

Oklahoma Water Resources Bulletin & Summary of Current Conditions

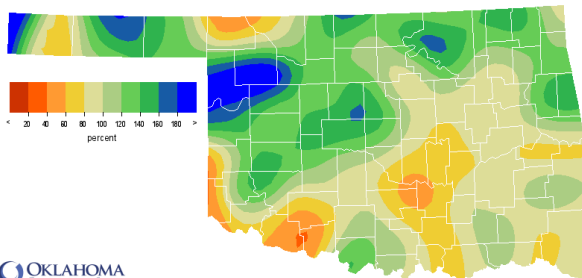


October 17, 2013

PRECIPITATION

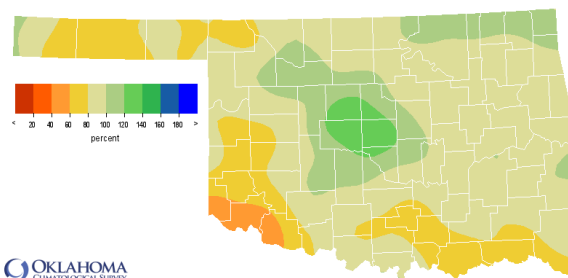
Statewide Precipitation

CLIMATE DIVISION	Last 30 Days September 15, 2013 – October 14, 2013				Last 365 Days October 15, 2012 – October 14, 2013			
	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	2.17"	+0.49"	129%	28th wettest	16.73"	-4.37"	79%	24th driest
North Central	3.50"	+0.63"	122%	28th wettest	29.69"	-1.96"	94%	41st wettest
Northeast	5.08"	+0.89"	121%	26th wettest	39.99"	-1.98"	95%	44th wettest
West Central	3.65"	+0.88"	132%	26th wettest	24.04"	-5.05"	83%	37th driest
Central	3.98"	+0.13"	103%	31st wettest	40.17"	+2.18"	106%	22nd wettest
East Central	4.55"	-0.03"	99%	33rd wettest	41.48"	-4.61"	90%	42nd driest
Southwest	2.95"	-0.21"	93%	39th wettest	23.93"	-6.87"	78%	25th driest
South Central	3.57"	-0.67"	84%	39th wettest	33.17"	-7.79"	81%	25th driest
Southeast	4.51"	-0.17"	96%	34th wettest	43.69"	-7.25"	86%	32nd driest
Statewide	3.78"	+0.22"	106%	33rd wettest	32.85"	-3.84"	90%	41st driest



OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1971-2000 Normal Rainfall
Last 30 Days

Sep 15, 2013 through Oct 14, 2013

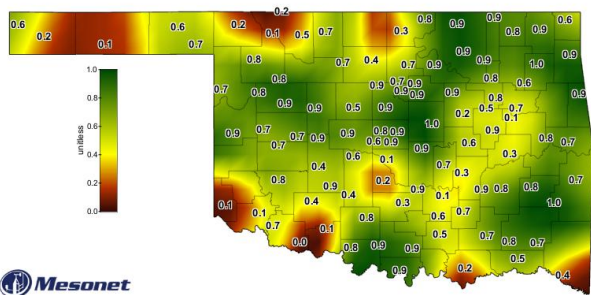


OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1971-2000 Normal Rainfall
Last 365 Days

Oct 15, 2012 through Oct 14, 2013

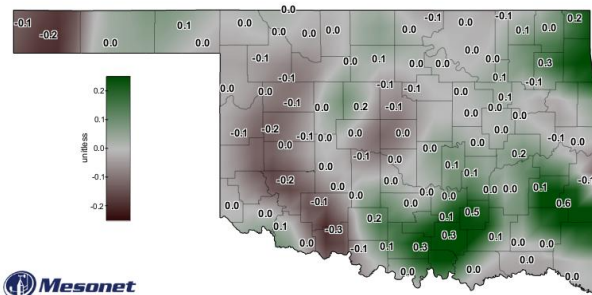
SOIL MOISTURE

Fractional Water Index¹ October 14, 2013



Mesonet
Daily Averaged Fractional Water Index at 10 inches

October 14, 2013



Mesonet
7-Day Change in Fractional Water Index at 10 inches

October 14, 2013

¹ 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

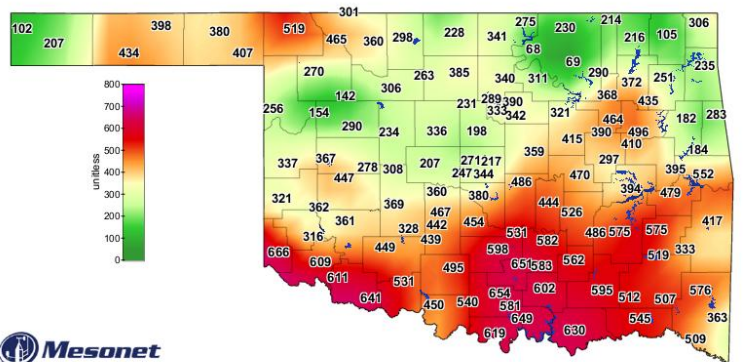
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through August 2013			
CLIMATE DIVISION	CURRENT STATUS 10/12/2013	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	12-MONTH	24-MONTH
		10/12	9/14					
Northwest	MILD DROUGHT	-1.02	-2.03	1.01	VERY MOIST	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
North Central	MOIST SPELL	1.52	1.14	0.38	MODERATELY MOIST	ABNORMALLY MOIST	NEAR NORMAL	NEAR NORMAL
Northeast	INCIPIENT MOIST SPELL	0.96	0.22	0.74	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
West Central	UNUSUAL MOIST SPELL	2.07	-1.59	3.66	ABNORMALLY MOIST	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY
Central	MOIST SPELL	1.54	1.42	0.12	EXTREMELY MOIST	EXTREMELY MOIST	MODERATELY MOIST	NEAR NORMAL
East Central	NEAR NORMAL	0.28	-0.69	0.97	ABNORMALLY DRY	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY
Southwest	MILD DROUGHT	-1.43	-2.04	0.61	MODERATELY MOIST	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
South Central	INCIPIENT DROUGHT	-0.66	-2.24	1.58	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Southeast	INCIPIENT DROUGHT	-0.86	-1.83	0.97	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL

- Four climate divisions, both in western Oklahoma, are classified as experiencing drought conditions, according to the PDSI. No regions have undergone a PDSI moisture decrease since September 14.
- According to the latest SPI, only two climate divisions (West Central and East Central) are experiencing near long-term dry conditions.

Keetch-Byram Drought Fire Index³

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 10/14/2013
Hollis	Southwest	666
Newport	South Central	654
Sulphur	South Central	651

- Stations currently at or above 600 (October 14) = 10
- Stations above 600 on September 16 = 22

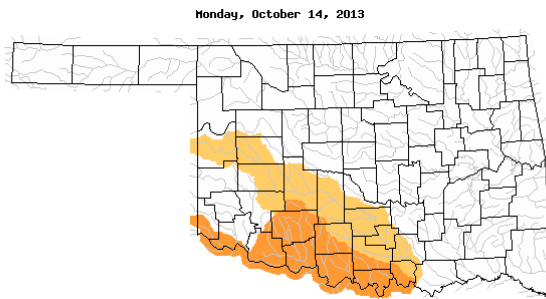
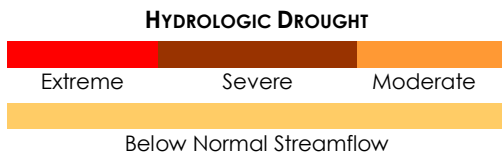


Mesonet
Keetch-Byram Drought Index

7:00 AM October 14, 2013 CDT
Created 7:44:04 AM October 14, 2013 CDT. © Copyright 2013

STREAMFLOW CONDITIONS

October 14, 2013



USGS

¹ 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.

² 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.

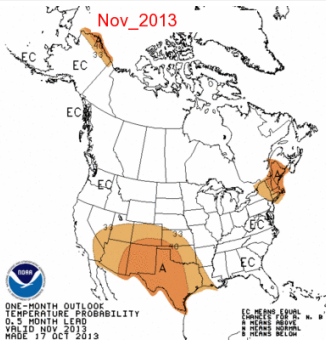
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

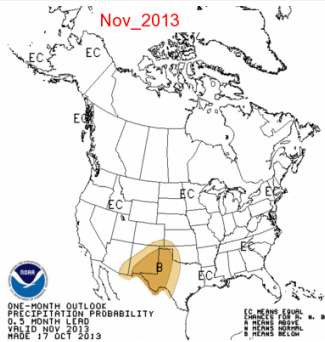
Seasonal Outlook

November

Temperature

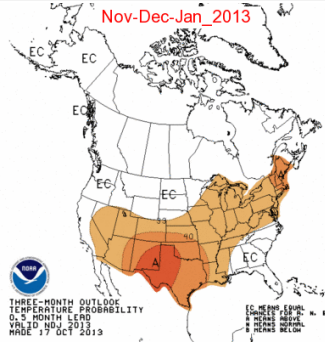


Precipitation

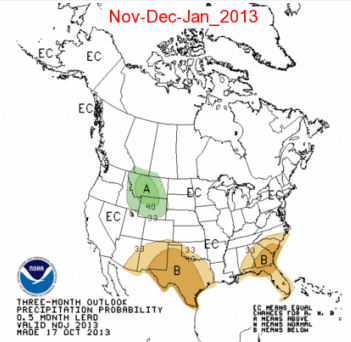


November-December-January

Temperature



Precipitation



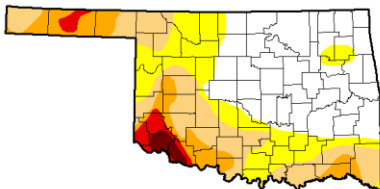
Regional Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

October 15, 2013

(Released Thursday, Oct. 17, 2013)
Valid 7 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	41.93	59.17	36.95	14.90	4.42	1.45
Last Week 19/02/13	22.70	77.30	42.81	19.12	4.42	1.45
3 Months Ago 28/02/12	24.92	75.08	59.05	36.19	30.29	4.32
Start of Calendar Year 1/01/13	0.00	100.00	100.00	100.00	94.89	37.06
Start of Water Year 1/07/13	21.74	79.26	43.00	17.62	4.42	1.45
One Year Ago 19/10/12	0.00	100.00	100.00	99.43	66.75	27.13



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.

Author:
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CPC/NOAA/NWS/NCEP

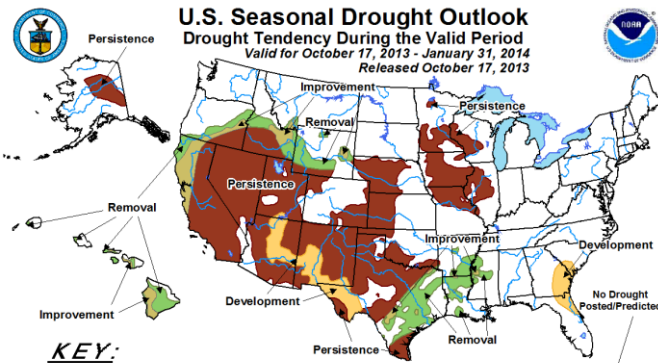
USDA
 NWS
 http://droughtmonitor.unl.edu/

October 15—Scattered moderate to heavy rainfall was experienced in southeast Kansas, southwest Missouri, the southern Great Plains, and portions of the lower Mississippi Valley west of the Mississippi River. However, excessive rains of 4 to nearly 10 inches doused southwestern Texas and small areas in east central and western Texas, and eastern Oklahoma. 30-day totals exceeded 6 inches in numerous areas outside the Texas and Oklahoma Panhandles, with the largest amounts (12 to nearly 20 inches) observed near the southern reaches of the Texas/Louisiana border.

Less than five percent of the state is now classified in Extreme Drought, virtually unchanged from last month. About 15 percent of the state is considered to be experiencing Severe Drought, and about 37 percent remains in Moderate Drought—both improvements from one month ago. Most notably, conditions have improved in the southeast. The worst and longest suffering areas continue to be southwest Oklahoma, where significant Exceptional Drought conditions persist, and the Panhandle.

According to the latest Drought Outlook, drought is expected to persist or intensify throughout much of western and southern Oklahoma through January 2014.

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period Valid for October 17, 2013 - January 31, 2014 Released October 17, 2013



KEY:
 Persistence
 Improvement
 Removal
 Development
 No Drought Posted/Predicted

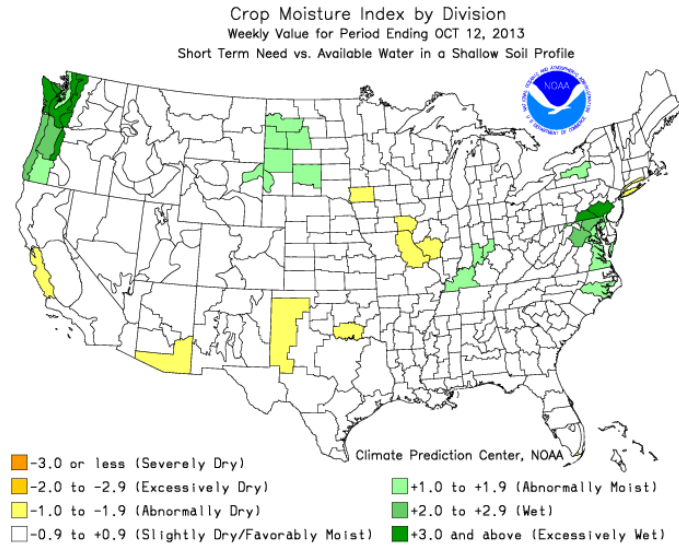
Author: Adam Allgood, Climate Prediction Center, NOAA
 http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

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 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 SUMMARY

September 30, 2013 – Planting of small grains and canola made significant progress before the weekend rainfall, and continued with the additional moisture received. Small portions of wheat, rye and canola were reported as emerged by the end of the week. Harvest of single-crop soybeans had begun on track with the five-year average, and corn and sorghum harvest continued. Topsoil moisture conditions were rated 45 percent adequate and 53 percent short to very short. Subsoil moisture conditions were rated 34 percent adequate and 65 percent short to very short. There were 6.0 days suitable for fieldwork.

Condition ratings of pasture and range continued to be rated mostly good to fair. Rainfall and cooler temperatures allowed for cool season forages to begin developing. Livestock was rated mostly in good condition. Although some livestock ponds received run-off moisture from the weekend rains, others are still low.



RESERVOIR STORAGE

October 14, 2013

