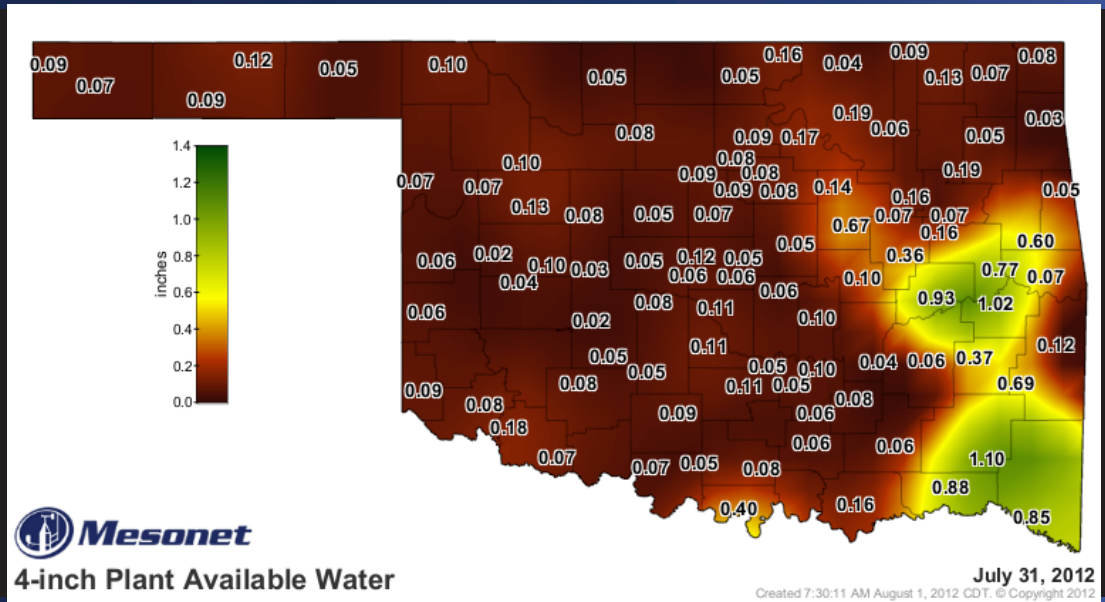




# MESONET IN PICTURES

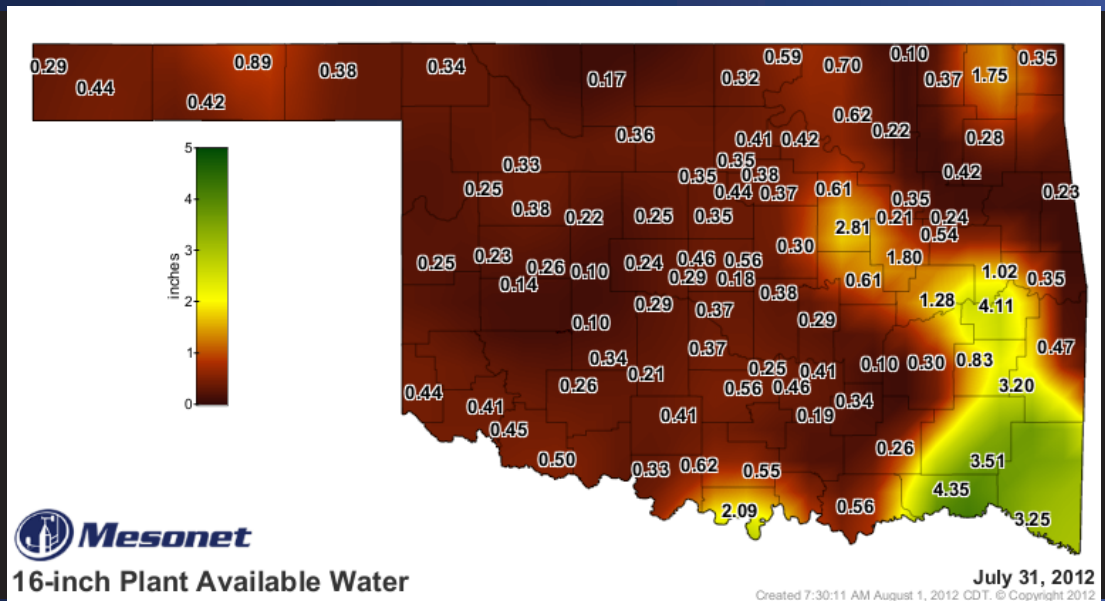
## 4-inch Plant Available Water

- The map shown is reporting soil moisture sensor readings from surface to 4 inches as estimates of plant available water in inches. To view these maps online, select "Weather" from the top main menu of the Mesonet website. Then from the left menu, select "Soil Moisture/Soil Temperature."



## 16-inch Plant Available Water

- The map shown is reporting soil moisture sensor readings from surface to 16 inches as estimates of plant available water in inches. To view these maps online, select "Weather" from the top main menu of the Mesonet website. Then from the left menu, select "Soil Moisture/Soil Temperature."



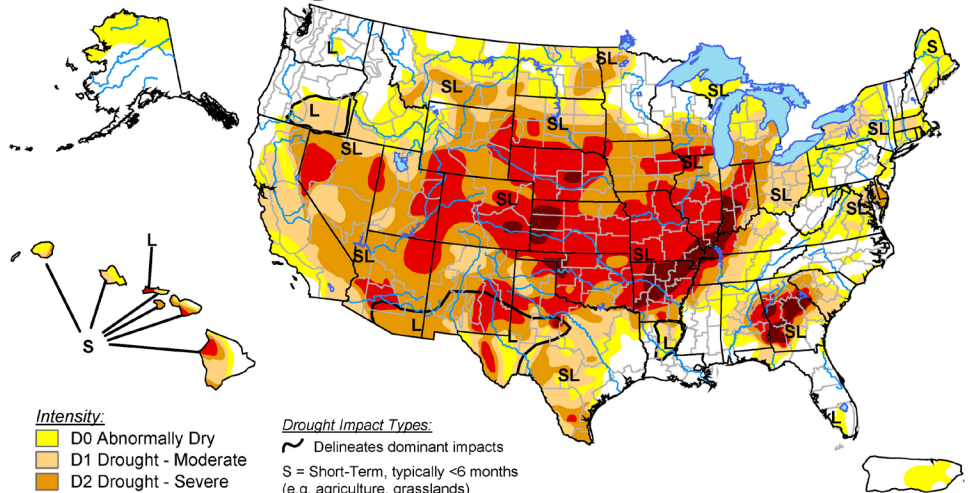


## U.S. Drought Monitor - July 31

- The U.S. Drought Monitor is released every Thursday. The July 31st drought monitor reflects 79.38% of the contiguous U.S. being in some sort of drought, with 22.27% being in the Extreme drought category. Visit [www.droughtmonitor.unl.edu](http://www.droughtmonitor.unl.edu) to view the current U.S. Drought Monitor.

# U.S. Drought Monitor

July 31, 2012  
Valid 7 a.m. EDT



**Intensity:**

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

**Drought Impact Types:**

- Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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

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



Released Thursday, August 2, 2012

Author: Mark Svoboda, National Drought Mitigation Center

## Oklahoma Drought Monitor - July 31

- The U.S. Drought Monitor is released every Thursday. The July 31st drought monitor reflects 100% of Oklahoma being in some sort of drought, with 71.6% being in the Extreme drought category. Visit [http://droughtmonitor.unl.edu/DM\\_state.htm?OK,S](http://droughtmonitor.unl.edu/DM_state.htm?OK,S) to view the current Drought Monitor for Oklahoma.

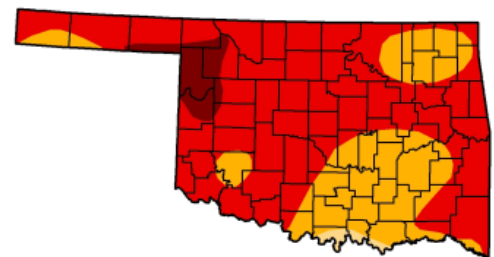
# U.S. Drought Monitor

July 31, 2012  
Valid 7 a.m. EST

## Oklahoma

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	98.99	71.60	5.20
Last Week (07/24/2012 map)	0.00	100.00	99.90	91.24	50.39	2.71
3 Months Ago (05/01/2012 map)	75.68	24.32	14.11	9.78	3.27	0.00
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (07/26/2011 map)	0.00	100.00	100.00	95.45	67.69	52.20



**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>

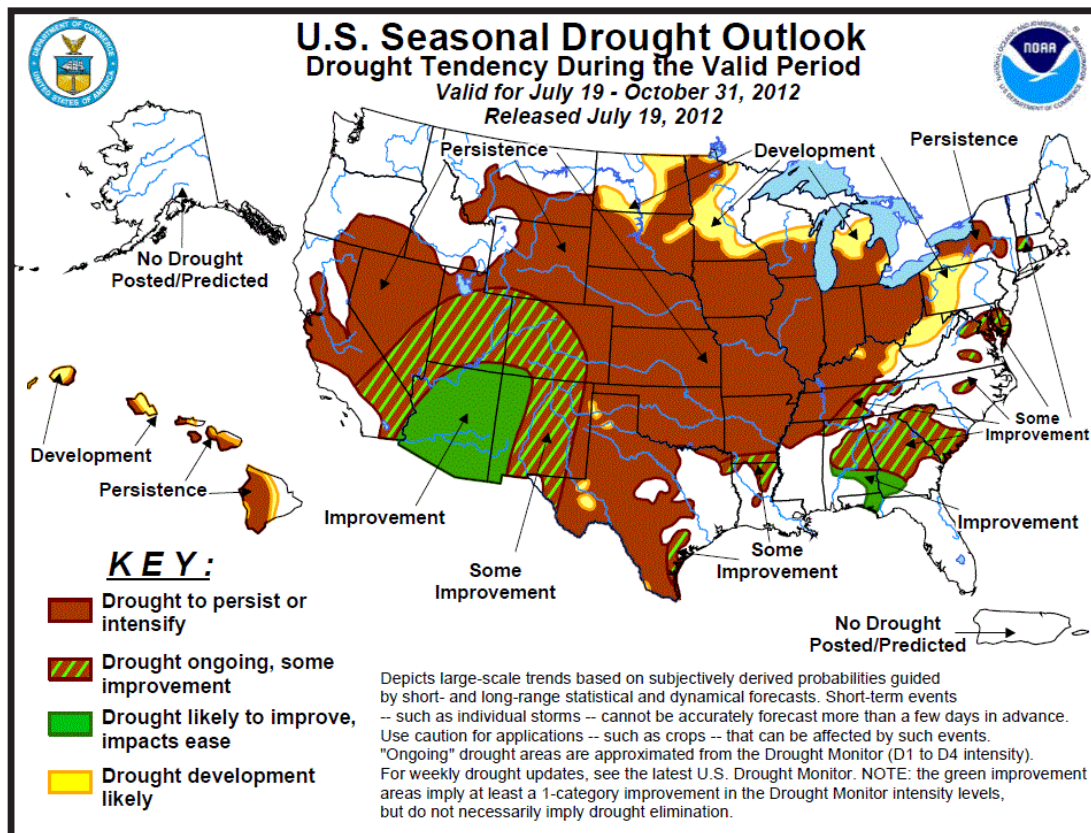


Released Thursday, August 2, 2012

Mark Svoboda, National Drought Mitigation Center

# Heat and Drought Surge Once Again in Oklahoma

—by Gary McManus on July 19



The drought plaguing much of the interior United States continues to stretch its tendrils into Oklahoma. Some experts claim the country's current drought is the worst in a generation and possibly the largest since the great droughts of the 1930s and 1950s.

In Oklahoma, significant heat along with mounting rainfall deficits have allowed drought to flourish once again. Unfortunately, the drought-quenching rains that extended through winter into March disappeared as the state's primary rainy season approached. According to data from the Oklahoma Mesonet, the statewide average rainfall deficit from April 1 through July 18 grew to more than 5 inches. The statewide average total over that period was 8.95 inches, the fourth driest on record dating back to at least 1921. Parts of eastern Oklahoma are up to a foot below normal, while the northwestern corner of the state is running a comparable 6-8 inch deficit. The rainfall deficits steepened deeper into the rainy season. Since May 1, the statewide average rainfall total stood at 5.14 inches, nearly 6 inches below normal and the second driest May 1-July 18 dating back to at least 1921.

The drought impacts continue to mount. County burn bans went into effect as the vegetation that thrived during the warm and wet early spring dried out, becoming fuel for wildfires. Reports of cattle sell-offs due to diminishing stock ponds and a lack of hay or pasture became more numerous, and warm-season crop conditions show further deterioration.

As of July 19, the USDA rated 91 percent of the state's topsoils as being either short or very short of moisture, with a similar rating of 89 percent for the subsoils. State reservoirs have seen a steepening decline through the dry weather. Lake Altus-Lugert, an important irrigation lake for the cotton crop in the southwest, was down to 21 percent of its conservation pool as of July 19. A part of Oklahoma City's water supply chain upstream to the northwest, Canton Lake has faced steady declines and was at 50% of its conservation pool. Several of the state's largest reservoirs are between 80-85 percent of their conservation pools, such as Skiatook at 82 percent and Eufaula at 85 percent.

The outlook for relief is a bit bleak, at least in the short term. The Seasonal Drought Outlook released July 19 by the Climate Prediction Center called for drought to persist or intensify over much of the United States, including Oklahoma, through at least the next couple of weeks. All indicators continue to favor above normal temperatures through August and the August-October period. Further heat would allow for continued drought intensification should rainfall remain scarce. Oklahoma continues on a possible course towards its warmest year on record, dating back to 1895. The statewide average January-June temperature finished at a record 60 degrees, 5 degrees above normal and besting 2006's 58.9 degrees. The mark for the state's warmest year on record remains 1954's 62.8 degrees. ■



# July Blazes to Sixth Warmest on Record as Drought Expands

By Gary McManus, Associate State Climatologist

## JULY WRAP-UP

Heat exploded across Oklahoma during July thanks to a rapidly intensifying drought and a persistent upper-level ridge of high pressure. The combination of dry soils, wilting vegetation and a brutal summer sun led to the sixth warmest July on record for the state since records began in 1895. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature finished at 85.9 degrees, 4.3 degrees above normal. July becomes the 23rd month out of the last 28 to finish warmer than normal, a persistent signal that began in April 2010. The first two months of summer were the ninth warmest on record at 3.2 degrees above normal. The January-July statewide average of 63.9 degrees was easily the warmest on record for the first seven months of the year at 4.8 degrees above normal. The heat broke or tied four daily records during the month at Oklahoma City and twice at Tulsa, including that city's all-time high minimum temperature. Tulsa's temperature only dropped to 88 degrees on July 30, breaking the previous all-time record high minimum temperature of 87 degrees set on August 2, 2011, and July 16, 1980. The highest temperature recorded during the month was 112 degrees on July 31 at several locations. The century mark was reached at all 120 Mesonet stations on both July 29 and July 31.

The month was also the 15th driest July on record with a statewide average rainfall total of 1.11 inches, 1.63 inches below normal. The May-July statewide average rainfall total of 5.99 inches fell 6.25 inches below normal and ranked as the third driest such period on record. Three of the 120 Oklahoma Mesonet stations – Marshall, Spencer and Waurika – recorded no rainfall for July and 10 recorded less than a tenth of an inch. Idabel led the state with 5.75 inches. July 31 marked the 55th day since the Mesonet stations at both Norman and Watonga recorded more than a tenth of an inch of rain in a single calendar day.

The drought's impacts became more significant as the month progressed. The USDA rated the moisture levels of 96 percent of the state's topsoils and subsoils as either "poor" or "very poor" in a report released on July 30. That report also rated 64 percent of the state's pastures and rangelands as being in either "poor" or "very poor" condition. County-level USDA offices from across the state reported a rapid deterioration of crops and vegetation as well as diminishing stock ponds. The lush green growth of the state's warm and wet early spring was transformed into abundant fuel for wildfires as it became dormant or dead. Many large fires were reported during the latter half of the month.

The latest U.S. Drought Monitor report indicated severe to extreme drought had crept into the state from both the east and the west, with 64 percent of Oklahoma now portrayed in at least severe drought. Approximately 15 percent of the state is considered in the extreme drought category, the highest percentage since early March when the drought appeared headed towards extinction.

# 6th WARMEST

July since records began in 1895

# 85.9°F

average statewide temperature for July

# 15th DRIEST

July since records began in 1895

# 1.11" RAINFALL

average statewide precipitation for July



## CALENDAR

### AUGUST

- ▶ 9th: Mesonet Steering Committee Meeting, Stillwater
- ▶ 9th-10th: Women in Ag Conference, Moore
- ▶ 11th: Southern Plains Beef Symposium, Ardmore
- ▶ 20th: OK-First Re-certification Course, Oklahoma Emergency Management Association Training Day, Norman
- ▶ 20th: OK-FIRE full-day workshop, OEMA Training Day, Norman
- ▶ 21st-23rd: OK-First, OEMA Conference, Norman
- ▶ 27th-30th: OK-First Full Certification Course, Norman
- ▶ 31st: OK-FIRE full-day workshop, Norman, To register, contact: [elaina.wright@okstate.edu](mailto:elaina.wright@okstate.edu)

### SEPTEMBER

- ▶ 5th-6th: OK-First Assistants Course, Red Rock
- ▶ 11th: OK-First Re-certification Course, Alva
- ▶ 13th: OK-First Re-certification Course, Lawton
- ▶ 18th: OK-First Re-certification Course, Tulsa

### *Thank you for 20 years of partnership!*

- ▶ El Reno - Installed August 6, 1992
- ▶ Spencer - Installed August 6, 1992
- ▶ Burneyville - Installed August 12, 1992
- ▶ Byars - Installed August 13, 1992
- ▶ Fort Cobb - Installed August 20, 1992
- ▶ Bowlegs - Installed August 21, 1992
- ▶ Pauls Valley - Installed August 21, 1992

## CONTACTS

Accessing recent (within the past 7 days)  
Mesonet data  
Contact: [Mesonet Operator](#)

Instrumentation, telecommunications, or  
other technical specifications  
Contact: [Chris Fiebrich](#)

Mesonet agricultural data and products  
Contact: [Al Sutherland](#)

Mesonet meteorological data  
Contact: [OCS Data Requests](#)

K-12 educational outreach  
Contact: [Andrea Melvin](#)

OK-First public safety outreach  
Contact: [James Hocker](#)

OK-FIRE fire decision support outreach  
Contact: [J.D. Carlson](#)

Not sure?  
Contact: 405-325-2541 or [Chris Fiebrich](#).

## FORECAST FOR AUGUST

*Click here to view the original maps from the Climate Prediction Center.*

