

Oklahoma Water Resources Bulletin & Summary of Current Conditions

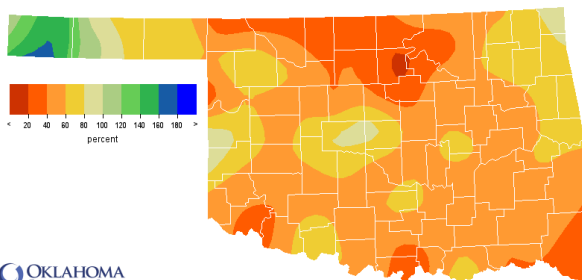


November 8, 2012

PRECIPITATION

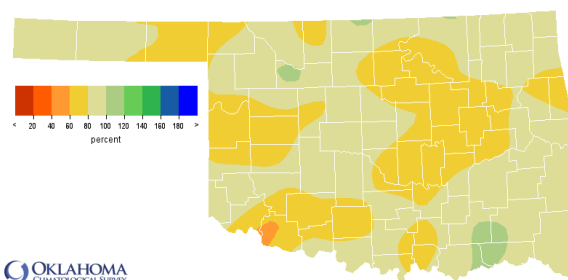
Statewide Precipitation

CLIMATE DIVISION	Cool Growing Season September 1, 2012 – November 5, 2012				Last 365 Days November 7, 2011 – November 5, 2012			
	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	2.57"	-1.00"	72%	26th driest	16.11"	-4.95"	77%	19th driest
North Central	2.39"	-3.74"	39%	8th driest	26.45"	-5.13"	84%	32nd driest
Northeast	5.04"	-3.97"	56%	17th driest	35.57"	-6.28"	85%	25th driest
West Central	3.66"	-2.22"	62%	23rd driest	21.79"	-7.24"	75%	16th driest
Central	4.49"	-3.75"	55%	19th driest	30.05"	-7.84"	79%	24th driest
East Central	5.39"	-4.56"	54%	22nd driest	36.10"	-9.85"	79%	18th driest
Southwest	3.42"	-3.24"	51%	20th driest	24.80"	-5.94"	81%	25th driest
South Central	4.65"	-4.46"	51%	17th driest	33.06"	-7.80"	81%	21st driest
Southeast	4.53"	-5.85"	44%	13th driest	46.95"	-3.82"	92%	36th driest
Statewide	4.03"	-3.63"	53%	14th driest	30.00"	-6.59"	82%	21st driest



OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Cool Growing Season

Sep 1, 2012 through Nov 5, 2012
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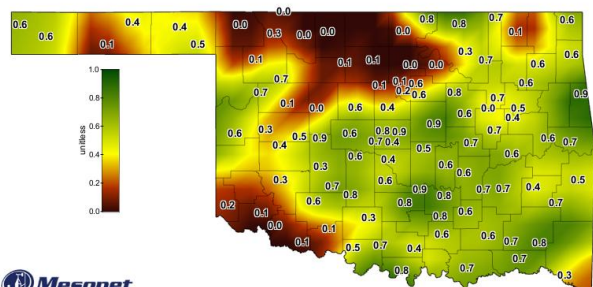
OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Last 365 Days

Nov 7, 2011 through Nov 5, 2012
Created 11/7/12 10:08:10 CST. Copyright © 2012

SOIL MOISTURE

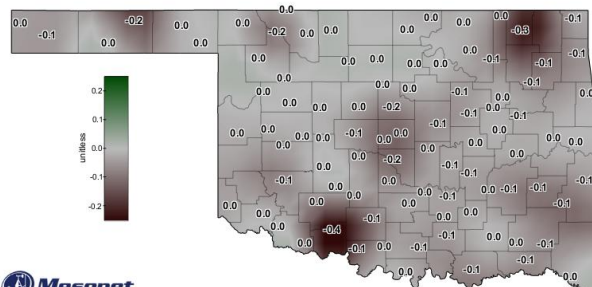
Fractional Water Index¹

November 5, 2012



Mesonet
Daily Averaged Fractional Water Index at 10 inches

November 5, 2012
Created 6:30:11 AM November 6, 2012 CST. © Copyright 2012



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

November 5, 2012
Created 5:30:51 AM November 6, 2012 CST. © Copyright 2012

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

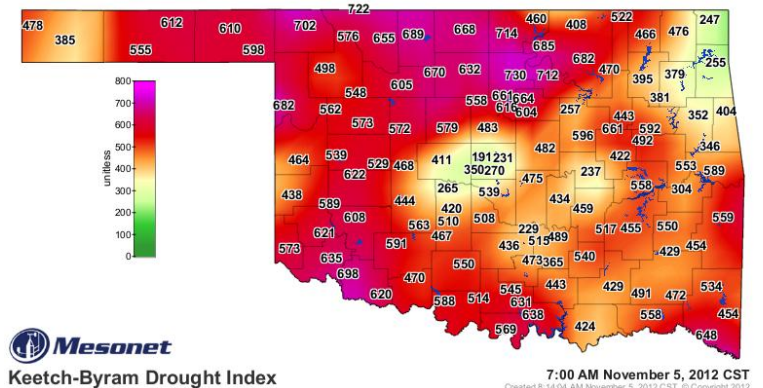
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through September 2012			
CLIMATE DIVISION	CURRENT STATUS 11/3/2012	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		11/3	10/6					
Northwest	SEVERE DROUGHT	-3.57	-3.60	0.03	ABNORMALLY DRY	SEVERELY DRY	NEAR NORMAL	NEAR NORMAL
North Central	SEVERE DROUGHT	-3.55	-3.40	-0.15	SEVERELY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Northeast	SEVERE DROUGHT	-3.35	-3.52	0.17	MODERATELY DRY	EXTREMELY DRY	SEVERELY DRY	MODERATELY DRY
West Central	SEVERE DROUGHT	-3.56	-2.91	-0.65	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Central	SEVERE DROUGHT	-3.52	-3.12	-0.40	ABNORMALLY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
East Central	SEVERE DROUGHT	-3.42	-3.20	-0.22	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Southwest	SEVERE DROUGHT	-3.45	-2.65	-0.80	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
South Central	SEVERE DROUGHT	-3.58	-3.25	-0.33	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Southeast	SEVERE DROUGHT	-3.33	-3.32	-0.01	NEAR NORMAL	EXTREMELY DRY	NEAR NORMAL	NEAR NORMAL

- All nine climate divisions are experiencing severe drought conditions, according to the PDSI. Seven climate divisions have undergone a PDSI moisture decrease since October 6. Eight climate divisions (all but the Southwest) continue to experience near long-term dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

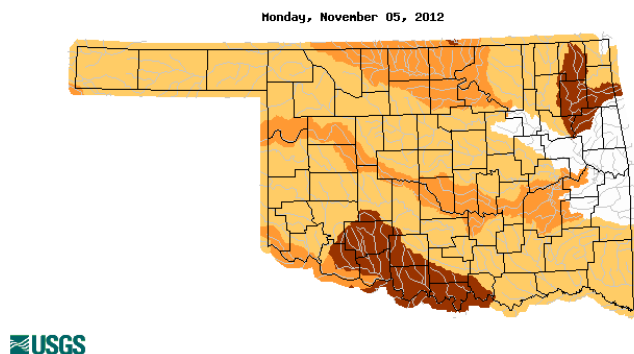
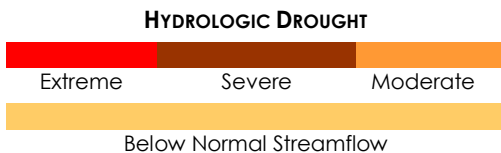
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 11/5/2012
Red Rock	North Central	730
May Ranch	North Central	722
Blackwell	North Central	714

- Stations currently at or above 600 (November 5) = 30
- Stations above 600 on October 8 = 29



STREAMFLOW CONDITIONS

November 5, 2012



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.

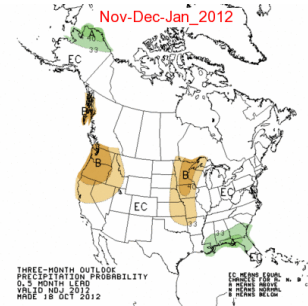
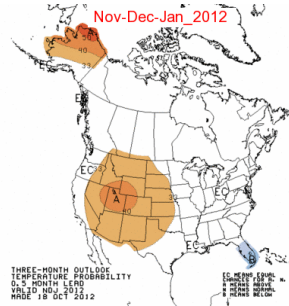
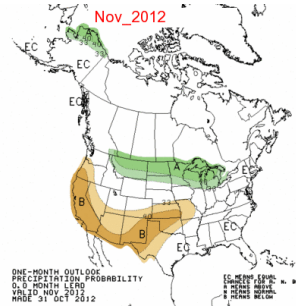
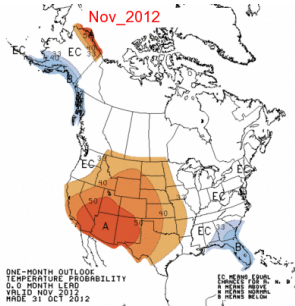
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

Seasonal Outlook

November

Nov-Dec-Jan



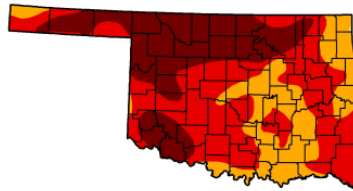
Regional Drought Summary & Outlook

U.S. Drought Monitor

November 6, 2012
Valid 7 a.m. EST

Oklahoma

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	99.96	75.74	31.90
Last Week (10/30/2012 map)	0.00	100.00	100.00	99.43	67.64	27.13
3 Months Ago (08/07/2012 map)	0.00	100.00	100.00	100.00	96.78	16.03
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	99.98	95.33	42.09
One Year Ago (11/01/2011 map)	0.00	100.00	100.00	99.28	85.48	42.87



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

<http://droughtmonitor.unl.edu>

Released Thursday, November 8, 2012
David Miskus, Climate Prediction Center/NCEP/NWS/NOAA

November 6—The latest U.S. Drought Monitor reports that much of Texas and Oklahoma recorded above normal temperatures and little or no rain. As a result, deteriorations were made to Oklahoma (D3 and D4) and most of Texas (D1-D4). With so much of Oklahoma already in D3 and D4, it is getting difficult to degrade the state further. An exception was in extreme southeastern Colorado (Baca County) and the immediate area where further assessment of indices and actual conditions warranted an improvement from D3 to D2. In contrast, the rains in southeast Texas were enough to remove D0 in Polk and San Jacinto counties; however, but drier conditions to the east expanded D0 into southwestern Louisiana while D1 was added in extreme southeastern Texas and southwestern Louisiana due to short-term (60-day) shortages of 6 to 9 inches.

More than 75 percent of Oklahoma remains in Extreme Drought. About 32 percent of the state—including much of northern and southwest Oklahoma—is considered Exceptional, the most intense drought category.

According to the latest Drought Outlook (November 1), abnormal dryness prevailed across the central and southern Plains, promoting drought persistence and modest expansion outside of some spotty relief in central Texas. During the upcoming three months, enhanced chances of abnormal dryness across the West keep prospects of significant improvement low. Drought persistence is likely across the remainder of the Plains (including Oklahoma) and Southwest due to dry seasonal climatology and a dry November outlook.

