

June Sees Drought's Return July 1, 2016

Lack of rain and hot weather took its toll during June, allowing drought to make a comeback from central through northeastern Oklahoma. Moisture deficits dating back to late April rose to 4-8 inches across a large swath of northern and eastern Oklahoma. During that period, heavy rains inundated southern Oklahoma at times and prompted numerous flash flood warnings. To highlight the disparity in moisture, the El Reno Mesonet site in central Oklahoma recorded a scant 2.7 inches of rain since May 1 while Mangum totaled a whopping 13.5 inches in the far southwest. June itself ended as the 48th driest on record for the state according to preliminary data from the Oklahoma Mesonet with a statewide average of 3.3 inches, 1.3 inches below normal. The moisture disparity across the state was extreme, however. Northeastern Oklahoma experienced its third driest June on record at 3.8 inches below normal. Southwestern Oklahoma saw its 17th wettest at 1.5 inches above normal. Acme led all Mesonet sites with 12.6 inches of rain during June while Oilton had the lowest total of 0.4 inches. The January-June statewide average fell 1.8 inches below normal at 17.2 inches. Kenton has received 9.3 inches for the lowest 2016 total thus far. Broken Bow leads the state with 37.4 inches.

The early return to summer during June helped intensify the drought and produced miserable conditions for Oklahomans. A large area of high pressure – summer's typical "heat dome" – camped over the Southern Plains through much of June's last three weeks and ramped up the temperature. Mesonet sites across northern and southwestern Oklahoma recorded triple digits several times during the month. Kingfisher hit the 100-degree mark seven times to lead the state. Ample moisture flow from the Gulf of Mexico combined with those high temperatures to create oppressive conditions, particularly during a three-day period from June 15-17. Heat index values reached highs of 117 degrees at Bixby, Marena and Oilton on the 15th, and there were 151 instances of 110 degrees or greater calculated by the Mesonet during that three-day period. The Mesonet recorded 437 heat index values of 105 degrees or higher during the month. The June statewide average temperature of 78.9 degrees was 2.4 degrees above normal, the 27th warmest June on record. Several Mesonet sites reached 104 degrees for the month's highest temperature while a low of 46 degrees at the Mesonet's newest station, Eva in Texas County, was the lowest reading. The January-June statewide was 2.1 degrees above normal and the eighth warmest first half of the year on record.

The month started with just three percent of the state in "Abnormally Dry" conditions, but no drought indicated according to the U.S. Drought Monitor. The Drought Monitor map was completely clear in Oklahoma on June 14, but the heat and lack of rainfall eventually took its toll, prompting the return to drought on June's last day. That last report had six percent of the state in moderate drought and 17 percent in abnormally dry conditions. On the opposite side of the hazard scale, flooding was an oft-reported problem during June. Lawton suffered widespread flash flooding on both June 2 and June 13 after heavy rains, necessitating water rescues by emergency personnel during both events. Flash flood warnings and water rescues were common during the first half of the month across the southwestern quarter of the state. Scattered storms on the month's final day brought high winds, large hail and localized heavy rainfall to parts of Oklahoma.

The Climate Prediction Center's outlooks for July indicate increased odds of above normal temperatures across the entire United States, although odds are a bit higher across the Southeast, including southeastern Oklahoma. The temperature outlook is non-committal with equal odds of near-, above- or below-normal temperatures. The U.S. Drought Outlook for July expects the current Oklahoma drought area will persist and possibly intensify through the end of the month with the areas surrounding it facing possible drought development.