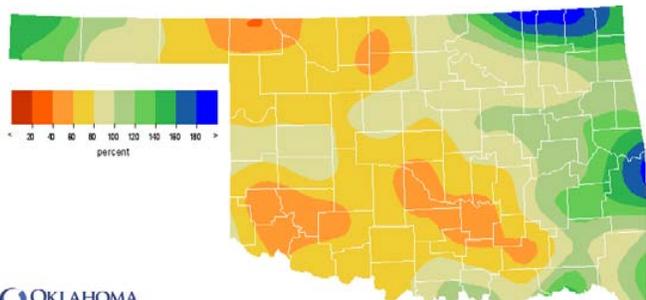


October 27, 2014

## PRECIPITATION

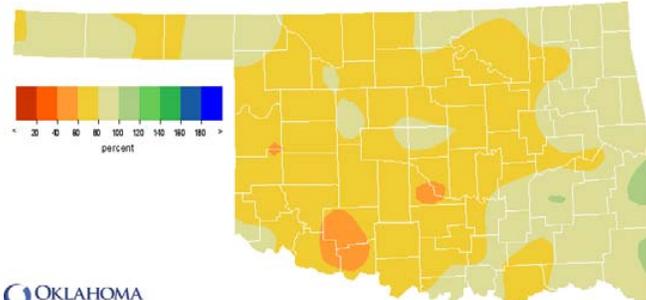
### Statewide Precipitation

CLIMATE DIVISION	Last 60 Days August 28 – October 26, 2014				Last 365 Days October 27, 2013 – October 26, 2014			
	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	3.04"	-0.51"	86%	44th driest	16.76"	-3.82"	81%	23rd driest
North Central	4.30"	-1.53"	74%	40th driest	24.18"	-7.24"	77%	22nd driest
Northeast	9.96"	+1.89"	123%	26th wettest	34.75"	-7.92"	81%	24th driest
West Central	4.57"	-1.05"	81%	45th driest	19.85"	-8.55"	70%	10th driest
Central	5.70"	-1.71"	77%	42nd driest	27.44"	-10.19"	73%	17th driest
East Central	9.49"	+0.60"	107%	28th wettest	38.34"	-7.80"	83%	27th driest
Southwest	3.77"	-2.33"	62%	29th driest	21.41"	-8.86"	71%	13th driest
South Central	5.62"	-2.37"	70%	33rd driest	30.81"	-9.90"	76%	15th driest
Southeast	10.36"	+1.61"	118%	22nd wettest	47.88"	-2.71"	95%	45th driest
Statewide	6.27"	-0.65"	91%	47th driest	28.87"	-7.60"	79%	16th driest



OKLAHOMA CLIMATOLOGICAL SURVEY  
Percentage of 1981-2010 Normal Rainfall  
Last 60 Days

Aug 28, 2014 through Oct 26, 2014

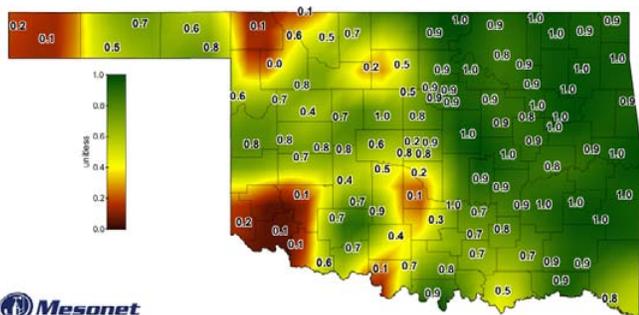


OKLAHOMA CLIMATOLOGICAL SURVEY  
Percentage of 1981-2010 Normal Rainfall  
Last 365 Days

Oct 27, 2013 through Oct 26, 2014

## SOIL MOISTURE

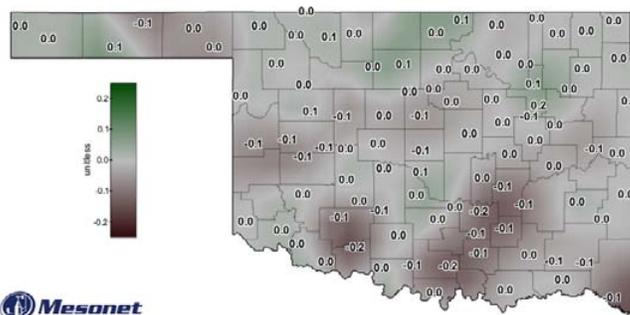
### Fractional Water Index<sup>1</sup> October 27, 2014



Mesonet

Daily Averaged Fractional Water Index at 10 inches

October 26, 2014



Mesonet

7-Day Change in Fractional Water Index at 10 inches

October 26, 2014

<sup>1</sup>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<sup>2</sup>

## Standardized Precipitation Index<sup>3</sup> Through September 2014

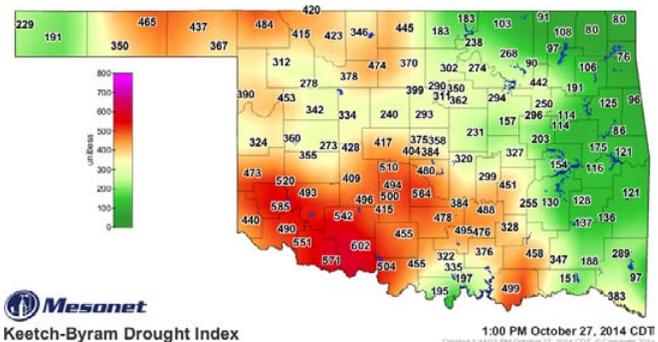
CLIMATE DIVISION	CURRENT STATUS 10/18/2014	VALUE			CHANGE IN VALUE	3-MONTH	12-MONTH	24-MONTH
		9/20	10/18	10/18				
Northwest	NEAR NORMAL	-2.85	-1.44	-1.41		NEAR NORMAL	MODERATELY DRY	MODERATELY DRY
North Central	NEAR NORMAL	0.57	1.29	-0.72		NEAR NORMAL	ABNORMALLY DRY	NEAR NORMAL
Northwest	NEAR NORMAL	-0.18	1.14	-1.32		NEAR NORMAL	MODERATELY DRY	ABNORMALLY DRY
West Central	MODERATE DROUGHT	-2.50	-1.96	-0.54		NEAR NORMAL	MODERATELY DRY	MODERATELY DRY
Central	NEAR NORMAL	-1.04	-0.73	-0.31		NEAR NORMAL	MODERATELY DRY	NEAR NORMAL
East Central	NEAR NORMAL	-0.18	1.07	-1.25		NEAR NORMAL	ABNORMALLY DRY	ABNORMALLY DRY
Southwest	SEVERE DROUGHT	-3.73	-3.60	-0.13		NEAR NORMAL	MODERATELY DRY	MODERATELY DRY
South Central	NEAR NORMAL	-0.92	-0.51	-0.41		NEAR NORMAL	ABNORMALLY DRY	MODERATELY DRY
Southeast	NEAR NORMAL	0.74	1.27	-0.53		ABNORMALLY MOIST	NEAR NORMAL	NEAR NORMAL

- According to the PDSI, the West Central and Southwest climate divisions are experiencing drought conditions with severe drought conditions in the Southwest; the rest of the state is classified as near normal. All regions have undergone a PDSI moisture decrease since September 20.
- According to the latest SPI, the Southeast region is *not* experiencing longer-term dry conditions (through the last two years); all other regions are shown to have abnormal to moderate dry conditions during the two-year period. No regions are shown to have dry conditions for the 3-month time period.

## Keetch-Byram Drought Fire Index<sup>4</sup>

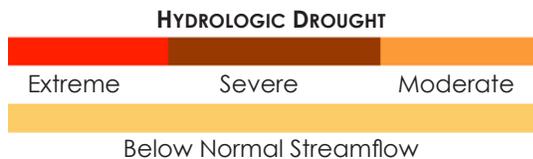
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 10/27/2014
Walters	Southwest	602
Mangum	Southwest	585
Grandfield	Southwest	571

- Stations currently at or above 600 (October 27) = 1
- Stations above 600 on September 26 = 2



## STREAMFLOW CONDITIONS

October 26, 2014



<sup>2</sup> The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

<sup>3</sup> The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while the 6-month SPI can be very effective in showing precipitation over distinct seasons.

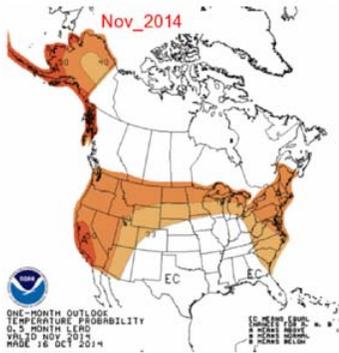
<sup>4</sup> The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

# WEATHER/DROUGHT FORECAST

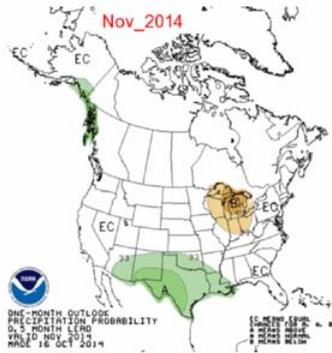
## Seasonal Outlook

November

Temperature

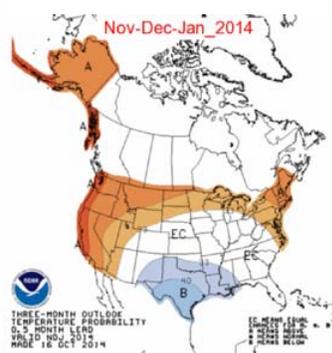


Precipitation

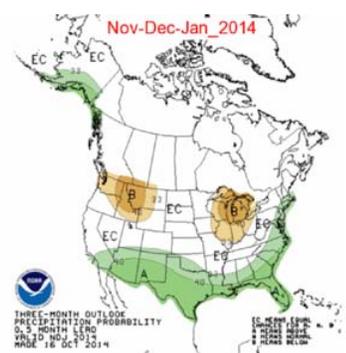


November-December-January

Temperature

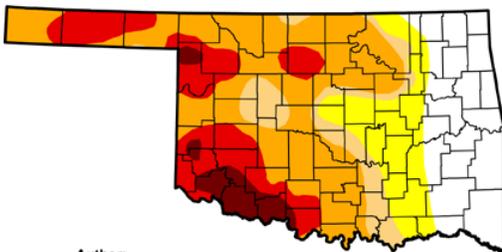


Precipitation



## Regional Drought Summary & Outlook

### U.S. Drought Monitor Oklahoma



Author:  
Michael Brewer  
NCDC/NOAA



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

October 21, 2014  
(Released Thursday, Oct. 23, 2014)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.15	77.85	64.49	55.44	20.87	4.84
Last Week 10/14/2014	22.08	77.92	64.49	55.44	20.87	4.84
3 Months Ago 7/22/2014	10.52	89.48	75.48	60.09	23.55	5.57
Start of Calendar Year 12/31/2013	50.84	49.16	38.17	18.99	4.84	2.40
Start of Water Year 9/30/2014	8.55	91.45	73.31	58.13	20.92	4.84
One Year Ago 10/22/2013	43.05	56.95	34.58	15.51	4.42	1.47

**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.

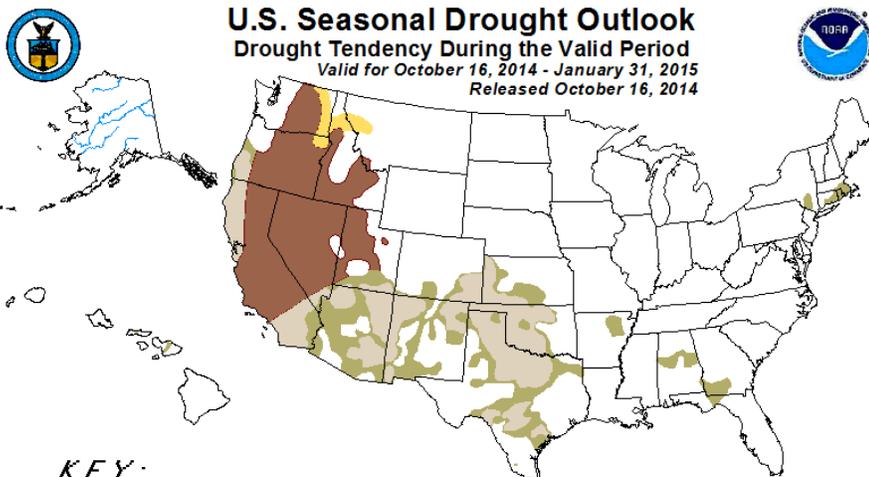
October 21—According to the U.S. Drought Monitor, 1,973,048 Oklahomans are being affected by drought (category D1-D4).

The past week was relatively dry in the Plains. There was some slight improvement in Abnormal Dryness (D0) in Kansas to line up more precisely with the beneficial precipitation of the previous week. Conversely, there was a slight expansion of Extreme Drought (D3) and Abnormal Dryness (D0) in Texas during the week as areas of the Texas panhandle and central Texas have missed the beneficial rains.

In the past month, the percentage of Oklahoma classified as being in Exceptional Drought (D4) has more than doubled (from 2.25% to 4.84%). Most of the areas experiencing Exceptional Drought are in the Southwest corner of the state. More areas are experiencing Extreme Drought than last month as well, all in the western half of the state. However, the percentage of the state experiencing Moderate Drought conditions or worse (D1-D4) has decreased by more than 4%, and the entire eastern quarter of the state is shown to be free of any dry conditions, which highlights the extreme variation in drought conditions across the state from east to west.

According to the seasonal drought outlook, during the period between mid-October and the end of January, drought conditions will likely remain but improve in all of western Oklahoma, as well as the North Central and South Central regions of the state. The rest of the state is expected not to experience drought conditions during this time period. No areas of the state are expected to experience persistent or intensifying drought conditions or likely drought development.

### U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period Valid for October 16, 2014 - January 31, 2015 Released October 16, 2014



**KEY:**

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

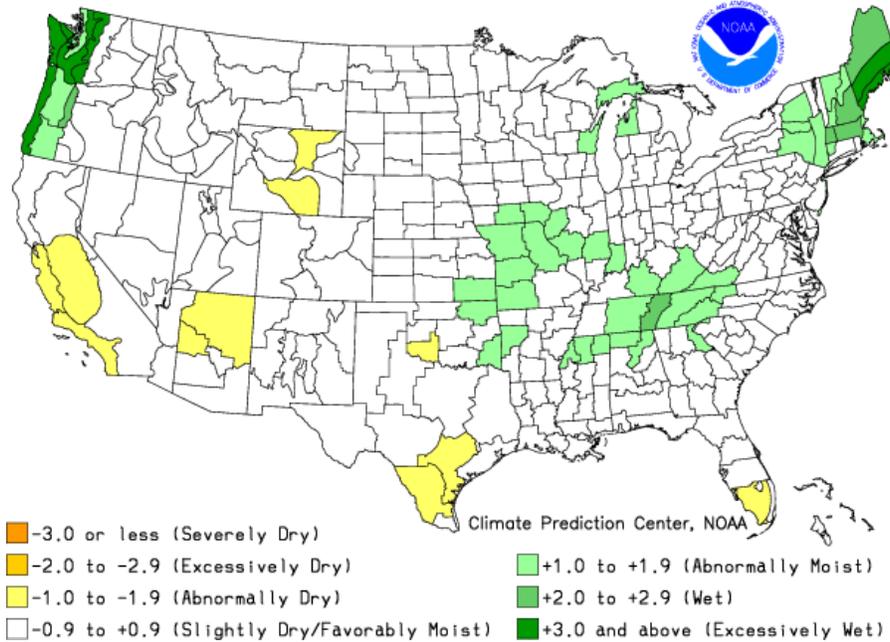
Author: Brad Pugh, Climate Prediction Center, NOAA  
[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/sdo\\_summary.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html)

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).  
 For weekly drought updates, see the latest U.S. Drought Monitor.  
 NOTE: The tan area 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)

# CROP REPORT

October 25 -According to the NOAA Crop Moisture Index by Division, the Southwest region was experiencing Abnormally Dry conditions during the past week. Most of the rest of the state was classified as Slightly Dry/Favorably Moist, with the Northeast and Southeast regions classified as Abnormally Moist.

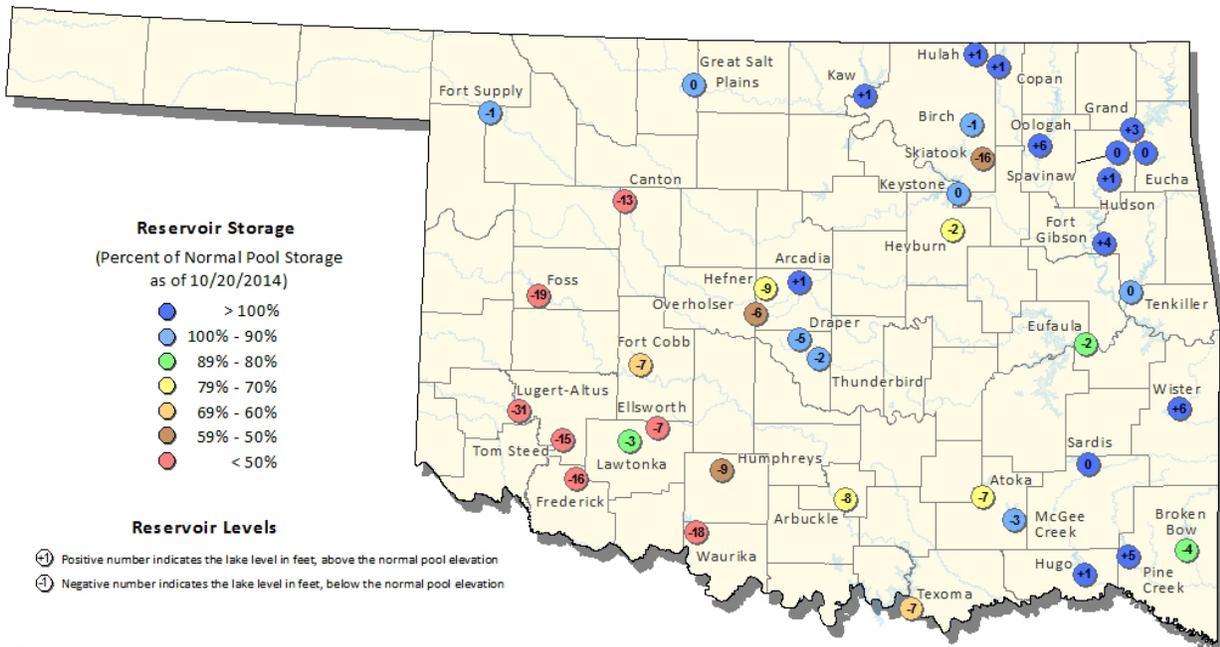
According to the USDA Crop Report, overall crop conditions were rated mostly good to fair in the last week. Topsoil and subsoil moisture conditions were rated mostly adequate to short.



# RESERVOIR STORAGE

## Oklahoma Surface Water Resources

### Reservoir Levels and Storage as of 10/20/2014



This map shows reservoir storage as a percentage of normal pool storage capacity. The source information was collected from real-time lake gages monitored by the U.S. Army Corps of Engineers ([http://www.swi-wc.usace.army.mil/old\\_resvrep.htm](http://www.swi-wc.usace.army.mil/old_resvrep.htm)), and the U.S. Geological Survey ([http://waterdata.usgs.gov/volkmwis/current/?type=lake&group\\_key=basin\\_cod](http://waterdata.usgs.gov/volkmwis/current/?type=lake&group_key=basin_cod)). For more information please visit the OWRB's website at: (<http://www.owrb.ok.gov>)

