

Oklahoma Water Resources Bulletin & Summary of Current Conditions

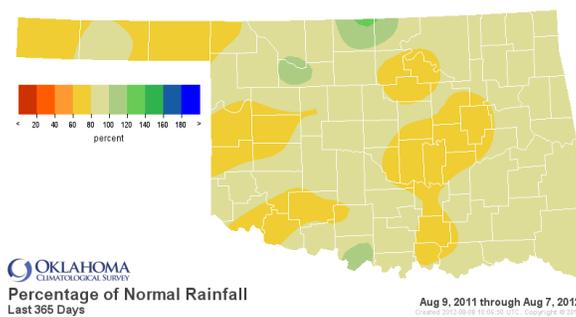
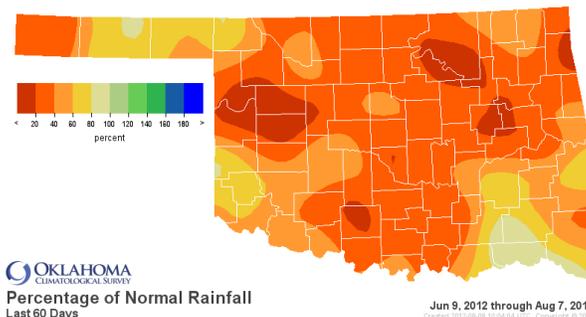


August 9, 2012

PRECIPITATION

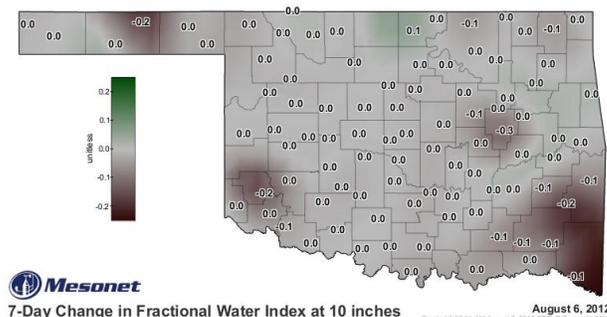
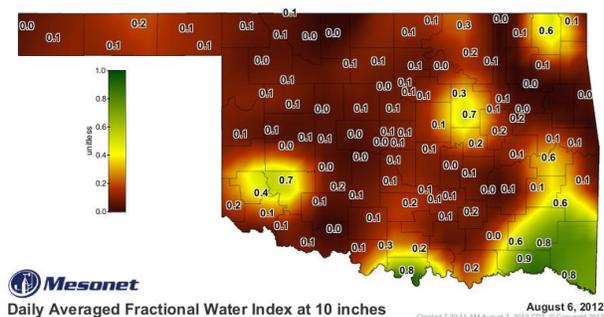
Statewide Precipitation

CLIMATE DIVISION	Last 60 Days June 9, 2012 – August 7, 2012				Last 365 Days August 9, 2011 – August 7, 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	2.76"	-2.48"	53%	12th driest	15.64"	-5.38"	74%	17th driest
North Central	2.01"	-4.55"	31%	4th driest	28.67"	-2.88"	91%	42nd driest
Northeast	2.17"	-5.10"	30%	2nd driest	36.64"	-5.23"	88%	36th driest
West Central	1.52"	-4.05"	27%	4th driest	22.10"	-6.90"	76%	21st driest
Central	2.05"	-4.46"	32%	4th driest	30.92"	-6.98"	82%	29th driest
East Central	2.52"	-4.67"	35%	3rd driest	37.82"	-8.18"	82%	23rd driest
Southwest	2.88"	-2.95"	49%	14th driest	25.68"	-5.03"	84%	35th driest
South Central	2.08"	-4.43"	32%	6th driest	33.66"	-7.21"	82%	30th driest
Southeast	5.38"	-2.26"	70%	27th driest	45.27"	-5.58"	89%	30th driest
Statewide	2.54"	-3.95"	39%	3rd driest	30.67"	-5.93"	84%	28th driest



SOIL MOISTURE

Fractional Water Index¹ August 6, 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

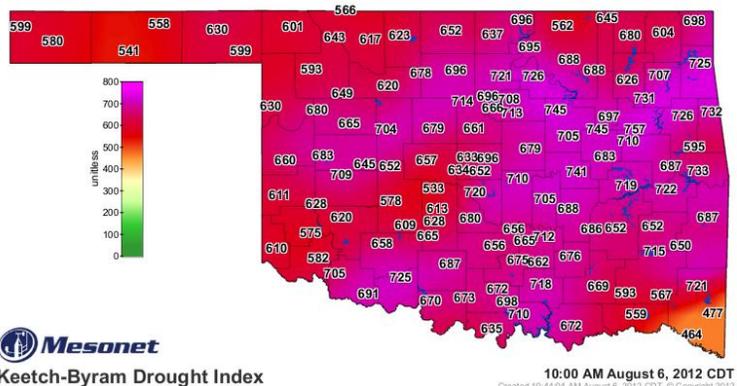
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through June 2012			
CLIMATE DIVISION	CURRENT STATUS 8/4/2012	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		8/4	7/7					
Northwest	EXTREME DROUGHT	-4.54	-4.09	-0.45	MODERATELY DRY	NEAR NORMAL	MODERATELY WET	NEAR NORMAL
North Central	SEVERE DROUGHT	-3.19	-2.03	-1.16	NEAR NORMAL	NEAR NORMAL	MODERATELY WET	NEAR NORMAL
Northeast	SEVERE DROUGHT	-3.60	-2.40	-1.20	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
West Central	EXTREME DROUGHT	-4.00	-2.91	-1.09	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Central	EXTREME DROUGHT	-4.14	-2.92	-1.22	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
East Central	EXTREME DROUGHT	-4.26	-3.35	-0.91	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Southwest	SEVERE DROUGHT	-3.94	-3.04	-0.90	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
South Central	EXTREME DROUGHT	-4.21	-3.19	-1.02	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Southeast	SEVERE DROUGHT	-3.92	-3.53	-0.39	EXTREMELY DRY	MODERATELY DRY	NEAR NORMAL	MODERATELY DRY

- All nine climate divisions are experiencing either extreme or severe drought conditions, according to the PDSI. All climate divisions have undergone a PDSI moisture decrease since July 7. Five climate divisions are experiencing near long-term dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

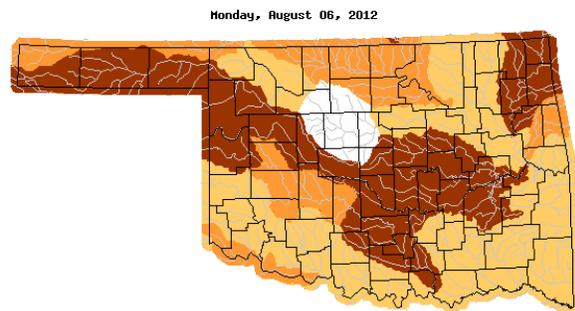
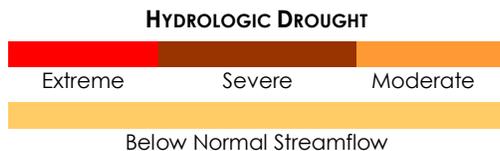
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 8/6/2012
Porter	Northeast	757
Hectorville	East Central	745
Oilton	Central	745

- Stations currently at or above 600 (August 6) = 102
- Stations above 600 on July 9 = 19



STREAMFLOW CONDITIONS

August 6, 2012



USGS

¹ The Palmer Drought Severity Index is calculated based on 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.

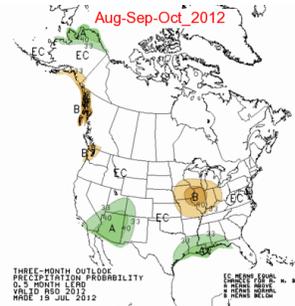
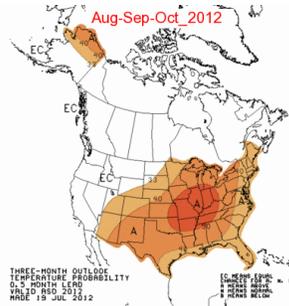
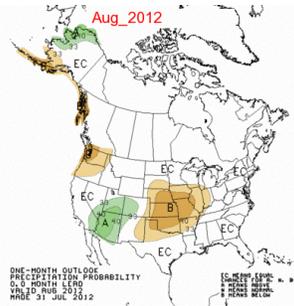
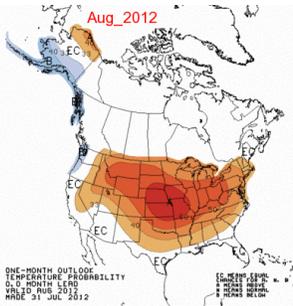
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

Seasonal Outlook

August 2012

Aug-Sep-Oct 2012

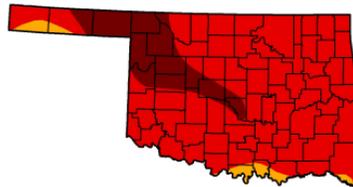


Regional Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

August 7, 2012
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	96.78	16.03
Last Week (07/31/2012 map)	0.00	100.00	100.00	98.99	71.60	5.20
3 Months Ago (05/09/2012 map)	75.76	24.24	14.15	9.78	3.27	0.00
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (08/02/2011 map)	0.00	100.00	100.00	100.00	88.10	64.30



Intensity:

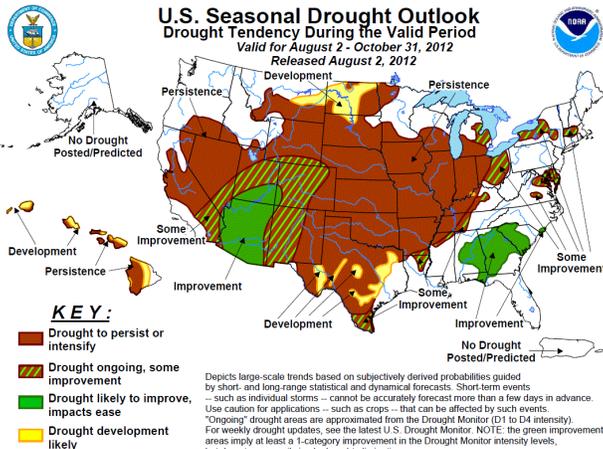
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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, August 9, 2012
Mark Svoboda, National Drought Mitigation Center



August 7—The latest U.S. Drought Monitor reports that the pattern of excessive heat and dryness persisted in the Plains region, leading to drought expansion across Nebraska, Kansas, Oklahoma and parts of Texas. As a result, D3 has moved across east central Nebraska and into west central Iowa, D3 pushes more to the northeast in Kansas, and D4 expands in western Kansas and connects up with a growing area of D4 in western Oklahoma. In addition, water emergencies and shortage concerns in several communities result in a new D4 region in east central Kansas over into extreme west central Missouri. After some improvement of late, the heat and dryness bring the return of a bit more D0-D3 into the Panhandle and western reaches of Texas.

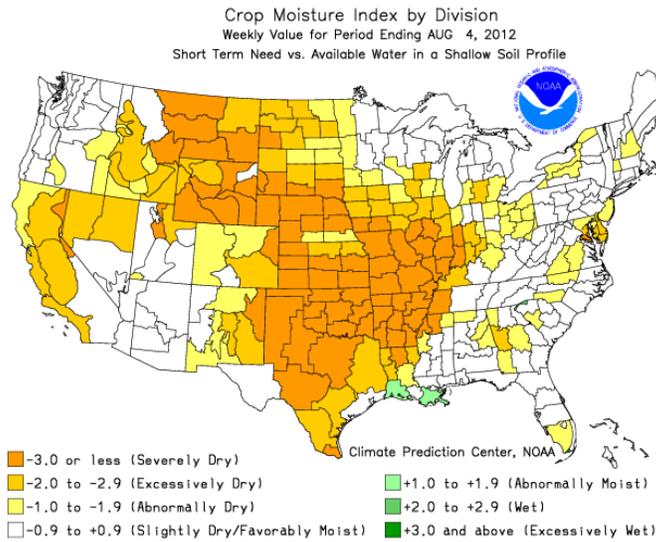
Currently, the entire state is in at least the Severe Drought category and almost 97 percent of Oklahoma is in Extreme Drought. Sixteen percent of the state—primarily the northwest and eastern portion of the Panhandle—is considered Exceptional, the worst drought category.

According to the latest Drought Outlook (August 2), dryness and drought, exacerbated by above normal temperatures, have been increasing both in extent and intensity across much of the central and northern U.S. Drought is anticipated to persist or intensify throughout Oklahoma. However, according to forecasters, there are increased chances of an El Niño event beginning in July-September, which would increase chances of above normal rainfall for Oklahoma.

CROP REPORT SUMMARY

August 6, 2012 – A statewide burn ban was issued by Governor Fallin on Friday. Wildfires burned throughout the weekend across Oklahoma, including fires in Creek, Cleveland, Grady and Oklahoma Counties. Many acres, homes and other structures were destroyed; at least one life was lost. A few showers across the northern third of Oklahoma Saturday alleviated fires in some areas. Records were set across the state as brutally hot temperatures dominated last week. Oklahoma City recorded a high of 113 on Friday, tying its all-time maximum temperature.

Livestock producers were selling cattle as the unabated heat dried up grasses and water sources. Crop conditions continued to decline. Ninety-eight percent of topsoil and subsoil moisture conditions were rated as short to very short. There were 6.5 days suitable for field work. The hay condition continued to decline, with 66 percent of alfalfa and 67 percent of other hay rated poor to very poor. Over three-fourths of pasture and range land was rated poor to very poor. Heat, drought and grasshoppers all contributed to more cattle being sold and increased supplemental feeding and haying among livestock producers.



RESERVOIR STORAGE

August 6, 2012

