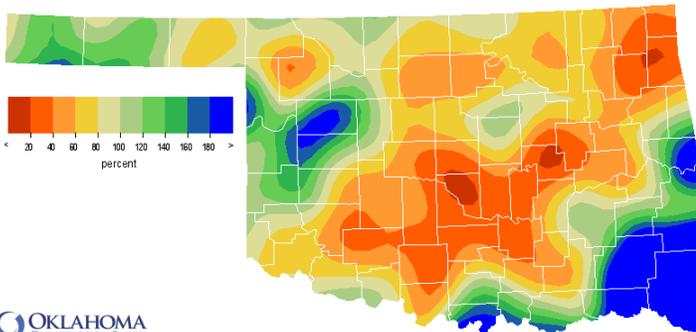


August 30, 2016

PRECIPITATION

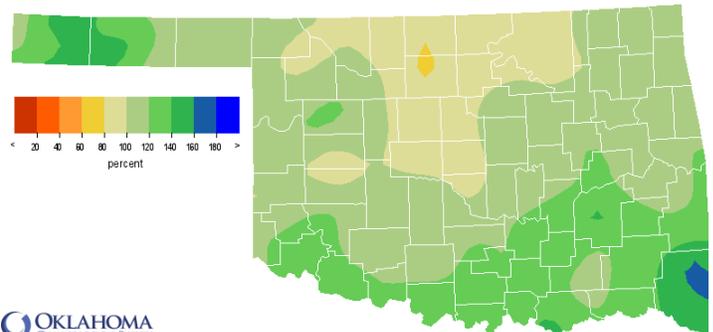
Statewide Precipitation

Climate Division	Last 30 Days July 31, 2016 – August 29, 2016				Last 365 Days August 31, 2015 – August 29, 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	3.07"	+0.36"	113%	26th wettest	24.00"	+3.50"	117%	13th wettest
N. CENTRAL	2.48"	-0.58"	81%	48th driest	29.74"	-1.58"	95%	41st wettest
NORTHEAST	1.73"	-1.42"	55%	23rd driest	43.59"	+1.03"	102%	33rd wettest
W. CENTRAL	3.93"	+1.04"	136%	19th wettest	30.80"	+2.49"	109%	19th wettest
CENTRAL	1.50"	-1.48"	50%	24th driest	38.86"	+1.34"	104%	29th wettest
E. CENTRAL	2.32"	-0.59"	80%	39th driest	54.38"	+8.35"	118%	9th wettest
SOUTHWEST	1.85"	-0.77"	70%	42nd driest	36.75"	+6.58"	122%	11th wettest
S. CENTRAL	1.74"	-0.74"	70%	39th driest	50.83"	+10.22"	125%	9th wettest
SOUTHEAST	5.95"	+3.26"	221%	7th wettest	68.66"	+18.17"	136%	2nd wettest
STATEWIDE	2.59"	-0.25"	91%	44th wettest	41.54"	+5.17"	114%	17th wettest



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

Jul 31, 2016 through Aug 29, 2016
Created 2016-08-30 10:01:57 UTC. Copyright © 2016

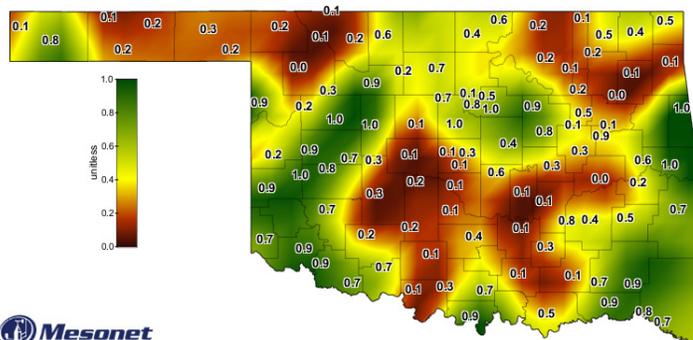


OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1981-2010 Normal Rainfall
Last 365 Days

Aug 31, 2015 through Aug 29, 2016
Created 2016-08-30 10:03:32 UTC. Copyright © 2016

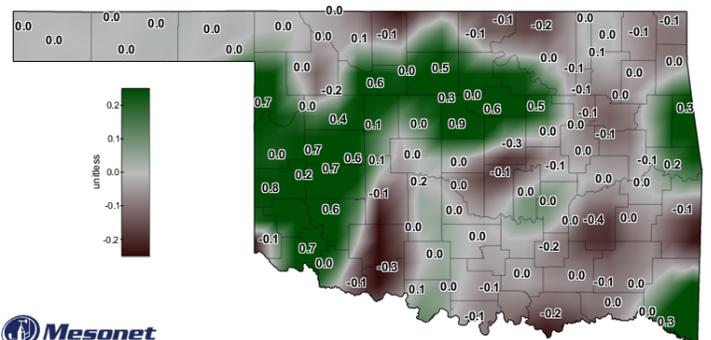
SOIL MOISTURE

Fractional Water Index August 30, 2016



Mesonet
1-day Average 10-inch Fractional Water Index

August 30, 2016
Created 7:30:13 AM August 31, 2016 CDT © Copyright 2016



Mesonet
7-day 10-inch Fractional Water Index Change

August 30, 2016
Created 6:30:02 AM August 31, 2016 CDT © 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 July 2016		
Climate Division	Status 8/30/16	Value 7/23 8/30		Change in Value	3-month	12-month	24-month
NORTHWEST	Unusual Moist Spell	1.93	2.26	-0.33	Near Normal	Moderately Moist	Extremely Moist
NORTH CENTRAL	Near Normal	-0.04	0.06	-0.1	Near Normal	Near Normal	Abnormally Moist
NORTHEAST	Near Normal	-0.69	-1.72	1.03	Near Normal	Abnormally Moist	Moderately Moist
WEST CENTRAL	Near Normal	-0.15	-0.31	0.16	Near Normal	Near Normal	Very Moist
CENTRAL	Near Normal	-0.4	-1.14	0.74	Near Normal	Abnormally Moist	Extremely Moist
EAST CENTRAL	Near Normal	0.6	-0.41	1.01	Abnormally Dry	Moderately Moist	Exceptionally Moist
SOUTHWEST	Unusual Moist Spell	3.12	2.11	1.01	Abnormally Moist	Moderately Moist	Exceptionally Moist
SOUTH CENTRAL	Near Normal	1.57	-0.2	1.77	Near Normal	Very Moist	Exceptionally Moist
SOUTHEAST	Near Normal	-0.07	1.04	-1.11	Moderately Dry	Extremely Moist	Exceptionally Moist

<div style="display: flex; justify-content: space-between;"> <div style="width: 15%;"> <p>extreme drought</p> -4.0 or less</div> <div style="width: 15%;"> <p>severe drought</p> -3.0 to -3.9</div> <div style="width: 15%;"> <p>moderate drought</p> -2.0 to -2.9</div> <div style="width: 15%;"> <p>near normal</p> -1.9 to +1.9</div> <div style="width: 15%;"> <p>unusual moist spell</p> +2.0 to +2.9</div> <div style="width: 15%;"> <p>very moist spell</p> +3.0 to +3.9</div> <div style="width: 15%;"> <p>extremely moist</p> +4.0 and above</div> </div>
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;"> <p>exceptionally dry</p> -2.00 and below</div> <div style="width: 10%;"> <p>extremely dry</p> -1.99 to -1.80</div> <div style="width: 10%;"> <p>severely dry</p> -1.59 to -1.30</div> <div style="width: 10%;"> <p>moderately dry</p> -1.29 to -0.80</div> <div style="width: 10%;"> <p>abnormally dry</p> -0.79 to -0.51</div> <div style="width: 10%;"> <p>near normal</p> -0.50 to +0.50</div> <div style="width: 10%;"> <p>abnormally moist</p> +0.51 to +0.79</div> <div style="width: 10%;"> <p>moderately moist</p> +0.80 to +1.29</div> <div style="width: 10%;"> <p>very moist</p> +1.30 to +1.59</div> <div style="width: 10%;"> <p>extremely moist</p> +1.60 to +1.99</div> <div style="width: 10%;"> <p>exceptionally moist</p> +2.0 and above</div> </div>

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 regions in the state are classified as Near Normal except the Northwest and Southwest, which are classified as experiencing Unusual Moist Spells.

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 the 3 time periods shown except the East Central and Southeast, which had Abnormally Dry and Moderately Dry conditions, respectively, during the 3-month time period.

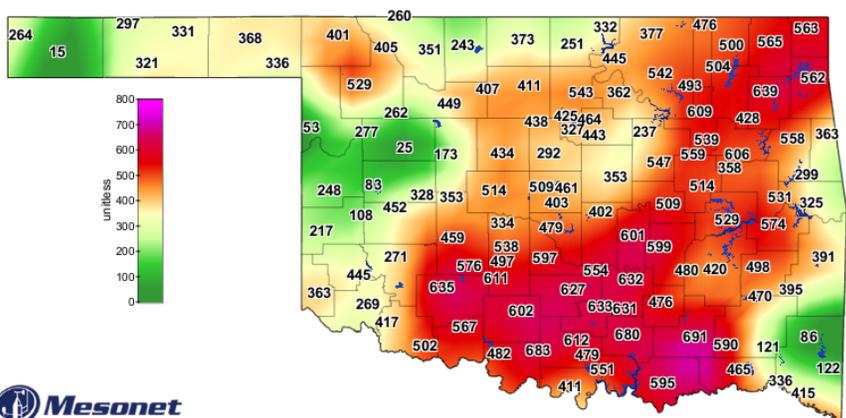
Keetch-Byram Drought Fire Index

Fifteen stations are currently above 600 (Aug. 31). The three stations with the highest values are Lane, Ringling, and Tishomingo.

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE
Lane	South Central	691
Ringling	South Central	683
Tishomingo	South Central	680

Five stations were above 600 on July 28.

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.



Mesonet
Keetch-Byram Drought Index

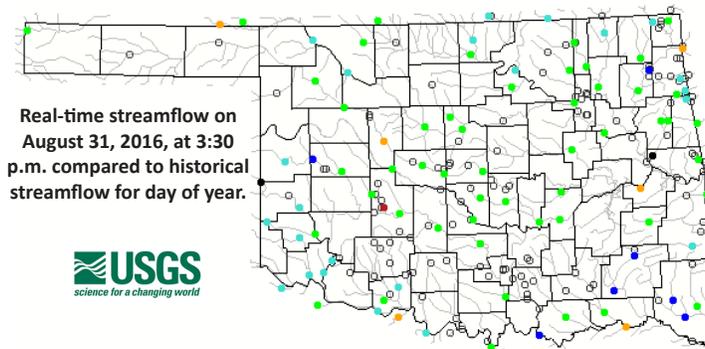
2:00 PM August 31, 2016 CDT
Created 3:14:04 PM August 31, 2016 CDT. © Copyright 2016

STREAMFLOW CONDITIONS

August 31, 2016

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

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

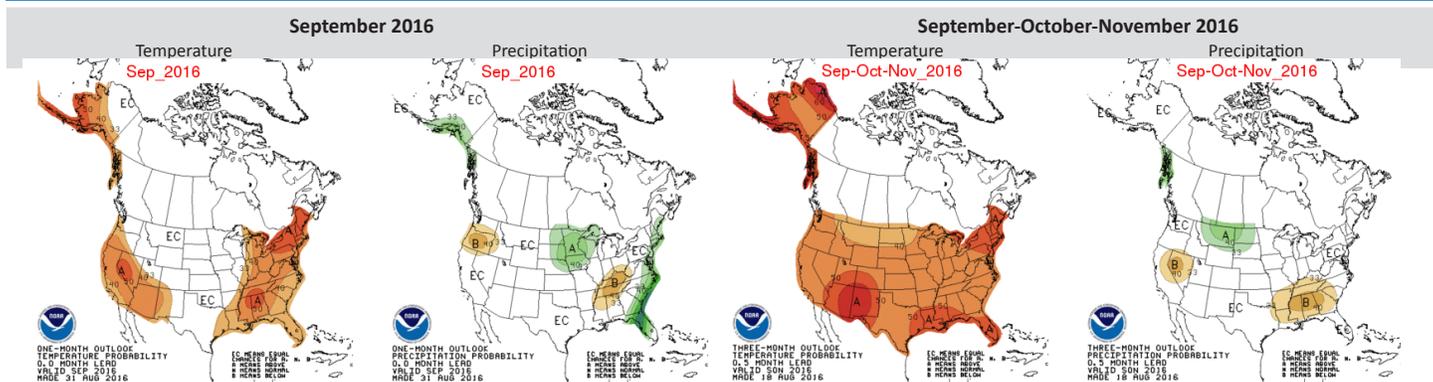


Real-time streamflow on August 31, 2016, at 3:30 p.m. compared to historical streamflow for day of year.

USGS
science for a changing world

WEATHER/DROUGHT FORECAST

Seasonal Outlook

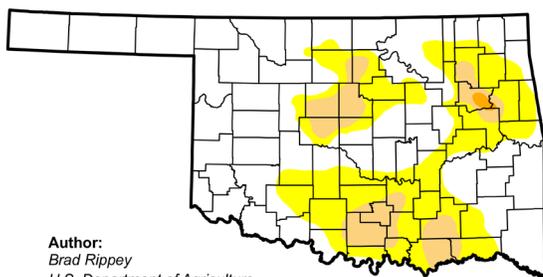


The contours on the maps show the total probability of three categories—above, indicated by the letter “A”; below, indicated by the letter “B”; and the middle category, indicated by the letter “N”. “EC” stands for “Equal Chances” for A, N, or B

Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

August 23, 2016
(Released Thursday, Aug. 25, 2016)
Valid 8 a.m. EDT



Author:
Brad Rippey
U.S. Department of Agriculture



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

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	64.06	35.94	9.31	0.30	0.00	0.00
Last Week 8/16/2016	63.40	36.60	8.32	0.58	0.00	0.00
3 Months Ago 5/24/2016	97.16	2.84	0.00	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/29/2015	52.60	47.40	16.79	6.37	0.97	0.00
One Year Ago 8/25/2015	81.86	18.14	8.85	0.00	0.00	0.00

Intensity:
 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. See accompanying text summary for forecast statements.

According to the U.S. Drought Monitor, the number of Oklahomans affected by drought has fallen to 491,184 in the past month, with 9.3% of the state (in area) now in Moderate Drought (D1), and 0.3% of the state in Severe Drought (D2)—this includes most of the eastern half of Wagoner county.

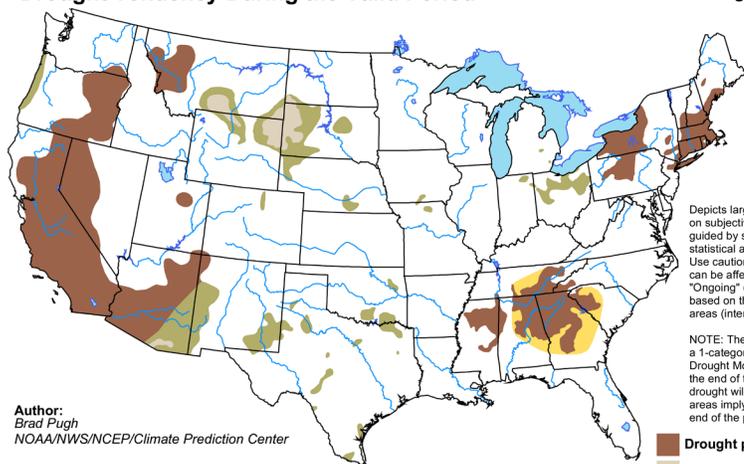
Rainfall totals varied widely across the state in the past month. While the Central region received only 50% of normal precipitation, the Southeast region received 221% of normal. The statewide average was 91% of normal.

According to the seasonal drought outlook, from mid August through the end of November, drought conditions are unlikely to remain or persist in any part of Oklahoma.

Drought is likely to persist in almost all of California, extending through eastern Oregon, western Nevada, and much of Arizona. There are also large areas of the southeastern and New England states, along with other isolated pockets across the nation, where drought is likely to develop or persist.

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

Valid for August 18 - November 30, 2016
Released August 18, 2016



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>



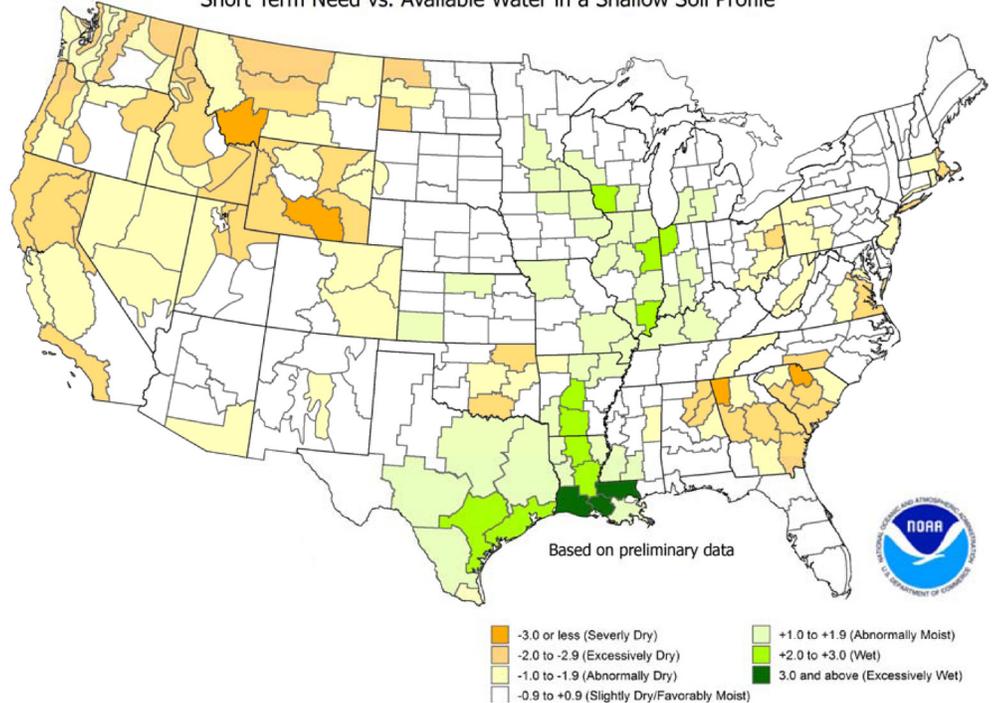
Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center

CROP MOISTURE INDEX

According to the NOAA Crop Moisture Index by Division, for the period ending August 27, the Panhandle, North Central, West Central, Southwest, and Southeast regions remain Slightly Dry/Favorably Moist (-0.9 to +0.9). The Central and East Central Regions are Abnormally Dry (-1.0 to -1.9), and the South Central region is Excessively Dry (-2.0 to -2.9).

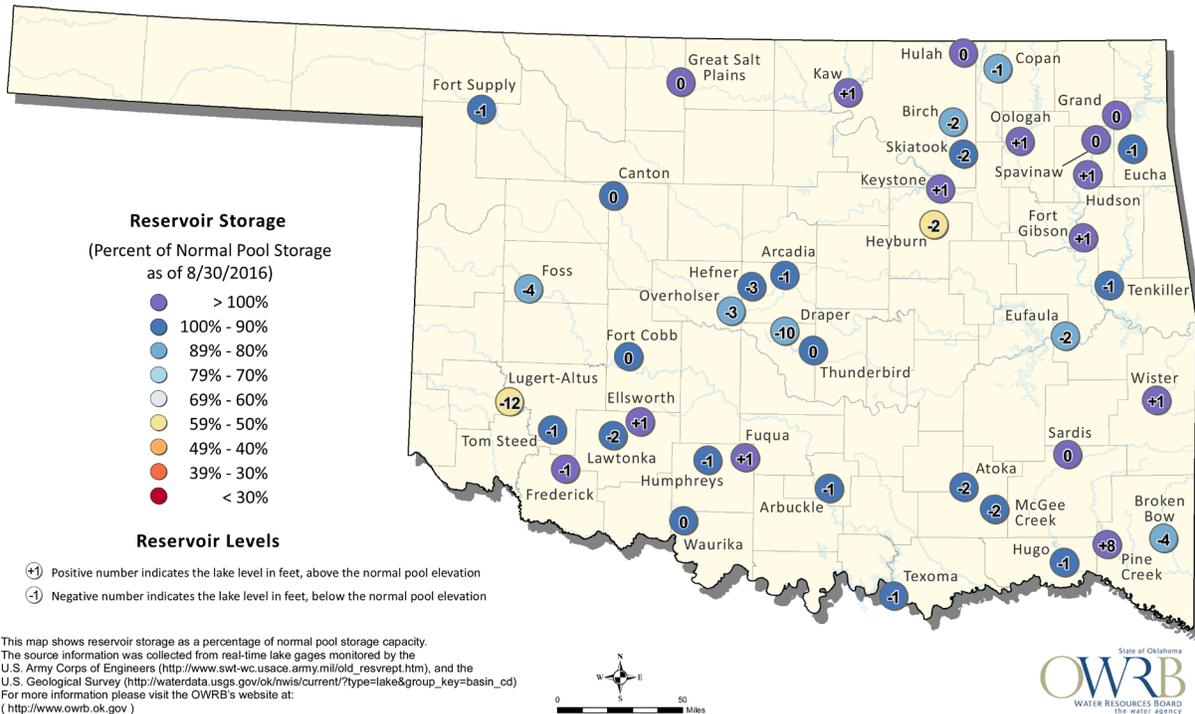
Derived from the Palmer Drought Severity Index (PDSI), the Crop Moisture Index reflects moisture supply in the short-term across major crop-producing regions. It identifies potential agricultural droughts. It is not intended to assess long-term droughts.

Crop Moisture Index by Division
Weekly Value for Period Ending Aug 27, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile



RESERVOIR STORAGE

Oklahoma Surface Water Resources Reservoir Levels and Storage as of 8/30/2016



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.