# Oklahoma Water Resources Bulletin & Summary of Current Conditions

Last 30 Days

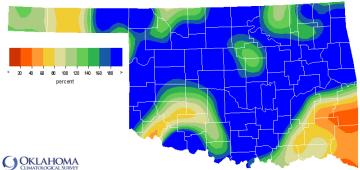


July 27, 2015

#### **PRECIPITATION**

# **Statewide Precipitation** Last 365 Days June 27, 2015 - July 26, 2015 July 27, 2014 - July 26, 2015

June 27, 2015 – July 26, 2015					July 27, 2014 – July 26, 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	3.82"	+1.31"	152%	13th wettest	26.88"	+6.30"	131%	7th wettest	
NORTH CENTRAL	5.55"	+2.58"	187%	4th wettest	34.34"	+2.92"	109%	19th wettest	
NORTHEAST	6.46"	+2.97"	185%	7th wettest	49.51"	+6.84"	116%	15th wettest	
WEST CENTRAL	4.81"	+2.61"	219%	7th wettest	38.07"	+9.67"	134%	6th wettest	
CENTRAL	5.77"	+2.80"	194%	7th wettest	47.82"	+10.19"	127%	7th wettest	
EAST CENTRAL	9.45"	+6.20"	291%	1st wettest	66.86"	+20.72"	145%	1st wettest	
SOUTHWEST	3.50"	+1.05"	143%	19th wettest	39.24"	+8.97"	130%	6th wettest	
SOUTH CENTRAL	6.93"	+4.05"	241%	4th wettest	63.40"	+22.69"	156%	1st wettest	
SOUTHEAST	2.23"	-1.43"	61%	30th driest	62.88"	+12.29"	124%	7th wettest	
STATEWIDE	5.49"	+2.55"	187%	6th wettest	47.57"	+11.10"	130%	1st wettest	



**OKLAHOMA** 

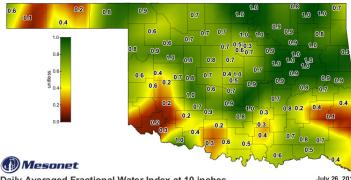
Percentage of 1981-2010 Normal Rainfall

Jun 27, 2015 through Jul 26, 2015
Percentage of 1981-2010 Normal Rainfall
Control 2015-97-27 1651 AU UT. Copyright 2015
Last 365 Days

Jul 27, 2014 through Jul 26, 2015

# **SOIL MOISTURE**

# **Fractional Water Index** July 26, 2015



**(1)** Mesonet

Daily Averaged Fractional Water Index at 10 inches

July 26, 2015 7-Day Change in Fractional Water Index at 10 inches

July 26, 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.]

# **DROUGHT INDICES**

Palmer Drought Severity Index					Standardized Precipitation Index Through June 2015			
Climate Division	Current Status 7/18/2015	Va 6/20	lue 7/18	Change in Value	3-Month	12-Month	24-Month	
NORTHWEST	Very Moist Spell	3.04	3.05	-0.01	Extremely Moist	Moderately Moist	Abnormally Moist	
NORTH CENTRAL	Unusual Moist Spell	2.3	2.22	0.08	<b>Extremely Moist</b>	Abnormally Moist	Abnormally Moist	
NORTHEAST	Near Normal	2.03	1.58	0.45	<b>Moderately Moist</b>	Near Normal	Near Normal	
WEST CENTRAL	Very Moist Spell	3.85	3.48	0.37	<b>Exceptionally Moist</b>	Moderately Moist	Moderately Moist	
CENTRAL	Very Moist Spell	3.79	3.27	0.52	<b>Exceptionally Moist</b>	Very Moist	Moderately Moist	
EAST CENTRAL	Extremely Moist	4.4	4.28	0.12	<b>Exceptionally Moist</b>	Extremely Moist	Moderately Moist	
SOUTHWEST	Very Moist Spell	4.38	3.84	0.54	<b>Exceptionally Moist</b>	Extremely Moist	Moderately Moist	
SOUTH CENTRAL	Extremely Moist	6.09	5.92	0.17	<b>Exceptionally Moist</b>	<b>Exceptionally Moist</b>	Very Moist	
SOUTHEAST	Unusual Moist Spell	3.56	2.59	0.97	Exceptionally Moist	Exceptionally Moist	Very Moist	

According to the Palmer Drought Severity Index (PDSI), the East Central and South Central climate divisions are currently experiencing extremely moist conditions (+4.0 and above). The Northeast climite division is near normal. The rest of the state is experiencing very moist or unusually moist conditions. All climate divisions except the Northwest have experienced a slight (<1) PDSI moisture decrease since June 20. The PDSI is based upon precipitation, temperature, and soil moisture, and is considered most effective for unirrigated cropland.

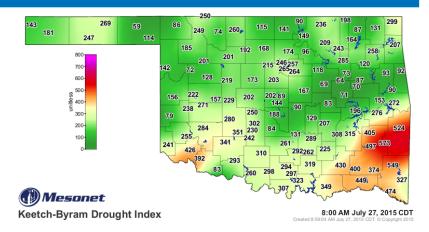
The latest Standardized Precipation Index (SPI) indicates that the Northeast climate division is experiencing near normal conditions for the 12- and 24-month time periods, but moderately moist conditions for the 3-month period. Every other climate division is experiencing moist conditions (ranging from abnormally moist to exceptionally moist or +.51 to +2 and above) for all three time periods shown. 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.

# **Keetch-Byram Drought Fire Index**

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE		
Talihina	Southeast	573		
Mt. Herman	Southeast	549		
Wister	Southeast	524		

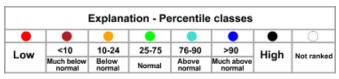
- Stations currently at or above 600 (July 27) = 0
- Stations above 600 on June 26 = 0

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.

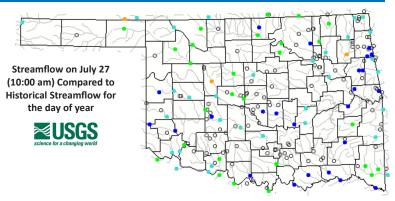


# STREAMFLOW CONDITIONS

#### July 27, 2015

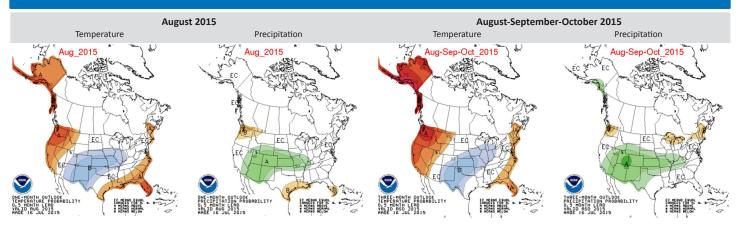


Visit waterwatch.usgs.gov for real-time streamflow information.



# 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**



Western Regional Climate Center **USDA** 



http://droughtmonitor.unl.edu/





July 21, 2015 (Released Thursday, Jul. 23, 2015) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

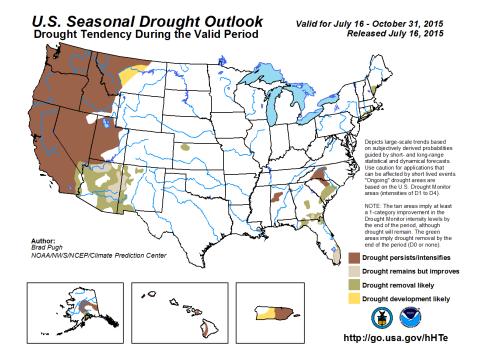
	None	D0-D4	D1-D4	D2-D4	D3-D4	5
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 7/14/2015	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 421/2015	25.19	74.81	60.92	52.39	37.13	8.36
Start of Calendar Year 12302014	25.63	74.37	62.03	40.84	21.74	5.70
Start of Water Year 930/2014	8.55	91.45	73.31	58.13	20.92	4.64
One Year Ago 7/22/2014	10.52	89.48	75.48	60.09	23.55	5.57

Intensity: D0 Abnomally Dn D2 Severe Drought



According to the U.S. Drought Monitor, the number of Oklahomans currently affected by drought (category D1-D4) has remained at zero, and 0% of the state is experiencing abnormally dry conditions. On this day last year, almost 90% of the state was experiencing abnormally dry conditions or worse, and 5.6% of the state was experiencing Exceptional Drought (D4), the worst drought category.

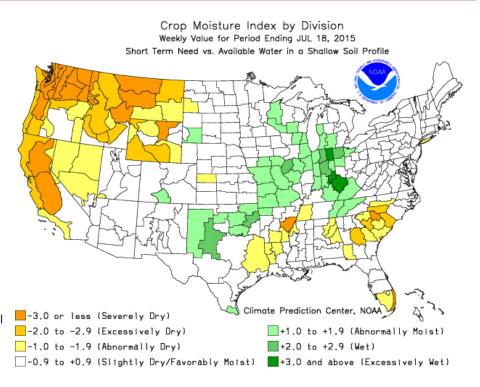
According to the seasonal drought outlook released on July 16, from mid-July through the end of October, no parts of the state are likely to develop drought conditions.



# **CROP REPORT**

According to the latest USDA Oklahoma Crop Weather report (July 13-19), every district remained well below average temperature and well above average preciptation for the period March 1-July 19, 2015. The East Central and South Central regions were reported as having more than 200% of normal precipitation. Topsoil and subsoil moisture conditions were rated mostly adequate to surplus.

According to the NOAA Crop Moisture Index by Division for the period ending July 18, the East Central region experienced Excessively Wet conditions (+3.0 and above), the Northeast, West Central, Central, and South Central regions experienced abnormally moist conditions, and the rest of the state was near normal. The index is based on short term need vs. available water in a shallow soil profile.



# **RESERVOIR STORAGE**

# Oklahoma Surface Water Resources

Reservoir Levels and Storage as of 7/20/2015

