Oklahoma Water Resources Bulletin
& Summary of Current Conditions

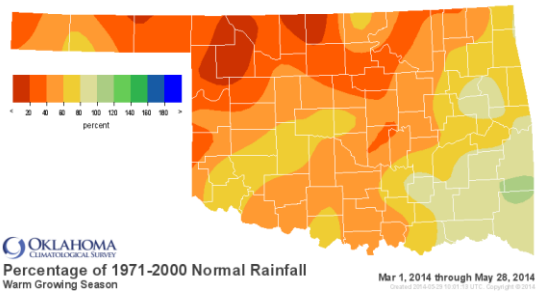
State of Oklahoma OWRB Water Resources Board the water agency

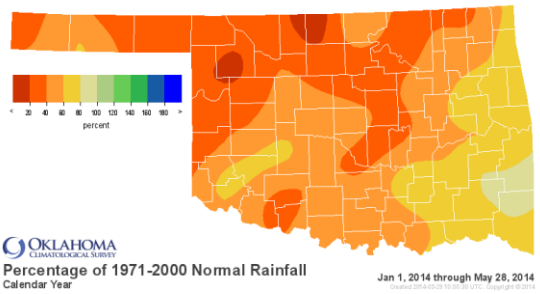
May 29, 2014

PRECIPITATION

Statewide Precipitation

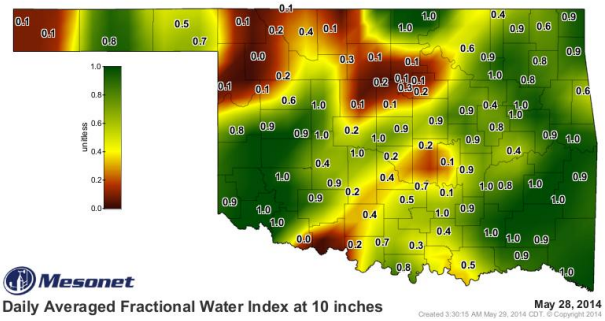
Climate Division	Warm Growing Season March 1 – May 28, 2014 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921	Calendar Year January 1 – May 28, 2014 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921
Panhandle	1.84"	-4.68"	28%	5th driest	2.34"	-5.35"	30%	2nd driest
North Central	3.06"	-6.84"	31%	3rd driest	3.69"	-8.37"	31%	1st driest
Northeast	7.00"	-5.62"	56%	11th driest	7.60"	-8.57"	47%	3rd driest
West Central	3.91"	-5.52"	41%	6th driest	4.24"	-7.21"	37%	5th driest
Central	5.52"	-6.34"	47%	5th driest	5.97"	-9.11"	40%	1st driest
East Central	9.73"	-4.01"	71%	16th driest	11.08"	-7.22"	61%	5th driest
Southwest	5.82"	-3.60"	62%	18th driest	6.16"	-5.65"	52%	9th driest
South Central	7.49"	-4.88"	61%	12th driest	8.54"	-7.93"	52%	3rd driest
Southeast	13.73"	-0.98"	93%	43rd driest	15.94"	-4.73"	77%	14th driest
Statewide	6.31"	-4.87"	56%	8th driest	7.10"	-7.28"	49%	3rd driest

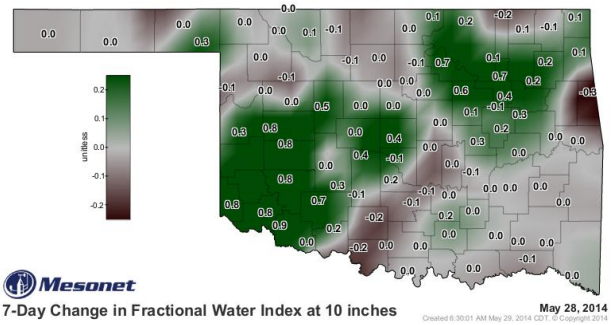




SOIL MOISTURE

Fractional Water Index[1]
May 28, 2014





[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[2]

Climate Division	Current Status 5/24/2014	Value 5/24	Value 5/3	Change In Value
Northwest	SEVERE DROUGHT	-3.67	-3.11	**-0.56**
North Central	MODERATE DROUGHT	-2.15	-1.45	**-0.70**
Northeast	MILD DROUGHT	-1.86	-1.27	**-0.59**
West Central	SEVERE DROUGHT	-3.06	-2.75	**-0.31**
Central	MILD DROUGHT	-1.86	-1.19	**-0.67**
East Central	MILD DROUGHT	-1.16	-0.94	**-0.22**
Southwest	SEVERE DROUGHT	-3.50	-3.25	**-0.25**
South Central	MILD DROUGHT	-1.43	-0.36	**-1.07**
Southeast	INCIPIENT DROUGHT	-0.68	-0.94	**0.26**

Standardized Precipitation Index[3] Through April 2014

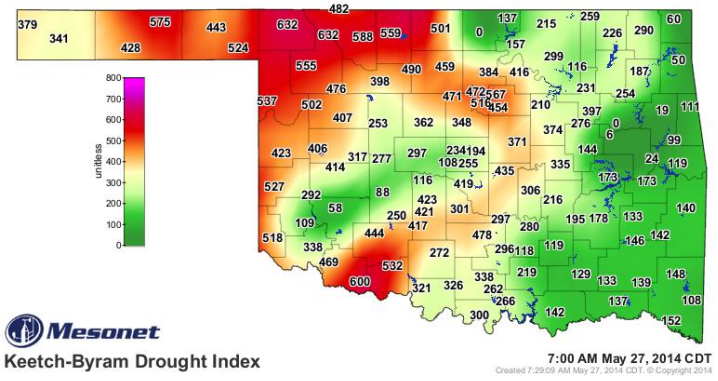
Climate Division	2-Month	12-Month	24-Month
Northwest	SEVERELY DRY	ABNORMALLY DRY	EXTREMELY DRY
North Central	EXTREMELY DRY	ABNORMALLY DRY	EXCEPTIONALLY DRY
Northeast	MODERATELY DRY	NEAR NORMAL	SEVERELY DRY
West Central	SEVERELY DRY	MODERATELY DRY	EXTREMELY DRY
Central	MODERATELY DRY	NEAR NORMAL	ABNORMALLY DRY
East Central	ABNORMALLY DRY	NEAR NORMAL	MODERATELY DRY
Southwest	MODERATELY DRY	MODERATELY DRY	EXTREMELY DRY
South Central	NEAR NORMAL	NEAR NORMAL	SEVERELY DRY
Southeast	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY

- All nine climate divisions are classified as experiencing drought or incipient drought conditions, according to the PDSI. Eight regions have undergone a PDSI moisture decrease since May 3.
- According to the latest SPI, all climate divisions are experiencing longer-term dry conditions (through at least two months or as long as two years or more).

Keetch-Byram Drought Fire Index[4]

Mesonet Station	Climate Division	Current Value 5/27/2014
Buffalo	Northwest	632
Freedom	Northwest	632
Grandfield	Southwest	600

- Stations currently at or above 600 (May 27) = 3
- Stations above 600 on May 5 = 4



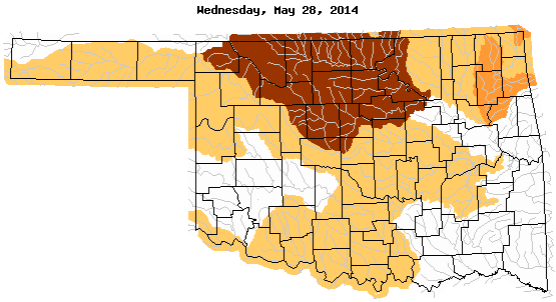
Streamflow Conditions

May 28, 2014

Hydrologic Drought

Extreme Severe Moderate

Below Normal Streamflow



[2] *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.*

[3] *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.*

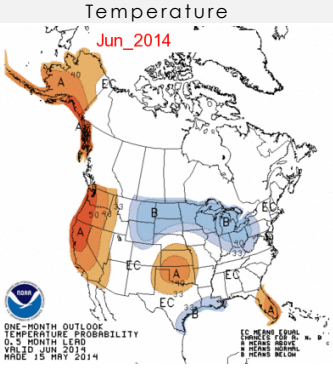
[4] *The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.*

Weather/Drought Forecast

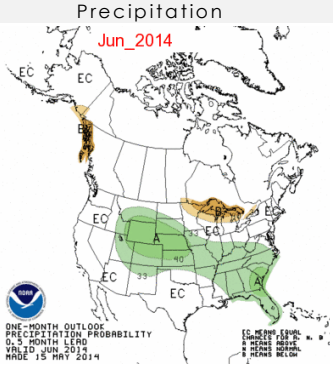
Seasonal Outlook

June

Temperature

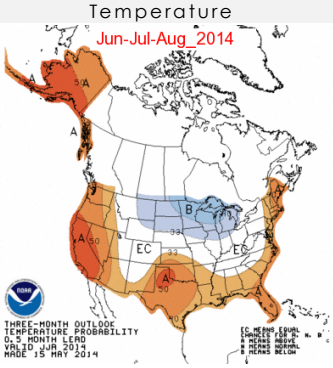


Precipitation

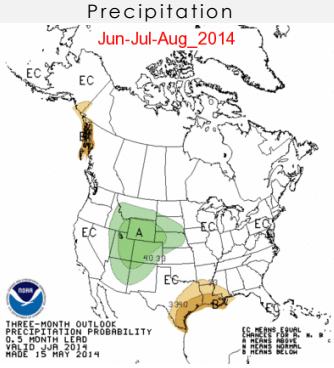


June-July-August

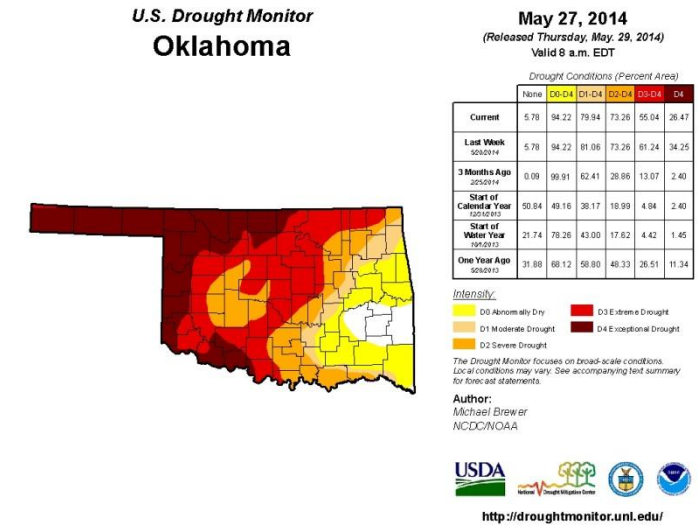
Temperature

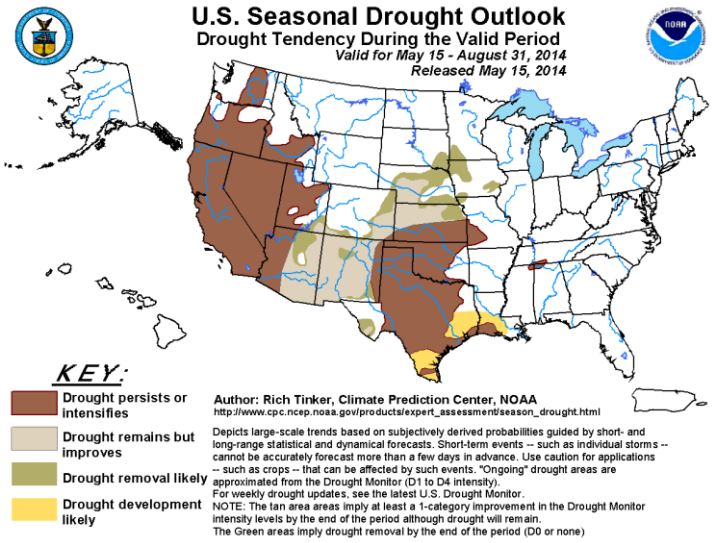


Precipitation



Regional Drought Summary & Outlook





May 27—According to the U.S. Drought Monitor, the southern Plains experienced heavy rainfall during the week. Oklahoma experienced significant improvement especially in Exceptional (D4) and Extreme (D3) Drought throughout the center of the state. Areas from New Mexico and Texas up into western Nebraska also benefitted. Texas experienced widespread improvements in Exceptional (D4), Extreme (D3), and Severe (D2) Drought largely throughout the central part of the state and the Panhandle. Moderate Drought (D1) and Abnormal Dryness (D0) also decreased, mainly in the eastern part of the state. Conversely, limited improvement in drought conditions in western Nebraska was more than offset by degradation of Extreme (D3), Severe (D2), and Moderate Drought (D1) and Abnormal Dryness (D0) in the central and eastern part of the state.

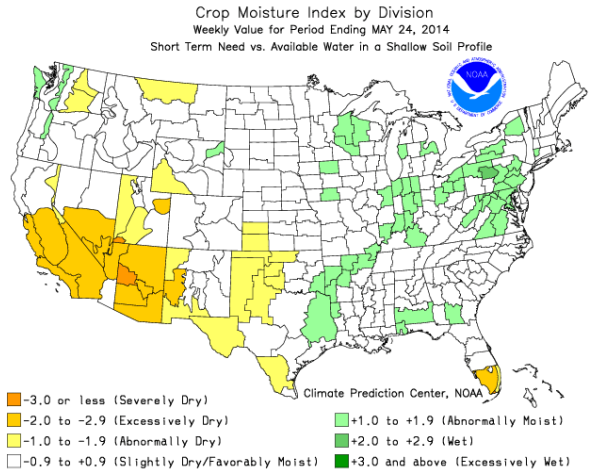
While the state experienced some improvement this week, almost 80 percent of Oklahoma remains in at least Moderate Drought. More than a quarter of the state's land area—including much of western Oklahoma and all of the Panhandle—is now classified in Exceptional Drought, the worst category.

According to the latest Drought Outlook, drought is expected to persist or intensify throughout the general western two-thirds of Oklahoma through August.

Crop Report Summary

May 26, 2014 – Much-needed rainfall was received in Oklahoma last week, especially in the southwest. According the Oklahoma Mesonet Rainfall table, Hobart received the most precipitation last week, with a total of 4.78 inches. Producers continued to plant row crops. Wheat fields continued to be disastered out, baled for hay, or otherwise abandoned due to the severe drought and freeze damage. Condition of the winter wheat in Oklahoma continued to decline, with 78 percent rated in poor to very poor condition. There were 5.9 days suitable for field work.

Range and pasture conditions continued at mostly fair to poor, with 20 percent rated in very poor condition. Low pond levels and summer forage availability continued to be a concern for livestock producers. Livestock conditions were rated 85 percent good to fair.



Reservoir Storage

May 28, 2014