

Oklahoma Water Resources Bulletin & Summary of Current Conditions

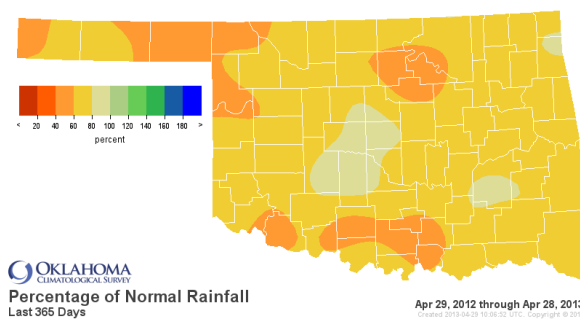
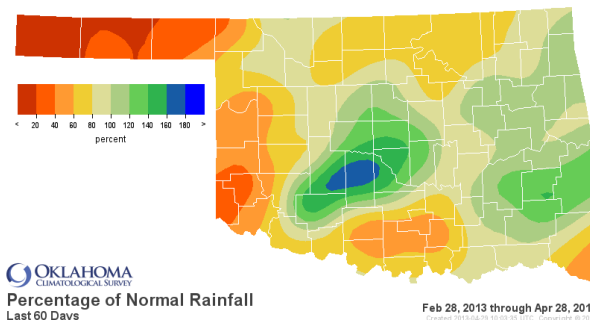


May 2, 2013

PRECIPITATION

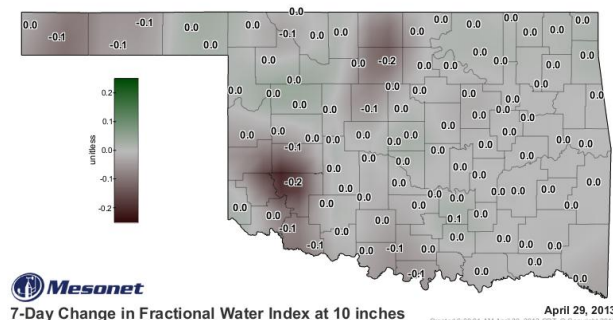
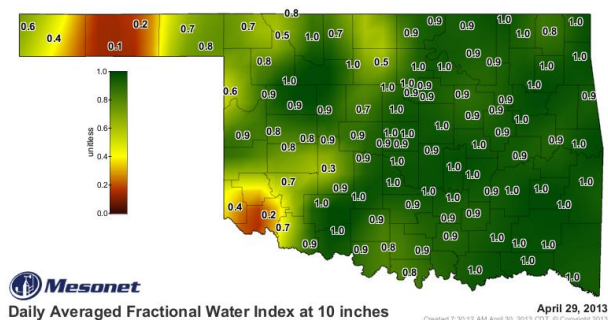
Statewide Precipitation

CLIMATE DIVISION	Last 60 Days February 28, 2013 – April 28, 2013				Last 365 Days April 29, 2012 – April 28, 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	1.10"	-2.28"	33%	14th driest	11.61"	-9.49"	55%	2nd driest
North Central	4.28"	-1.21"	78%	44th driest	20.49"	-11.16"	65%	8th driest
Northeast	6.71"	-0.76"	90%	38th wettest	29.74"	-12.23"	71%	9th driest
West Central	2.98"	-1.89"	61%	28th driest	18.87"	-10.22"	65%	6th driest
Central	7.57"	+0.97"	115%	20th wettest	27.84"	-10.15"	73%	12th driest
East Central	8.63"	+0.42"	105%	29th wettest	32.09"	-14.00"	70%	6th driest
Southwest	4.19"	-0.61"	87%	39th wettest	20.70"	-10.10"	67%	8th driest
South Central	5.11"	-2.03"	72%	30th driest	25.71"	-15.25"	63%	4th driest
Southeast	9.13"	+0.35"	104%	32nd wettest	36.12"	-14.82"	71%	5th driest
Statewide	5.56"	-0.75"	88%	44th wettest	24.81"	-11.88"	68%	4th driest



SOIL MOISTURE

Fractional Water Index¹ April 29, 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

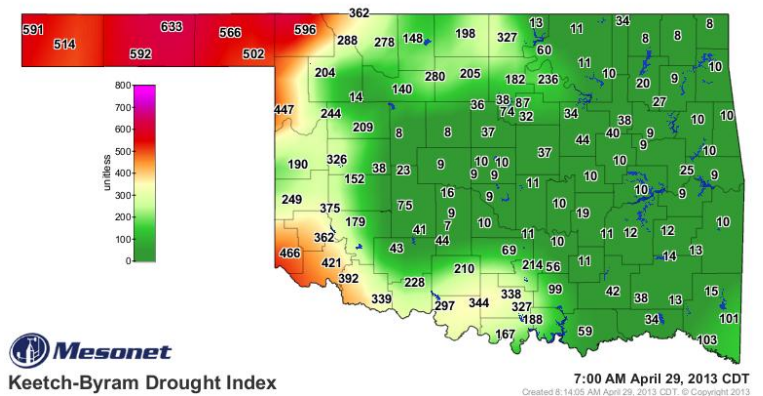
Palmer Drought Severity Index ¹				Standardized Precipitation Index ² Through March 2013				
CLIMATE DIVISION	CURRENT STATUS 4/27/2013	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		4/27	3/30					
Northwest	MODERATE DROUGHT	-2.74	-2.25	-0.49	ABNORMALLY MOIST	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY
North Central	NEAR NORMAL	0.28	-0.97	1.25	ABNORMALLY MOIST	ABNORMALLY DRY	EXTREMELY DRY	SEVERELY DRY
Northwest	NEAR NORMAL	0.32	-1.06	1.38	ABNORMALLY MOIST	ABNORMALLY DRY	SEVERELY DRY	SEVERELY DRY
West Central	NEAR NORMAL	0.36	-0.61	0.97	ABNORMALLY MOIST	ABNORMALLY DRY	MODERATELY DRY	SEVERELY DRY
Central	MOIST SPELL	1.51	-1.85	3.36	NEAR NORMAL	ABNORMALLY DRY	MODERATELY DRY	SEVERELY DRY
East Central	INCIPIENT MOIST SPELL	0.98	-0.51	1.49	NEAR NORMAL	SEVERELY DRY	MODERATELY DRY	EXTREMELY DRY
Southwest	NEAR NORMAL	-0.39	-2.11	1.72	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY	MODERATELY DRY
South Central	MILD DROUGHT	-1.46	-2.27	0.81	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY	SEVERELY DRY
Southeast	NEAR NORMAL	-0.43	-1.43	1.00	NEAR NORMAL	ABNORMALLY DRY	MODERATELY DRY	EXTREMELY DRY

- Recent above normal moisture continues to improve the drought situation as only two climate divisions are now experiencing drought conditions, according to the PDSI. Only one region (the Northwest) has undergone a PDSI moisture decrease since March 30. According to the latest SPI, all climate divisions continue to experience near long-term dry conditions, although the short-term (3-month) indices continue to indicate considerable improvement.

Keetch-Byram Drought Fire Index³

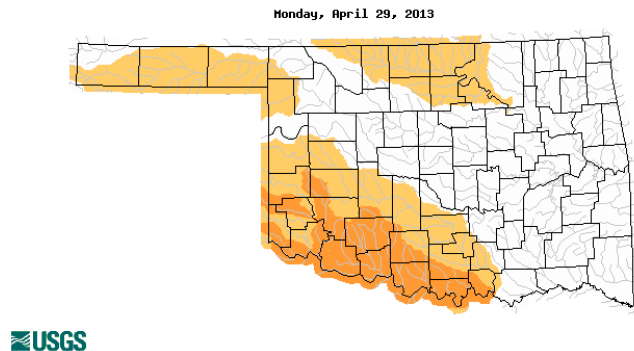
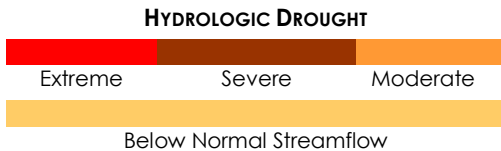
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 4/29/2013
Hooker	Northwest	633
Buffalo	Northwest	596
Goodwell	Northwest	592

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



STREAMFLOW CONDITIONS

April 29, 2013



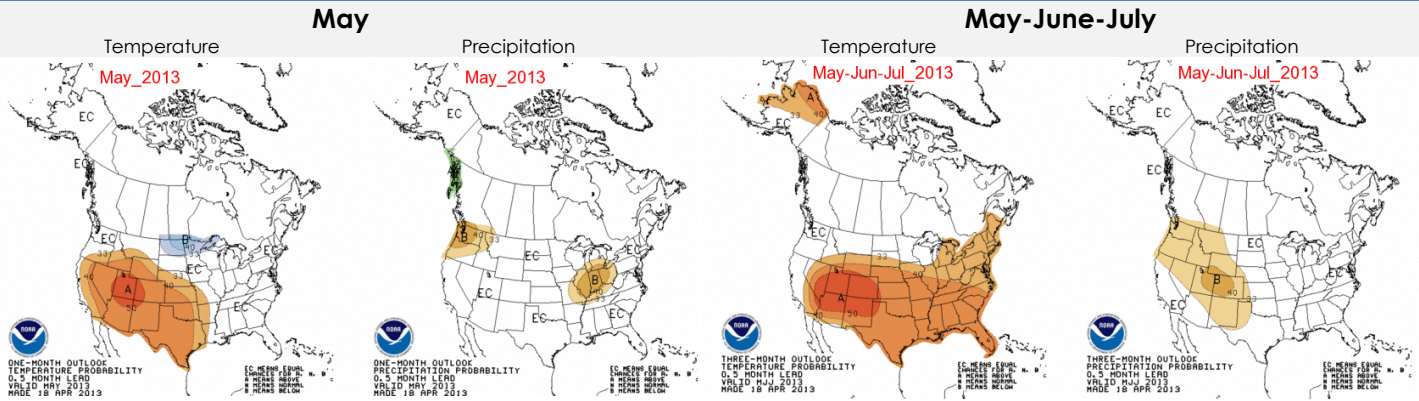
¹ The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

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



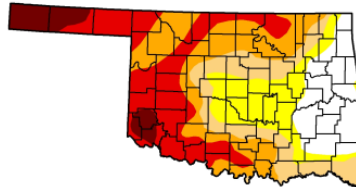
Regional Drought Summary & Outlook

U.S. Drought Monitor

April 30, 2013
Valid 7 a.m. EST

Oklahoma

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	16.69	83.31	67.94	52.82	30.53	6.39
Last Week (04/23/2013 map)	10.80	89.20	72.08	53.76	30.53	5.48
3 Months Ago (01/29/2013 map)	0.00	100.00	100.00	100.00	92.14	39.58
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 (04/24/2012 map)	74.94	25.06	15.00	9.78	3.27	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>

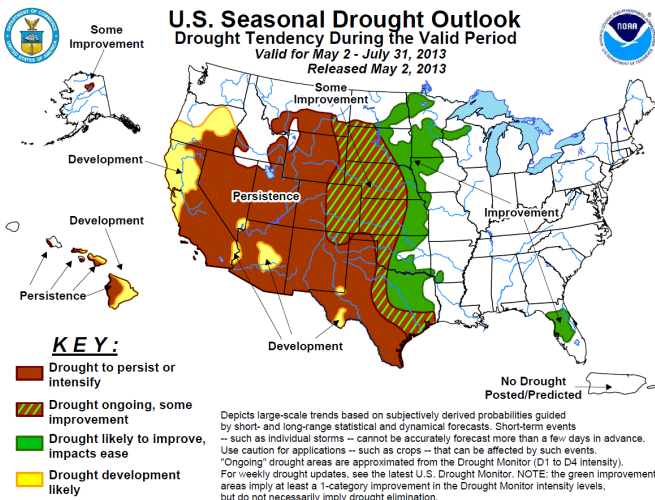


April 30—In the south central U.S., sharp temperature fluctuations were accompanied by rain in the east and south, while unfavorably dry conditions prevailed over the High Plains. From the southeastern Plains into the western Delta, one to three inches of rain (locally more) eased long-term drought in eastern Oklahoma and northwestern Arkansas. Locally heavy downpours eased Moderate to Exceptional Drought (D1-D4) across the southern third of Texas.

With no rain and increasing heat, drought intensity and coverage expanded across the southern half of the High Plains. As of April 28, the percent of the southern Plains' winter wheat rated poor to very poor stood at 41 percent in Oklahoma and 68 percent in Texas, both increases from last week.

Less than 31 percent of Oklahoma is classified in Extreme Drought, down from 53 percent one month ago. Only a little more than six percent of the state—including portions of the western Panhandle and southwest regions—is considered Exceptional, the most intense drought category, which is also an improvement. Overall, recent precipitation and a series of unusual cool spells have had a significant positive impact on Oklahoma's drought situation. However, more rain is needed, especially in the west.

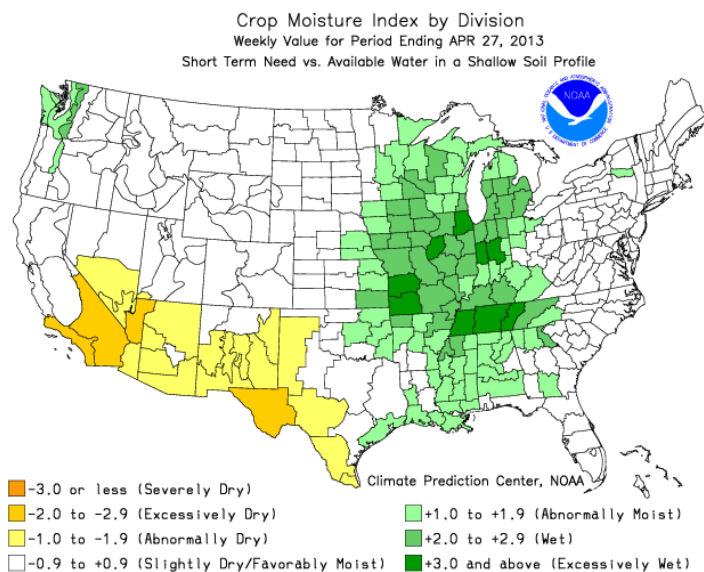
According to the latest Drought Outlook (May 2), at least limited drought improvement is forecast for all but the general Panhandle region of Oklahoma, where drought is expected to persist or intensify.



CROP REPORT SUMMARY

April 29, 2013 – Small grain development continued to be significantly behind normal but topsoil moisture conditions continued to be rated mostly adequate. Subsoil moisture conditions improved slightly and one-third was rated as adequate. There were 5.1 days suitable for fieldwork.

Heading of wheat, rye and oats made significant progress over the past week, but was well behind the five-year average. Condition ratings for wheat declined slightly and were rated mostly fair to poor. Fieldwork and planting were behind normal for all row crops. Conditions of pasture and range improved slightly, but were rated mostly fair to poor. Below normal temperatures continued, limiting the growth of spring forage. Livestock conditions continued to be rated mostly good to fair.



RESERVOIR STORAGE

May 1, 2013

