

Oklahoma Water Resources Bulletin & Summary of Current Conditions

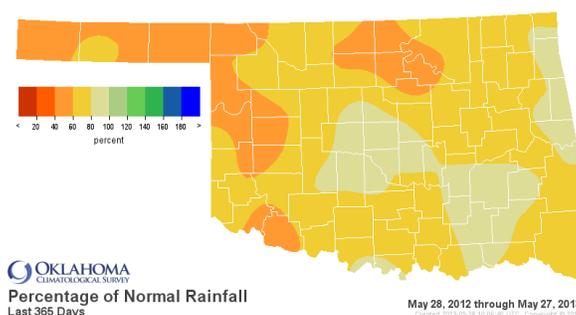
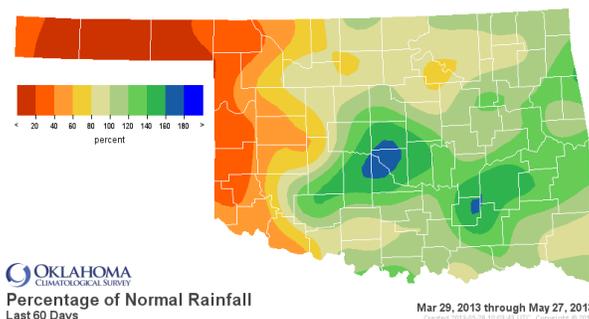


May 30, 2013

PRECIPITATION

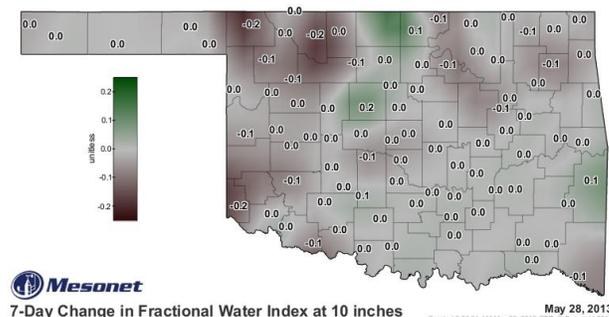
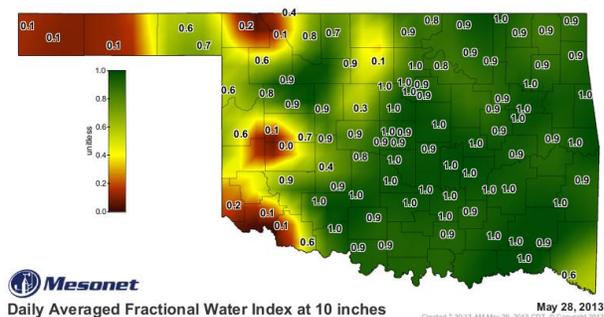
Statewide Precipitation

CLIMATE DIVISION	Last 60 Days March 29, 2013 – May 27, 2013				Last 365 Days May 28, 2012 – May 27, 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	0.97"	-3.97"	20%	1st driest	10.93"	-10.17"	52%	4th driest
North Central	5.61"	-1.72"	77%	33rd driest	19.14"	-12.51"	60%	5th driest
Northeast	9.36"	+0.24"	103%	37th wettest	30.37"	-11.60"	72%	9th driest
West Central	3.68"	-3.42"	52%	12th driest	17.19"	-11.90"	59%	4th driest
Central	10.75"	+2.01"	123%	17th wettest	29.06"	-8.93"	76%	19th driest
East Central	12.27"	+2.41"	124%	21st wettest	35.67"	-10.42"	77%	19th driest
Southwest	5.74"	-1.48"	80%	38th driest	20.11"	-10.69"	65%	6th driest
South Central	10.05"	+1.07"	112%	26th wettest	29.71"	-11.25"	73%	11th driest
Southeast	12.35"	+1.89"	118%	27th wettest	39.81"	-11.13"	78%	13th driest
Statewide	7.97"	-0.23"	97%	40th wettest	25.81"	-10.88"	70%	6th driest



SOIL MOISTURE

Fractional Water Index¹ May 28, 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

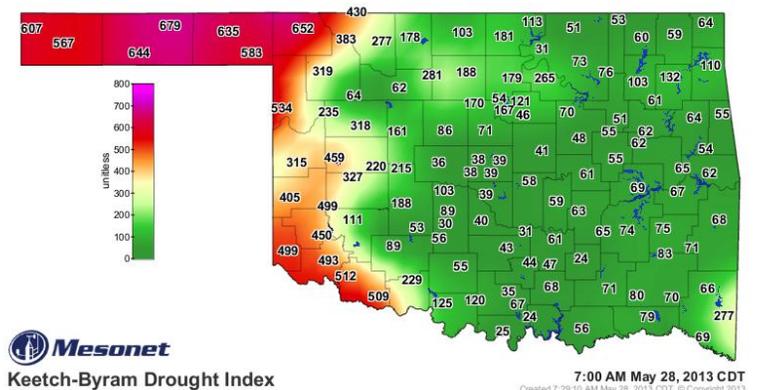
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through April 2013			
CLIMATE DIVISION	CURRENT STATUS 5/25/2013	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		5/25	4/27					
Northwest	SEVERE DROUGHT	-3.71	-2.74	-0.97	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY	EXTREMELY DRY
North Central	NEAR NORMAL	-0.06	0.28	-0.34	ABNORMALLY MOIST	NEAR NORMAL	MODERATELY DRY	EXTREMELY DRY
Northwest	NEAR NORMAL	0.04	0.32	-0.28	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY	EXTREMELY DRY
West Central	INCIPIENT DROUGHT	-0.88	0.36	-1.24	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	SEVERELY DRY
Central	MOIST SPELL	1.47	1.51	-0.04	MODERATELY MOIST	ABNORMALLY MOIST	NEAR NORMAL	MODERATELY DRY
East Central	MOIST SPELL	1.48	0.98	0.50	ABNORMALLY MOIST	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY
Southwest	MILD DROUGHT	-1.33	-0.39	-0.94	ABNORMALLY MOIST	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY
South Central	INCIPIENT DROUGHT	-0.50	-1.46	0.96	NEAR NORMAL	ABNORMALLY DRY	MODERATELY DRY	SEVERELY DRY
Southeast	NEAR NORMAL	-0.28	-0.43	0.15	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY	SEVERELY DRY

- Only two climate divisions (the Northwest and Southwest) are classified as experiencing drought conditions, according to the PDSI. Six regions have undergone a PDSI moisture decrease since April 27. According to the latest SPI, all climate divisions continue to experience near long-term dry conditions, although the shorter-term (3- and 6-month) indices continue to indicate considerable improvement.

Keetch-Byram Drought Fire Index³

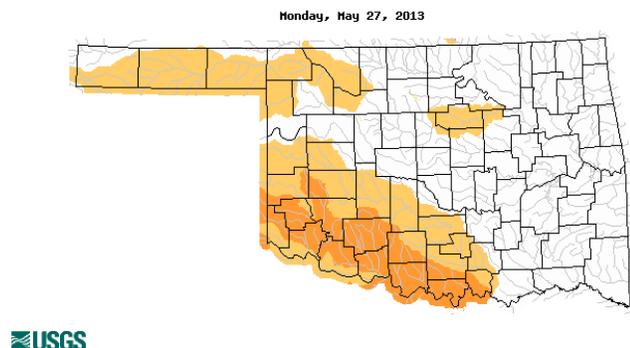
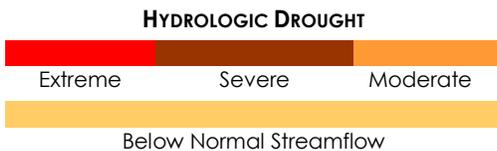
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 5/28/2013
Hooker	Northwest	679
Buffalo	Northwest	652
Goodwell	Northwest	644

- Stations currently at or above 600 (May 28) = 5
- Stations above 600 on April 29 = 1



STREAMFLOW CONDITIONS

May 27, 2013



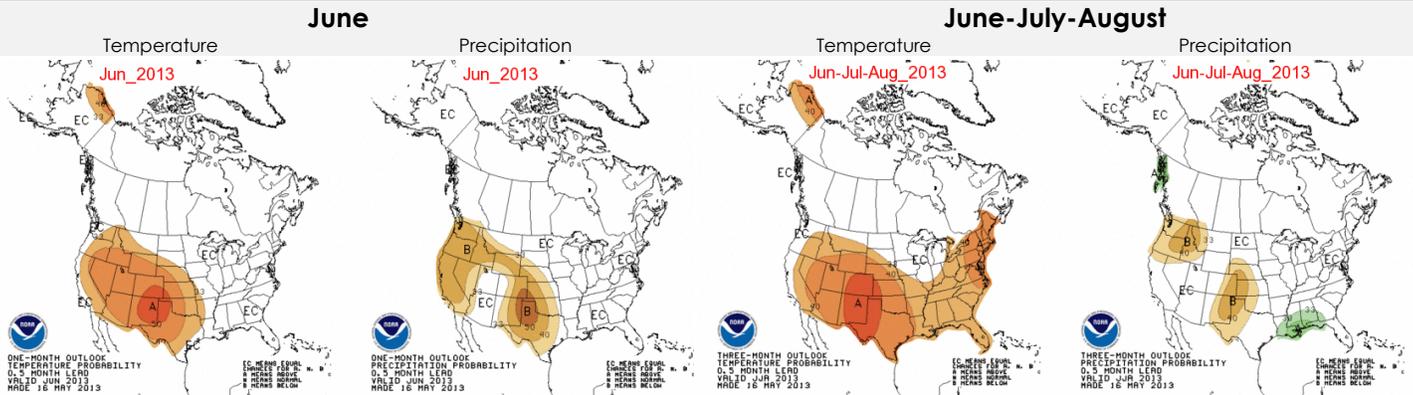
¹ The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

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



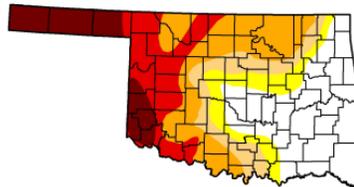
Regional Drought Summary & Outlook

U.S. Drought Monitor

May 28, 2013
Valid 7 a.m. EST

Oklahoma

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.88	68.12	58.80	48.33	26.51	11.34
Last Week (05/21/2013 map)	25.21	74.79	61.60	50.91	26.73	10.60
3 Months Ago (02/26/2013 map)	0.00	100.00	100.00	100.00	61.65	11.80
Start of Calendar Year (01/01/2013 map)	0.00	100.00	100.00	100.00	94.89	37.06
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	99.98	95.33	42.09
One Year Ago (05/22/2012 map)	31.44	68.56	13.99	9.34	3.54	0.00



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>



May 28—Heavy rain returned to the northern Plains and upper Midwest late in the drought-monitoring period, further easing or eradicating lingering long-term drought and turning residual drought to flooding in some of the hardest-hit areas. Local downpours also dotted the southeastern Plains. Meanwhile, little or no precipitation fell from California to the central and southern High Plains, further sharpening the gradient between drought and non-drought areas across the nation's mid-section.

Exceptional drought (D4) remained a fixture in the central and southern High Plains. Rain came too late for winter wheat in South Dakota (64% very poor to poor on May 26) and Nebraska (52%), and the maturing crop continued to suffer in parts of Texas (76%), Oklahoma (54%), Colorado (49%), and Kansas (45%). From late March to early May, several freezes further damaged an already drought-stressed wheat crop on the southern High Plains.

About 26 percent of Oklahoma is classified in Extreme Drought, down from 31 percent one month ago. More than 11 percent of the state—including the entire Panhandle and much of the southwest region—is considered Exceptional, the most intense drought category, which is a downgrade from last month. Overall, recent precipitation and a series of unusual cool spells have had a positive impact on much of Oklahoma. However, the west remains very dry. In some areas of the Panhandle, it has now been almost 100 days without a quarter-inch of rain in a single day.

According to the latest Drought Outlook (May 16), at least limited drought improvement is forecast for all but the general Panhandle region of Oklahoma, where drought is expected to persist or intensify.

