Oklahoma Water Resources Bulletin & Summary of Current Conditions

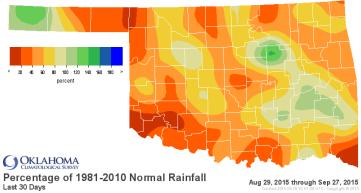


September 28, 2015

PRECIPITATION

Statewide Precipitation

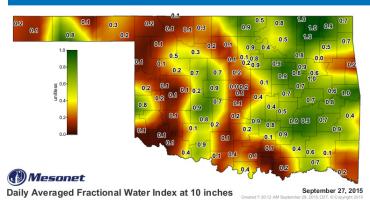
	Last 30 Days August 29, 2015 – September 27, 2015				Last 365 Days September 28, 2014 – September 27, 2015			
Climate Division	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	Rank Since 1921	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	RANK SINCE 1921
PANHANDLE	0.97"	-0.82"	54%	22nd driest	26.60"	+6.02"	129%	7th wettest
NORTH CENTRAL	1.83"	-1.07"	63%	28th driest	34.08"	+2.66"	108%	21st wettest
NORTHEAST	2.37"	-2.02"	54%	23rd driest	49.39"	+6.72"	116%	16th wettest
WEST CENTRAL	1.68"	-1.13"	60%	29th driest	37.84"	+9.44"	133%	6th wettest
CENTRAL	2.52"	-1.25"	67%	34th driest	46.83"	+9.20"	124%	11th wettest
EAST CENTRAL	3.51"	-1.14"	75%	42nd driest	66.57"	+20.43"	144%	2nd wettest
SOUTHWEST	1.03"	-2.00"	34%	18th driest	38.27"	+8.00"	126%	8th wettest
SOUTH CENTRAL	2.15"	-1.78"	55%	30th driest	60.41"	+19.70"	148%	1st wettest
SOUTHEAST	2.85"	-1.29"	69%	35th driest	58.59"	+8.00"	116%	16th wettest
STATEWIDE	2.11"	-1.39"	60%	25th driest	46.44"	+9.97"	127%	4th wettest



OKLAHOMA Percentage of 1981-2010 Normal Rainfall Last 365 Days Sep 28, 2014 through Sep 27, 2015

SOIL MOISTURE

Fractional Water Index September 27, 2015



(1) Mesonet September 27, 2015

September 27, 2015
7-Day Change in Fractional Water Index at 10 inches

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 August 2015				
Climate Division	Status 9/19/2015	Value 8/22 9,		Change in Value	3-month	12-month	24-month		
NORTHWEST	Unusual Moist Spell	4.24	2.58	1.66	Moderately Moist	Extremely Moist	Moderately Moist		
NORTH CENTRAL	Unusual Moist Spell	2.67	2.19	0.48	Near Normal	Moderately Moist	Near Normal		
NORTHEAST	Unusual Moist Spell	2.35	2.33	0.02	Moderately Moist	Moderately Moist	Near Normal		
WEST CENTRAL	Unusual Moist Spell	3.63	2.29	1.34	Abnormally Moist	Extremely Moist	Moderately Moist		
CENTRAL	Unusual Moist Spell	3.34	2.53	0.81	Moderately Moist	Extremely Moist	Abnormally Moist		
EAST CENTRAL	AL Extremely Moist		4.46	0	Very Moist	Exceptionally Moist	Moderately Moist		
SOUTHWEST	Γ Near Normal		1.78	1.54	Near Normal	Extremely Moist	Abnormally Moist		
SOUTH CENTRAL	SOUTH CENTRAL Unusual Moist Spell		2.27	1.32	Very Moist	Exceptionally Moist	Very Moist		
SOUTHEAST Near Normal		0.6	0.34	0.26	Abnormally Dry	Extremely Moist	Abnormally Moist		
extreme drought severe drought -4.0 or less -3.0 to -3.9	drought normal moisi	spell m	very oist spell .0 to +3.9	extremely moist +4.0 and above	exceptionally extremely dry dry dry dry dry -2.00 and -1.99 to -1.59 to -1.29 to -0.80	abnormally near abnormally mode moist mode 1-0.79 to -0.50 to +0.51 to +0.8 -0.79 to +0.80 to +0.79 to +0.80 to	oist moist m		

The PDSI is based upon precipitation, temperature, and soil moisture, and is considered most effective for unirrigated cropland. According to the latest PDSI, the Southwest and Southeast climate divisions are currently experiencing near normal conditions, while the rest of the state is above normal. No regions have experienced a PDSI moisture increase since Aug. 22.

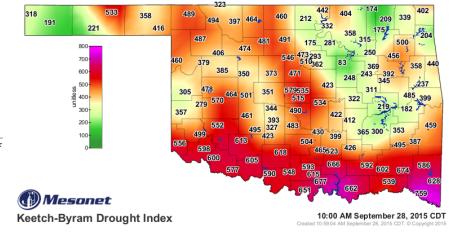
The SPI provides a comparison of precipitation over several specified periods with totals from the same periods for all years included in the historical record. All climate divisions had near normal or above normal precipitation for the 12-month and 24-month time periods. For the 3-month time period, the Southeast region had abnormally dry conditions

Keetch-Byram Drought Fire Index

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE
Idabel	Southeast	759
Madill	South Central	677
Cloudy	Southeast	674

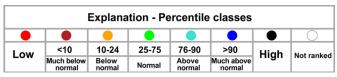
- Stations currently at or above 600 (September 28) = 13
- Stations above 600 on August 28 = 11

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.

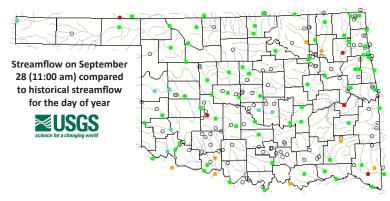


STREAMFLOW CONDITIONS

September 28, 2015

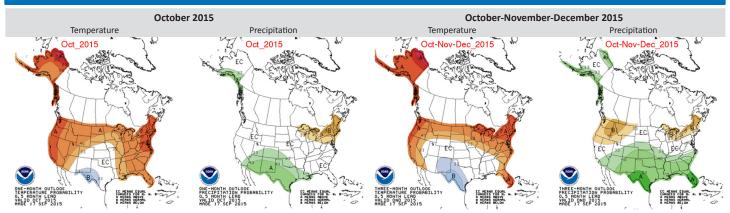


Visit waterwatch.usgs.gov for real-time streamflow information.



WEATHER/DROUGHT FORECAST

Seasonal Outlook

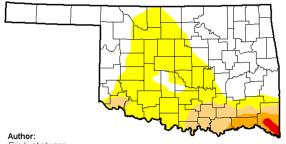


The contours on the maps show the total probability of three categories—above, indicated by the letter "A"; below, indicated by the letter "B"; and the middle category, indicated by the letter "N". "EC" stands for "Equal Chances" for A, N, or B

Regional Drought Summary & Outlook

U.S. Drought Monitor

Oklahoma



Eric Luebehusen U.S. Department of Agriculture









http://droughtmonitor.unl.edu/

September 22, 2015

(Released Thursday, Sep. 24, 2015) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

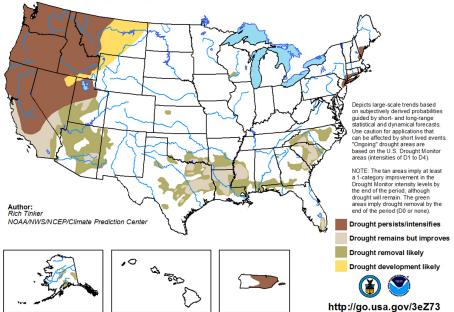
	None	DU-D4	D1-D4	D2-D4	D3-D4	D4
Сиггепт	52.80	47.20	10.85	3.30	0.69	0.00
Last Week 9/15/2015	47.59	52.41	15.55	4.54	0.00	0.00
3 Month's Ago 623/2015	98.28	1.72	0.00	0.00	0.00	0.00
Start of Calendar Year 12302014	25.63	74.37	62.03	40.84	21.74	5.70
Start of Water Year 930/2014	8.55	91.45	73.31	58.13	20.92	4.64
One Year Ago 923/2014	17.17	82.83	69.10	49.31	13.59	2.25

D3 Extreme Drought

D4 Exceptional Drought

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

U.S. Seasonal Drought Outlook Valid for September 17 - December 31, 2015 Drought Tendency During the Valid Period Released September 17, 2015



According to the U.S. Drought Monitor, the number of Oklahomans currently affected by drought (category D1-D4) is 182,209, up by more than 50,000 from this time last month, and all in the southern third of the state. While most of these areas are classified as experiencing Moderate Drought (D1), the southern half of McCurtain County and all of Choctaw County are classified as experiencing Severe Drought (D2), and a small area in the southeast corner of the state near Broken Bow and Idabel is classified as experiencing Extreme Drought (D3).

At this time last year, almost 70% of the state was experiencing drought conditions with nearly half the state experiencing Severe Drought (D2) or worse.

According to the seasonal drought outlook, from mid September through the end of December drought conditions are not likely to develop in any parts of Oklahoma, and drought conditions are likely to remain but improve in a few areas in the extreme southern portions of the South Central and Southeast regions.

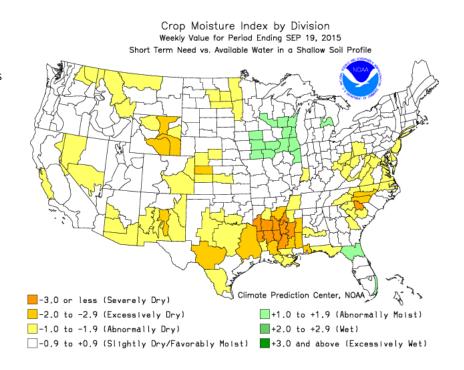
Drought is likely to persist or intensify in a huge area along the west coast, reaching inland through Idaho and Nevada and into Montana and Utah. There are a few areas of persistent drought along the northern portions of the east coast as well.

CROP REPORT

According to the latest USDA Oklahoma Crop Weather report (September 24), topsoil moisture conditions declined from the week prior with 11 percent rated adequate. Subsoil moisture conditions declined slightly with 96 percent of the state rated short to very short.

According to the NOAA Crop Moisture Index by Division, for the period ending September 19, the Southwest and South Central climate regions experienced abnormally dry conditions while the remaining climate regions were slightly dry to favorably moist.

Derived from the Palmer, 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.



RESERVOIR STORAGE

Oklahoma Surface Water Resources

Reservoir Levels and Storage as of 9/28/2015

