

Oklahoma Water Resources Bulletin & Summary of Current Conditions

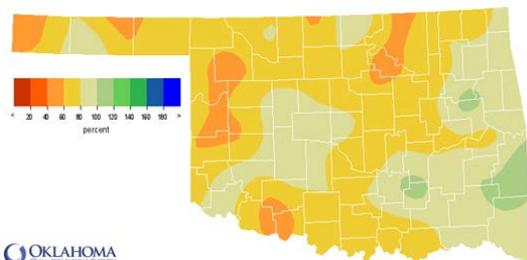


June 26, 2014

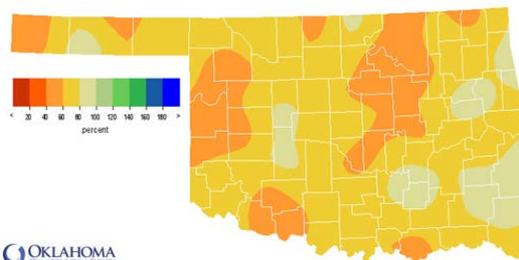
PRECIPITATION

Statewide Precipitation

CLIMATE DIVISION	Warm Growing Season March 1 – June 25, 2014				Calendar Year January 1 – June 25, 2014			
	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	5.99"	-3.30"	64%	20th driest	6.49"	-3.96"	62%	15th driest
North Central	9.67"	-3.97"	71%	17th driest	10.30"	-5.49"	65%	11th driest
Northeast	12.76"	-4.24"	75%	16th driest	13.35"	-7.20"	65%	9th driest
West Central	8.83"	-4.29"	67%	18th driest	9.15"	-5.98"	60%	10th driest
Central	11.86"	-4.34"	73%	24th driest	12.32"	-7.12"	63%	12th driest
East Central	15.22"	-3.14"	83%	34th driest	16.57"	-6.35"	72%	11th driest
Southwest	10.64"	-2.73"	80%	32nd driest	10.98"	-4.77"	70%	19th driest
South Central	13.01"	-3.76"	78%	27th driest	14.07"	-6.82"	67%	13th driest
Southeast	18.28"	-0.96"	95%	45th driest	20.49"	-4.71"	81%	19th driest
Statewide	11.73"	-3.50"	77%	18th driest	12.53"	-5.91"	68%	11th driest



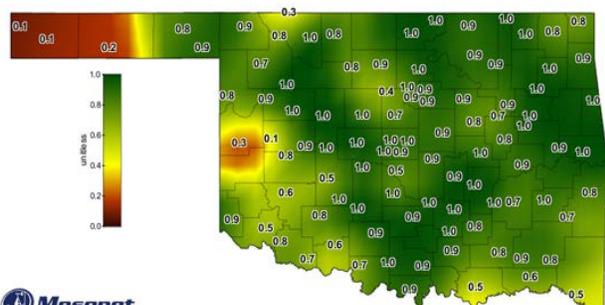
OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1971-2000 Normal Rainfall
Warm Growing Season
Mar 1, 2014 through Jun 25, 2014
Created 2014-06-25 10:25:10 UTC. Copyright © 2014



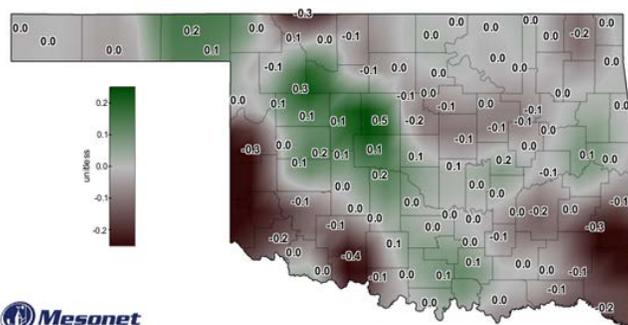
OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of 1971-2000 Normal Rainfall
Calendar Year
Jan 1, 2014 through Jun 25, 2014
Created 2014-06-25 10:25:10 UTC. Copyright © 2014

SOIL MOISTURE

Fractional Water Index¹ June 25, 2014



Mesonet
Daily Averaged Fractional Water Index at 10 inches
June 25, 2014
Created 7:30:12 AM June 26, 2014 CDT. © Copyright 2014



Mesonet
7-Day Change in Fractional Water Index at 10 inches
June 25, 2014
Created 6:30:02 AM June 26, 2014 CDT. © Copyright 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.]

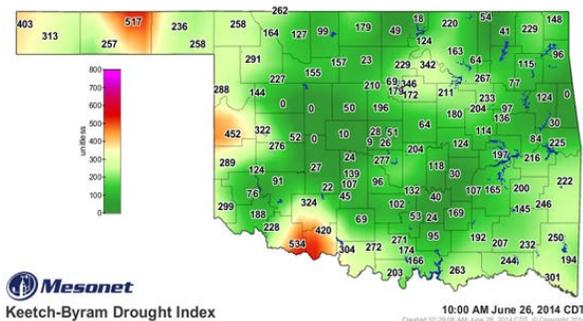
DROUGHT INDICES

Palmer Drought Severity Index ²					Standardized Precipitation Index ³ Through May 2014		
CLIMATE DIVISION	CURRENT STATUS 6/21/2014	VALUE		CHANGE IN VALUE	3-MONTH	12-MONTH	24-MONTH
		6/21	5/24				
Northwest	SEVERE DROUGHT	-2.05	-3.67	-1.62	EXTREMELY DRY	ABNORMALLY DRY	EXTREMELY DRY
North Central	NEAR NORMAL	0.28	-2.15	-2.43	EXCEPTIONALLY DRY	MODERATELY DRY	EXCEPTIONALLY DRY
Northeast	NEAR NORMAL	0.49	-1.86	-2.35	EXTREMELY DRY	MODERATELY DRY	SEVERELY DRY
West Central	SEVERE DROUGHT	0.04	-3.06	-3.1	MODERATELY DRY	MODERATELY DRY	SEVERELY DRY
Central	NEAR NORMAL	0.3	-1.86	-2.16	EXTREMELY DRY	NEAR NORMAL	ABNORMALLY DRY
East Central	NEAR NORMAL	0.1	-1.16	-1.26	MODERATELY DRY	ABNORMALLY DRY	MODERATELY DRY
Southwest	SEVERE DROUGHT	-0.22	-3.5	-3.28	MODERATELY DRY	MODERATELY DRY	SEVERELY DRY
South Central	NEAR NORMAL	0.39	-1.43	-1.82	MODERATELY DRY	MODERATELY DRY	EXTREMELY DRY
Southeast	NEAR NORMAL	0.29	-0.68	-0.97	NEAR NORMAL	NEAR NORMAL	ABNORMALLY DRY

- The Northwest, West Central, and Southwest climate divisions are classified as experiencing severe drought conditions, according to the PDSI. All nine regions have undergone a PDSI moisture decrease since May 24.
- According to the latest SPI, all nine climate divisions are experiencing longer-term dry conditions (through the last two years).

Keetch-Byram Drought Fire Index⁴

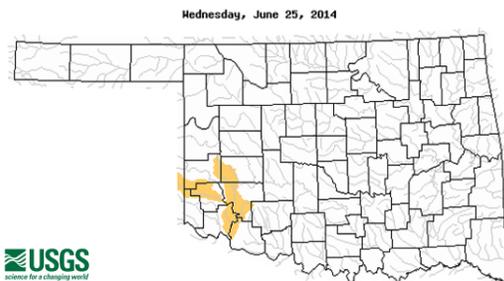
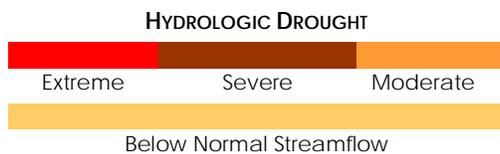
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 6/26/2014
Grandfield	Southwest	534
Hooker	Northwest	517
Cheyenne	West Central	452



- Stations currently at or above 600 (June 26) = 0
- Stations above 600 on May 27 = 3

STREAMFLOW CONDITIONS

June 25, 2014



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.

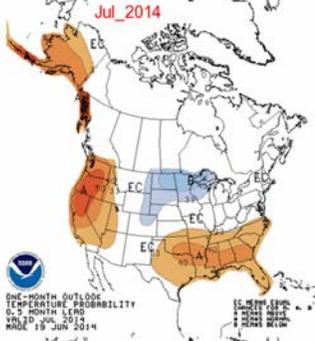
⁴ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

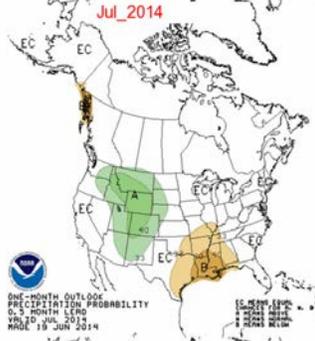
Seasonal Outlook

July

Temperature

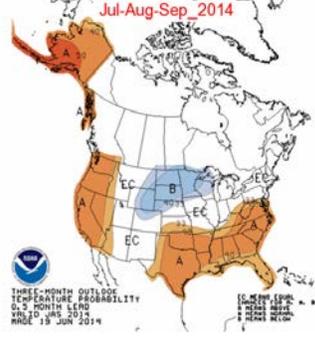


Precipitation

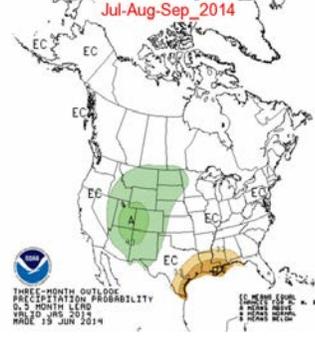


July-August-September

Temperature



Precipitation



Regional Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

June 24, 2014
(Released Thursday, Jun. 26, 2014)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	9.08	90.92	78.40	65.61	40.57	10.89
Last Week 6/17/2014	8.48	91.52	79.34	73.38	48.47	14.48
3 Months Ago 3/25/2014	4.05	95.95	77.41	52.45	24.03	8.58
Start of Calendar Year 1/1/2014	50.84	49.16	38.17	18.99	4.84	2.40
Start of Water Year 10/1/13	21.74	78.26	43.00	17.62	4.42	1.45
One Year Ago 6/25/13	46.86	53.14	42.09	36.76	26.35	8.69

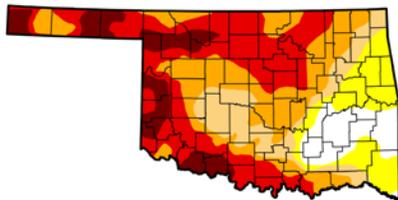
Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

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

Author:
Eric Luebbehusen
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>



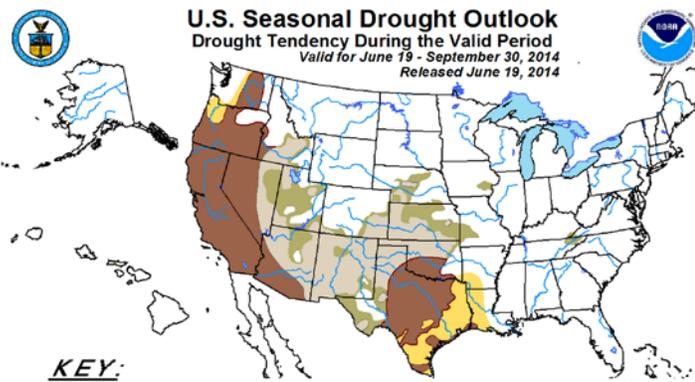
June 24—According to the U.S. Drought Monitor, widespread and ample rains across the southern Plains reduced drought (D1-D4) coverage. In the past month, Oklahoma has experienced significant improvement especially in Severe to Exceptional Drought (D2-D4) throughout the western part of the state. With the late spring and summer months climatologically the wettest time of the year in the Nation's mid-section, the 4 to 8 inches of rain (locally over a foot) that fell during the past 30-days were quite beneficial. Only a few small areas were degraded since mid-May, but did include the Red River Valley of Oklahoma and Texas. Moderate Drought (D1) and Abnormal Dryness (D0) also remained relatively the same in the eastern part of the state, with conditions improving in the central and west central regions.

While the state experienced some improvement during the last month, almost 80 percent of Oklahoma still remains in at least Moderate Drought. More than 10% of the state, primarily in western regions, remains classified in Exceptional Drought, the worst category, with more than 65% of the state in Severe Drought or worse.

According to the latest Drought Outlook, drought is expected to remain throughout the majority of the state except areas in the east, with conditions generally improving in the northern half of the state but intensifying in the south central and southwestern portions of the state.

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period
Valid for June 19 - September 30, 2014
Released June 19, 2014



KEY:

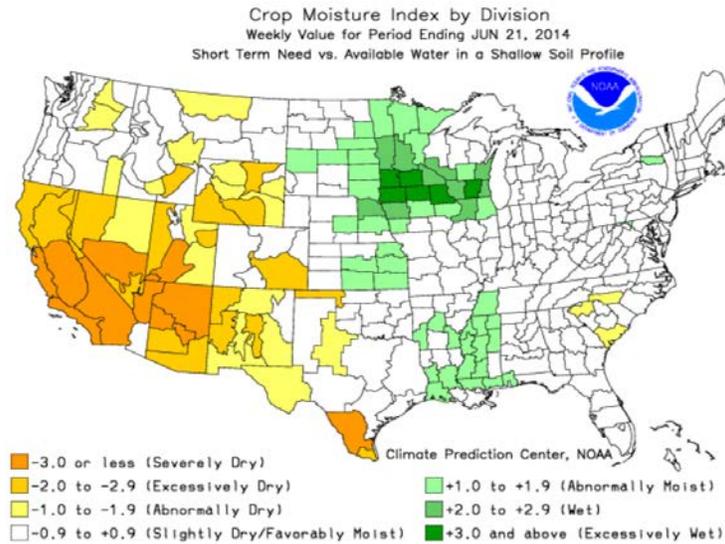
- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: David Miskus, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events — such as individual storms — cannot be accurately forecast more than a few days in advance. Use caution for applications — such as crops — that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).
For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.
The Green areas imply drought removal by the end of the period (D0 or none)

CROP REPORT SUMMARY

June 22-The week was mostly sunny and dry with only scattered showers allowing for progress in small grain harvest. According to the Oklahoma Mesonet Rainfall table, Hinton received the most precipitation last week, with a total of 6.33 inches. Average rainfall for the week ranged from 0.09 of an inch in the Southeast District to 0.9 of an inch in the West Central District. Small grain harvest was in full swing and canola harvest was virtually complete. Grasshopper populations continued to increase in various parts of the state. Topsoil and subsoil moisture conditions continued to be rated mostly adequate to short. There were 5.5 days suitable for field work.



RESERVOIR STORAGE

June 24, 2014

Oklahoma Surface Water Resources Reservoir Levels and Storage as of 6/24/2014

