Oklahoma Water Resources Bulletin & Summary of Current Conditions



August 28, 2015

PRECIPITATION

Statewide Precipitation									
	L	Last 3 – uly 26, 2015	0 Days August 26, 2	2015	Last 365 Days August 28, 2014 – August 27, 2015				
Climate Division	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	3.39"	+0.67"	125%	20th wettest	26.94"	+6.36"	131%	5th wettest	
NORTH CENTRAL	3.12"	+0.09"	103%	37th wettest	34.07"	+2.65"	108%	22nd wettest	
NORTHEAST	4.98"	+1.83"	158%	16th wettest	50.87"	+8.20"	119%	11th wettest	
WEST CENTRAL	2.81"	-0.02"	99%	35th wettest	38.59"	+10.19"	136%	6th wettest	
CENTRAL	2.28"	-0.68"	77%	45th driest	47.09"	+9.46"	125%	8th wettest	
EAST CENTRAL	3.37"	+0.44"	115%	37th wettest	66.98"	+20.84"	145%	1st wettest	
SOUTHWEST	2.06"	-0.49"	81%	44th driest	39.65"	+9.38"	131%	6th wettest	
SOUTH CENTRAL	0.51"	-1.92"	21%	7th driest	60.82"	+20.11"	149%	1st wettest	
SOUTHEAST	1.96"	-0.77"	72%	28th driest	60.72"	+10.13"	120%	11th wettest	
STATEWIDE	2.73"	-0.10"	96%	46th wettest	47.18"	+10.71"	129%	1st wettest	





SOIL MOISTURE

Fractional Water Index August 27, 2015



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.]

Jul 29, 2015 through Aug 27, 2015

DROUGHT INDICES

Palm	er Drought Sever	ity Ind	lex		Through July 2015			
Climate Division	Current Status 8/22/2015	Va 7/18	lue 8/22	Change in Value	3-Month	12-Month	24-Month	
NORTHWEST	Extremely Moist	3.05	4.24	-1.19	Extremely Moist	Very Moist	Moderately Moist	
NORTH CENTRAL	Unusual Moist Spell	2.22	2.67	-0.45	Extremely Moist	Moderately Moist	Near Normal	
NORTHEAST	Unusual Moist Spell	1.58	2.35	-0.77	Extremely Moist	Abnormally Moist	Near Normal	
WEST CENTRAL	Very Moist Spell	3.48	3.63	-0.15	Exceptionally Moist	Very Moist	Moderately Moist	
CENTRAL	Very Moist Spell	3.27	3.34	-0.07	Exceptionally Moist	Very Moist	Abnormally Moist	
EAST CENTRAL	Extremely Moist	4.28	4.46	-0.18	Exceptionally Moist	Extremely Moist	Moderately Moist	
SOUTHWEST	Very Moist Spell	3.84	3.32	0.52	Exceptionally Moist	Very Moist	Abnormally Moist	
SOUTH CENTRAL	Very Moist Spell	5.92	3.59	2.33	Exceptionally Moist	Exceptionally Moist	Very Moist	
SOUTHEAST	Near Normal	2.59	0.6	1.99	Exceptionally Moist	Extremely Moist	Very Moist	

According to the Palmer Drought Severity Index (PDSI), the Northwest and East Central climate divisions are currently experiencing extremely moist conditions (+4.0 and above). The Southeast climite division is near normal. The rest of the state is experiencing very moist or unusually moist conditions. The Southwest, South Central, and Southeast climate divisions have experienced a PDSI moisture decrease since July 18. The PDSI is based upon precipitation, temperature, and soil moisture, and is considered most effective for unirrigated cropland.

The latest Standardized Precipation Index (SPI) indicates that the North Central and Northeast climate divisions are experiencing near normal conditions for the 24-month time period, but all other climate divisions are experiencing moderately to exceptionally moist conditions (+.8 to +2 and above) for all three time periods shown. All climate divisions are experiencing extremely or exceptionally moist conditions for the 3-month time period. The SPI provides a comparison of precipitation over several specified periods with totals from the same periods for all years included in the historical record.

Keetek Dune	Discourse			
Keetch-Byra	im Drougi	nt Fire	Index	X

300 376

373 461

420 241

590556 557

594 603

659 640

2:00 PM August 28, 2015 CDT

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE
Hugo	Southeast	701
Idabel	Southeast	697
Mount Herman	Southeast	680

- Stations currently at or above 600 (August 28) = 11
- Stations above 600 on July 27 = 0

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.



Keetch-Byram Drought Index

()) Mesonet

REAMIFLOW CONDITION

August 28, 2015

	0
Low <10 10-24 25-75 76-90 >90 High	Not ranked
Much below Below Normal Above Much above normal normal	



Visit waterwatch.usgs.gov for real-time streamflow information.

Water Resources Bulletin, 8/28/2015 – page 2

WEATHER/DROUGHT FORECAST

Seasonal Outlook



A means Above; N means Normal; B means Below; EC means Equal Chances for A, N, or B

Regional Drought Summary & Outlook

http://go.usa.gov/hHTe



According to the U.S. Drought Monitor, the number of Oklahomans currently affected by drought (category D1-D4) is 127,404, up from 0 at this time last month. This includes an area covering the central and southern portions of the Southeast region. Many areas in the central and southern portions of the South Central region are experiencing abnormally dry conditions.

At this time last year, more than 70% of the state was experiencing drought conditions with nearly half the state experiencing Severe Drought (D2) or worse.

According to the seasonal drought outlook, from mid August through the end of November drought conditions are not likely to develop in any parts of Oklahoma. Drought is likely to persist or intensify all along the west coast, through most of Nevada and Idaho, and the western third of Montana. Persistent drought and drought development are also likely in many areas along the east coast, while most of the interior portions of the country are expected to be free from drought conditions.

CROP REPORT

According to the latest USDA Oklahoma Crop Weather report (July 17-23), conditions of pasture and range were rated at 79 percent good to fair. Temperatures were cooler than normal during the week with highs ranging from the mid 70s to the low 80s.

According to the NOAA Crop Moisture Index by Division for the period ending August 22, the Panhandle and Northeast regions experienced abnormally moist conditions, the South Central and Southeast regions were abnormally dry, and the rest of the state was slightly dry to favorably moist. The index is based on short term need vs. available water in a shallow soil profile. Crop Moisture Index by Division Weekly Value for Period Ending AUG 22, 2015 Short Term Need vs. Available Water in a Shallow Soil Profile



RESERVOIR STORAGE

Oklahoma Surface Water Resources

Reservoir Levels and Storage as of 8/24/2015

