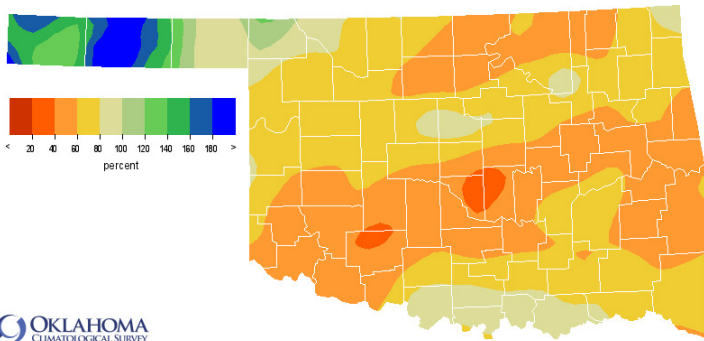


February 26, 2015

## PRECIPITATION

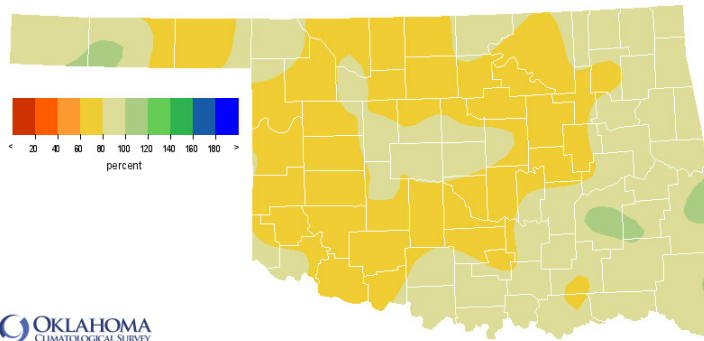
### Statewide Precipitation

CLIMATE DIVISION	Last 30 Days January 27, 2015 – February 25, 2015				Last 365 Days February 26, 2014 – February 25, 2015			
	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	0.80"	+0.13"	120%	34th wettest	17.25"	-3.33"	84%	27th driest
N. Central	0.81"	-0.46"	64%	42nd driest	24.28"	-7.14"	77%	23rd driest
Northeast	1.31"	-0.75"	64%	34th driest	34.89"	-7.78"	82%	24th driest
W. Central	0.77"	-0.38"	67%	47th driest	21.22"	-7.18"	75%	13th driest
Central	1.08"	-0.76"	58%	32nd driest	29.40"	-8.23"	78%	20th driest
E. Central	1.53"	-1.10"	58%	33rd driest	38.87"	-7.27"	84%	29th driest
Southwest	0.72"	-0.72"	50%	29th driest	23.43"	-6.84"	77%	20th driest
S. Central	1.67"	-0.70"	70%	35th driest	34.02"	-6.69"	84%	32nd driest
Southeast	2.18"	-1.33"	62%	26th driest	47.91"	-2.68"	95%	41st driest
Statewide	1.20"	-0.66"	65%	31st driest	30.01"	-6.46"	82%	23rd driest



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

Jan 27, 2015 through Feb 25, 2015  
Created 2/19/2015 10:01:28 UTC. Copyright © 2015

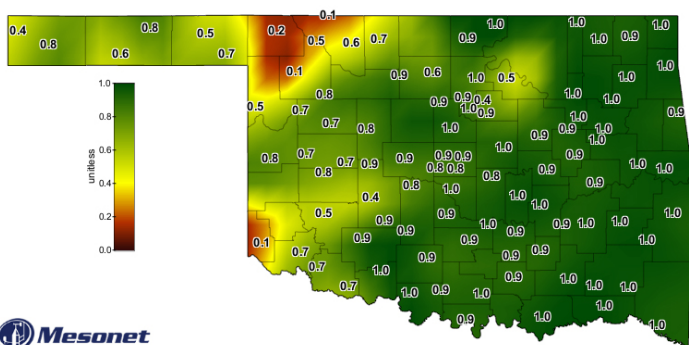


OKLAHOMA CLIMATOLOGICAL SURVEY  
Percentage of 1981-2010 Normal Rainfall  
Last 365 Days

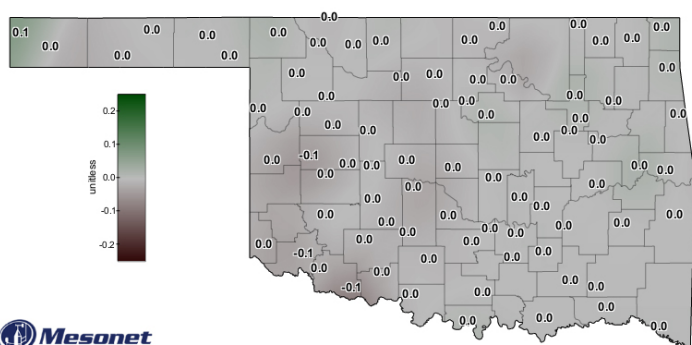
Feb 26, 2014 through Feb 25, 2015  
Created 2/19/2015 10:04:14 UTC. Copyright © 2015

## SOIL MOISTURE

### Fractional Water Index<sup>1</sup> February 25, 2015



Mesonet  
Daily Averaged Fractional Water Index at 10 inches  
February 25, 2015  
Created 6:30:12 AM February 26, 2015 CST. Copyright © 2015



Mesonet  
7-Day Change in Fractional Water Index at 10 inches  
February 25, 2015  
Created 5:30:01 AM February 26, 2015 CST. Copyright © 2015

<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 January 2015

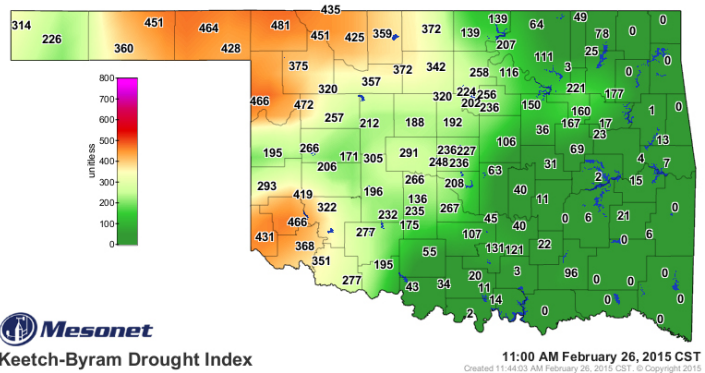
CLIMATE DIVISION	CURRENT STATUS 2/21/2015	VALUE			3-MONTH	12-MONTH	24-MONTH
		1/24	2/21	CHANGE IN VALUE			
Northwest	NEAR NORMAL	-1.66	-1.59	-0.07	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY
North Central	NEAR NORMAL	-0.62	-0.67	0.05	ABNORMALLY DRY	ABNORMALLY DRY	NEAR NORMAL
Northeast	NEAR NORMAL	-0.33	-0.29	-0.04	ABNORMALLY DRY	MODERATELY DRY	NEAR NORMAL
West Central	MODERATE DROUGHT	-1.73	-2.02	0.29	NEAR NORMAL	ABNORMALLY DRY	NEAR NORMAL
Central	NEAR NORMAL	-0.6	-1.17	0.57	NEAR NORMAL	ABNORMALLY DRY	NEAR NORMAL
East Central	NEAR NORMAL	0.25	-0.18	0.43	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Southwest	MODERATE DROUGHT	-2.16	-2.63	0.47	NEAR NORMAL	ABNORMALLY DRY	ABNORMALLY DRY
South Central	NEAR NORMAL	0.74	0.72	0.02	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Southeast	NEAR NORMAL	0.7	0.03	0.67	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL

- According to the PDSI, the West Central and Southwest climate divisions are currently experiencing moderate drought conditions, while the rest of the state is classified as near normal. All climate regions except the Northwest and Northeast regions have undergone a PDSI moisture decrease since January 24.
- According to the latest SPI, all climate regions except the South Central and Southeast regions are experiencing longer term dry conditions (through the last two years). The North Central and Northeast regions are experiencing abnormally dry conditions for the 3-month time period ending in January.

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

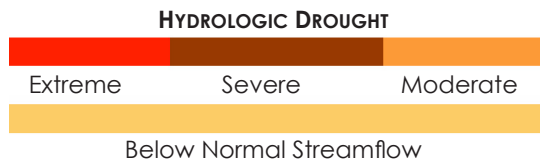
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 2/26/2015
Buffalo	Northwest	481
Camargo	West Central	472
Arnett	Northwest	466

- Stations currently at or above 600 (February 26) = 0
- Stations above 600 on January 26 = 0

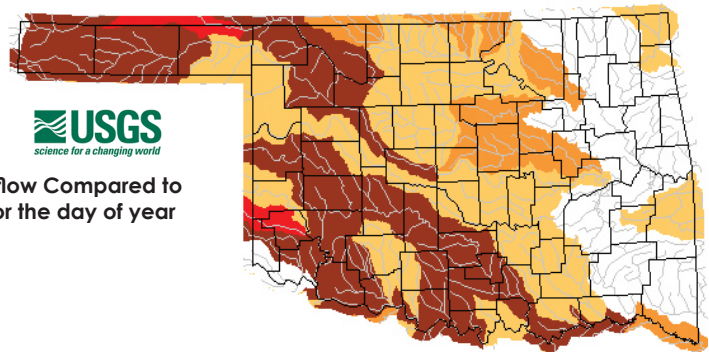


# STREAMFLOW CONDITIONS

February 25, 2015



Wednesday, February 25, 2015



**7-Day Average Streamflow Compared to Historical Streamflow for the day of year**

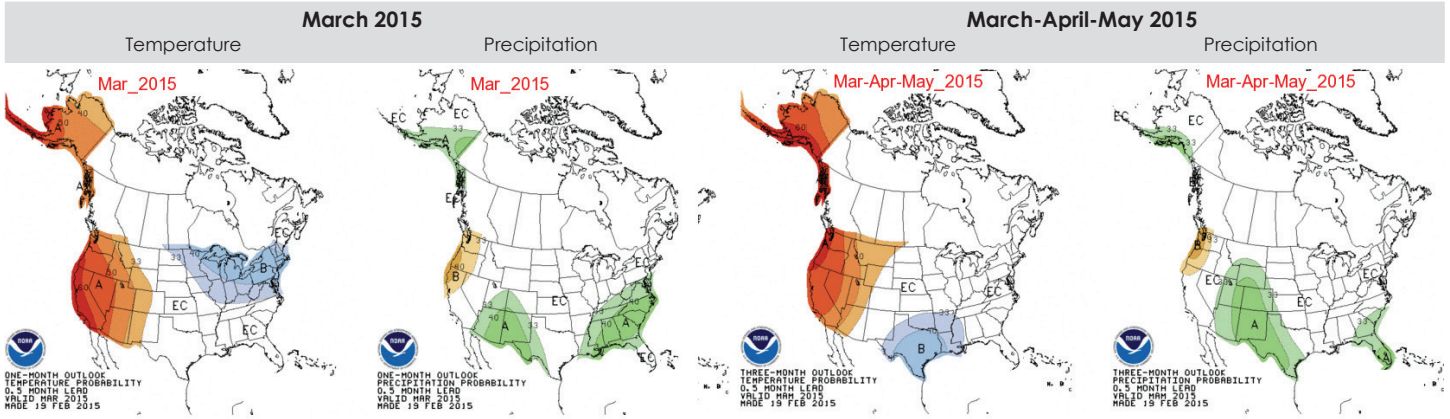
<sup>2</sup> The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

<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

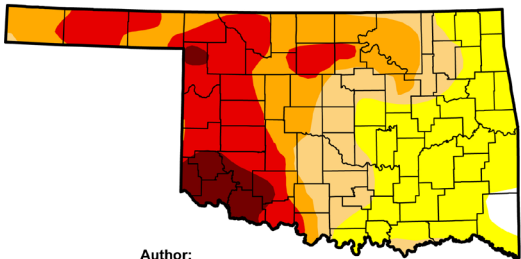
## Seasonal Outlook



A means Above; N means Normal; B means Below; EC means Equal Chances for A, N, or B

## Regional Drought Summary & Outlook

### U.S. Drought Monitor Oklahoma



Author:  
Richard Heim  
NCDC/NOAA



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

**February 24, 2015**  
(Released Thursday, Feb. 26, 2015)  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	1.48	98.52	65.55	48.46	27.80	5.75
<b>Last Week</b> 2/17/2015	1.48	98.52	65.04	45.54	22.81	5.75
<b>3 Months Ago</b> 11/25/2014	24.48	75.52	59.85	40.85	18.33	5.04
<b>Start of Calendar Year</b> 1/20/2014	25.63	74.37	62.03	40.84	21.74	5.70
<b>Start of Water Year</b> 9/30/2014	8.55	91.45	73.31	58.13	20.92	4.64
<b>One Year Ago</b> 2/23/2014	0.09	99.91	62.41	28.86	13.07	2.40

**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.

February 24—According to the U.S. Drought Monitor, 2,889,630 Oklahomans are currently affected by drought (category D1-D4), up by nearly 59% since this time last month.

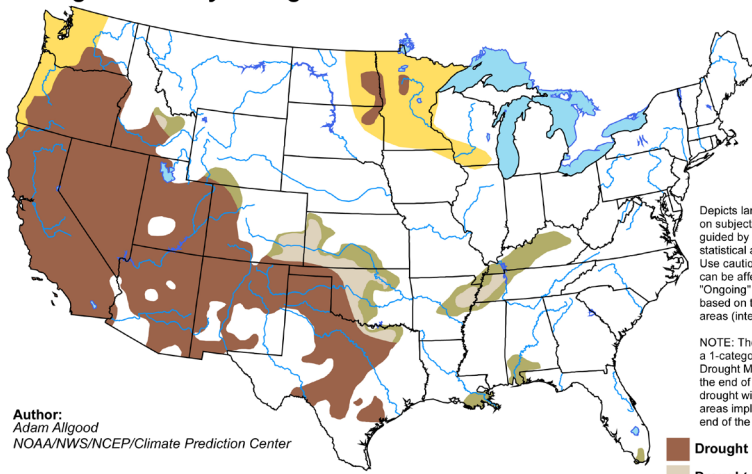
In the past month, the percentage of Oklahoma classified as experiencing Abnormally Dry (D0) to Extreme Drought (D3) conditions has increased by more than 4%, with the largest increase in the Extreme Drought (D3) classification. D3 was expanded in western Oklahoma across Roger Mills, Custer, Beckham, and Washita Counties. D1-D3 were expanded in north central Oklahoma. Only a small area in Southeastern Oklahoma (1.48% of the state) is classified as not experiencing abnormally dry conditions or worse.

Areas experiencing Exceptional Drought (D4) continue to include the Southwest corner of the state with a small area in northern Ellis County. Deeper soil moisture, stock ponds, rivers, and reservoirs in western Oklahoma have never fully recovered from the drought that began 4 years ago. The Washita River has been completely dry for most of the last 4 years. NASA satellite-based measurements of groundwater indicated severely dry conditions in western Oklahoma.

According to the seasonal drought outlook, from mid-February through the end of May, drought conditions are expected to persist or intensify in far western Oklahoma, including areas in the Panhandle, West Central, and Southwest regions. Drought will improve or drought removal is likely in most of the North Central, Central, and South Central regions, while the eastern half of the state is expected not to experience drought conditions during this time period.

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

Valid for February 19 - May 31, 2015  
Released February 19, 2015



Author:  
Adam Allgood  
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/intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

<http://go.usa.gov/hHTe>

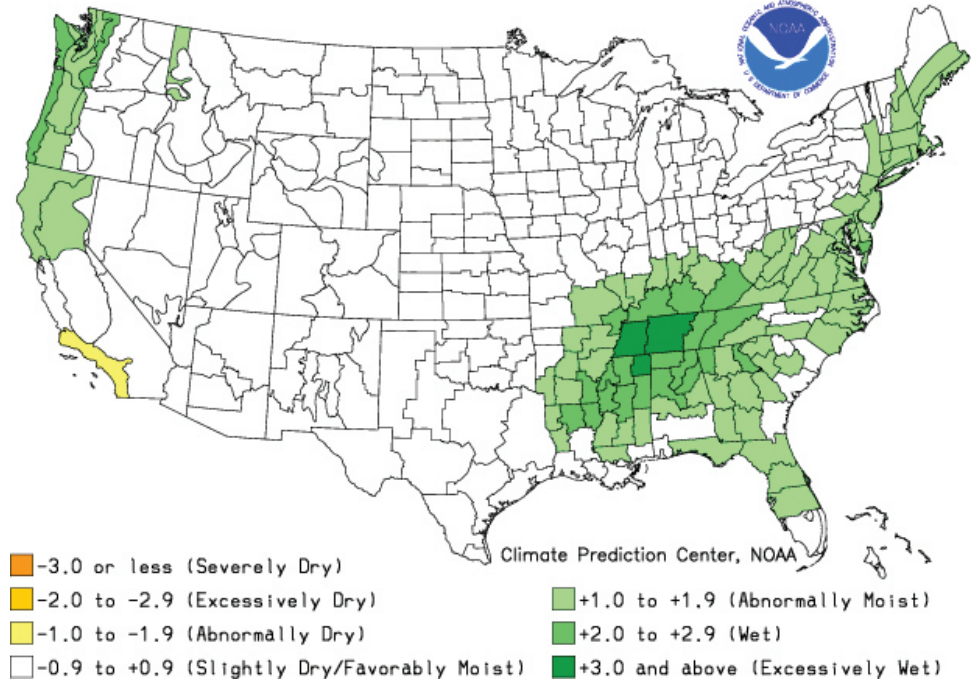


# CROP REPORT

According to the latest USDA Oklahoma Crop Weather report (February 2), all districts were below normal precipitation levels throughout January, with the North Central district experiencing the largest departure at just 64 percent of normal. Drought conditions were more extreme across the western half of the state, with areas of the Southwest and West Central districts experiencing severe to exceptional drought. Topsoil and subsoil moisture conditions were rated mostly adequate to short.

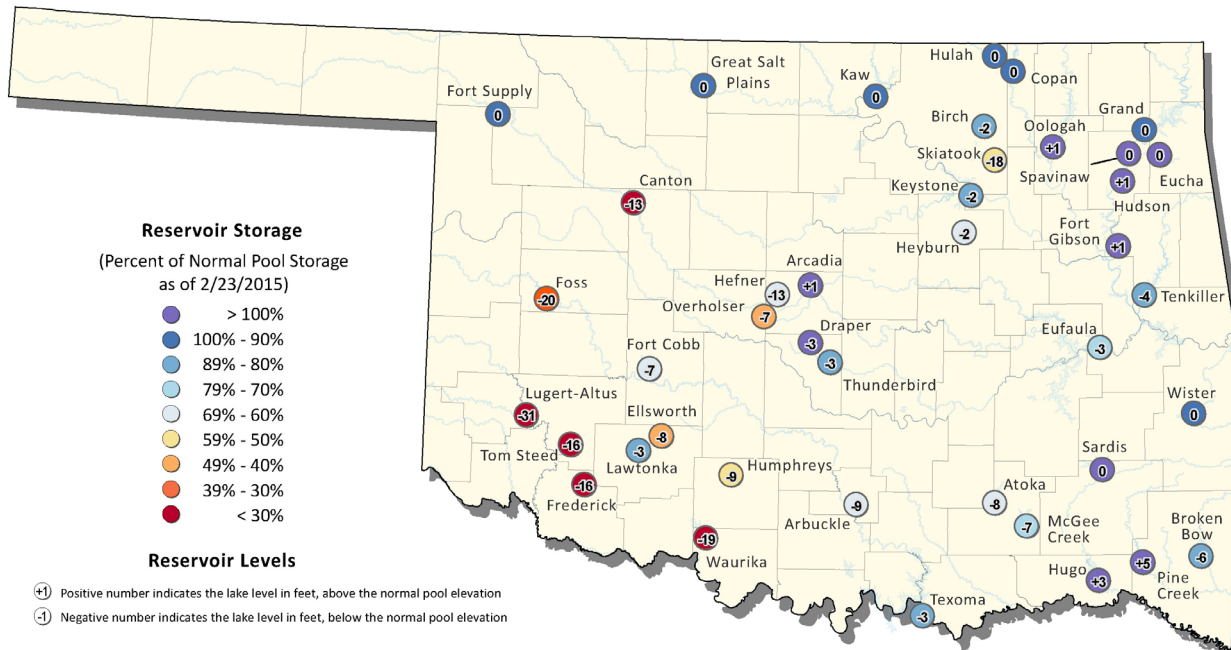
According to the NOAA Crop Moisture Index by Division, for the period ending February 21, the entire state is classified as experiencing slightly dry/favorably moist conditions.

Crop Moisture Index by Division  
Weekly Value for Period Ending FEB 21, 2015  
Short Term Need vs. Available Water in a Shallow Soil Profile



# RESERVOIR STORAGE

## Oklahoma Surface Water Resources Reservoir Levels and Storage as of 2/23/2015



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.svt-wc.usace.army.mil/old\\_resvpt.htm](http://www.svt-wc.usace.army.mil/old_resvpt.htm)), and the U.S. Geological Survey ([http://waterdata.usgs.gov/ok/nwis/current/?type=lake&group\\_key=basin\\_cd](http://waterdata.usgs.gov/ok/nwis/current/?type=lake&group_key=basin_cd)). For more information please visit the OWRB's website at: (<http://www.owrb.ok.gov>)

