43	52.57	25.04	4.26	0.00	0.00
Last Week 10/18/2016	48.58	51.42	18.43	3.21	0.00	0.00
3 Months Ago 7/26/2016	61.25	38.75	10.00	0.53	0.00	0.00
Start of Calendar Year 1/2/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/27/2015	57.82	42.18	19.04	3.05	0.00	0.00
One Year Ago 10/27/2015	33.36	66.64	17.68	2.79	0.00	0.00

Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

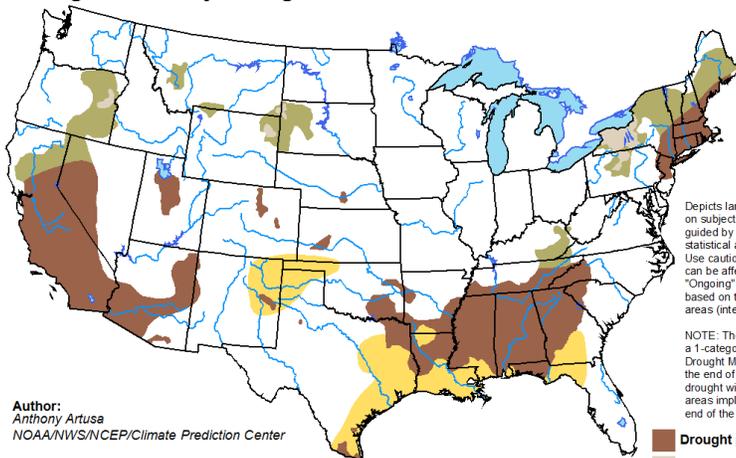
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

According to the U.S. Drought Monitor, the number of Oklahomans currently affected by drought is 577,089, less than half the number at this time last month. More than 25% of the state (in area) is now in Moderate Drought (D1) or worse, and more than 4% of the state is in Severe Drought (D2).

Rainfall totals varied widely across the state in the past month with the Northeast region receiving 123% of normal precipitation, while the Panhandle region only received 15% of normal. The statewide average was only 54% of normal--the 30th driest on record for the 30-day period.

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

Valid for October 20 - January 31, 2017
Released October 20, 2016



Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The 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. The green areas imply drought removal by the end of the period (D0 or none).

■ Drought persists
■ Drought remains but improves
■ Drought removal likely
■ Drought development likely



<http://go.usa.gov/3eZ73>

According to the seasonal drought outlook, from mid October through the end of January, drought conditions are likely to develop in the Northwest region of Oklahoma including the entirety of the Oklahoma panhandle. Drought is likely to persist in the Southeast region and the southern portion of the Northeast region of the state.

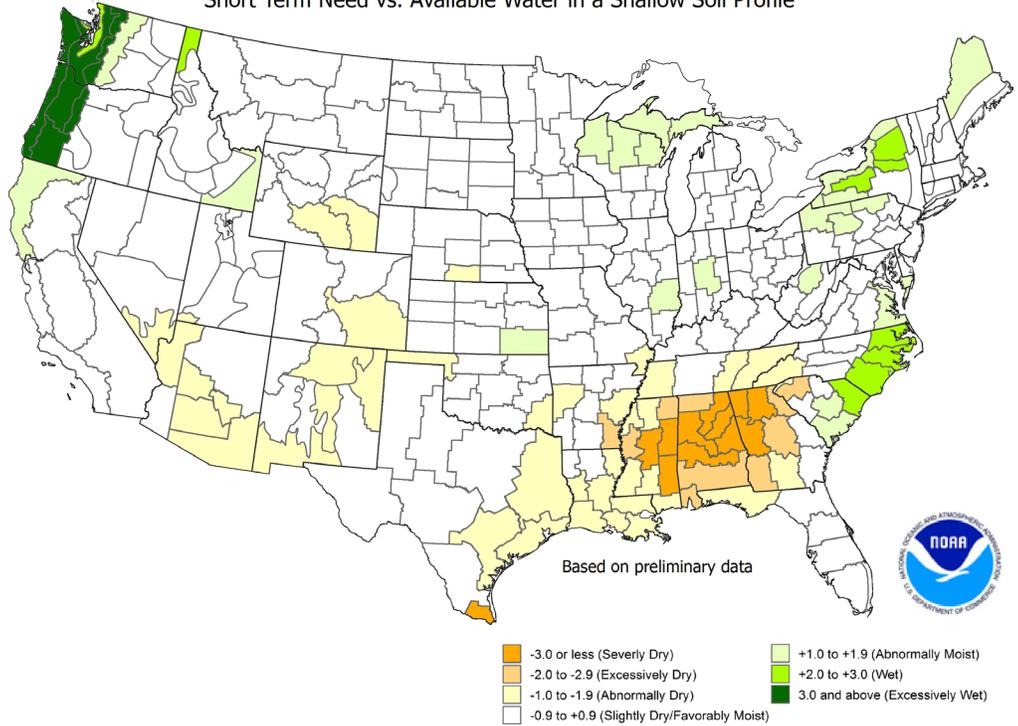
Drought is also likely to develop in all areas bordering the panhandle of Oklahoma, as well as many areas along the Gulf Coast.

CROP MOISTURE INDEX

According to the NOAA Crop Moisture Index by Division, for the period ending October 22, all regions of the state are Slightly Dry/Favorably Moist (-0.9 to +0.9) except the Panhandle and Southeast regions, which are both Abnormally Dry (-1.0 to -1.9).

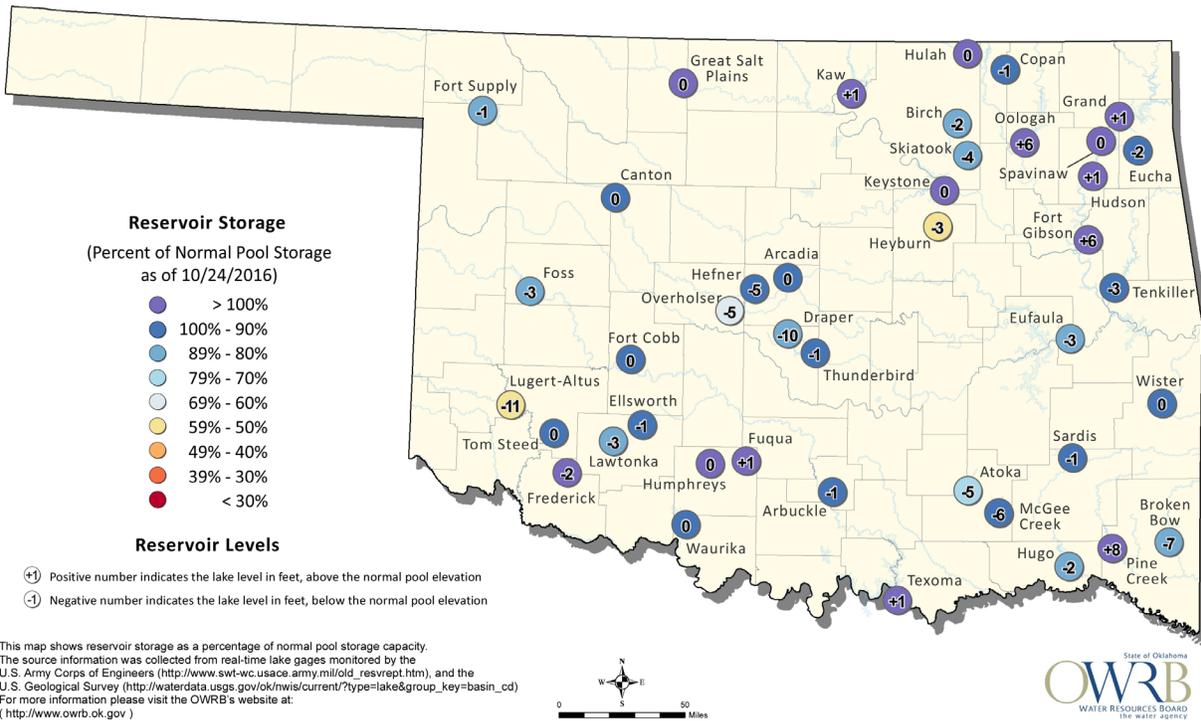
Derived from the Palmer Drought Severity Index (PDSI), the Crop Moisture Index reflects moisture supply in the short-term across major crop-producing regions. It identifies potential agricultural droughts. It is not intended to assess long-term droughts.

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 22, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile



RESERVOIR STORAGE

Oklahoma Surface Water Resources Reservoir Levels and Storage as of 10/24/2016



The Oklahoma Water Resources Bulletin is compiled and distributed monthly by the Oklahoma Water Resources Board utilizing products and information developed by the Oklahoma Climatological Survey, Oklahoma Mesonet, National Oceanic and Atmospheric Administration, National Drought Mitigation Center, US Geological Survey, US Army Corps of Engineers, and US Department of Agriculture. For questions or comments contact Darla Whitley.