

## Rainy Summer Evaporates In August Sept. 1, 2015

Many a rainy summer has stared into the unyielding gaze of August and faltered. Coming off the wettest May-July period on record for Oklahoma, this August was met with similar expectations. In that regard, however, it was an unmitigated failure with preliminary data from the Oklahoma Mesonet indicating a statewide average of 2.3 inches. That is more than half an inch below normal and ranks the month as the 46<sup>th</sup> driest August on record, dating back to 1895. The northeast saw a surplus of more than 1.7 inches to rank as the 24<sup>th</sup> wettest August for that area. South central Oklahoma, the epicenter of the extreme rains from the previous few months, dried out considerably with a deficit of more than 2.1 inches and ranked as the seventh driest. Miami led the state with 8.51 inches of rain, which is more than 5 inches above normal for that location. Madill, in far south central Oklahoma, barely wet the gauge with 0.04 inches. That is a stark contrast to the 43.71 inches of rain Madill received April-July, including 23.25 inches in May alone.

August's rain totals might have diminished the climatological summer's (June-August) ranking, but the season still finished as the 28<sup>th</sup> wettest on record with a statewide average of 12.13 inches, 1.78 inches above normal. Much of that wetter than normal weather was concentrated from south central through northeast Oklahoma. The southeast and southwest were drier than normal. The year still leads 1957 in the race to finish as the wettest on record for Oklahoma. The 2015 January-August statewide average was 36.19 inches, 11.33 inches above normal and 0.32 inches ahead of 1957's mark. That leaves 2015 just 11.69 inches off 1957's calendar year record total of 47.88 inches. The final four months of the year average 12.07 inches of precipitation, so even a slightly below normal finish to the year can still garner 2015 the record.

The outlooks called for a cooler than normal August, and those prognostications were prophetic with a statewide average of 78.8 degrees. That's 2 degrees below normal to rank the month as the 24<sup>th</sup> coolest August on record. Of course, that's not the entire story with the temperature data, as is often the case. High temperatures ranged from a maximum of 107 degrees at Hollis on the sixth to a chilly 68 degrees at Boise City on the 23<sup>rd</sup>. The former occurred during a period of above normal temperatures and the latter following an unusually strong cold front for that part of the year. That cold front was also apparent in the minimum temperatures readings. El Reno got down to an October-like 47 degrees on the 20<sup>th</sup>, and many other Mesonet sites reached lows in the 40s or lower 50s on the 19<sup>th</sup> and 20<sup>th</sup>. Record lows were set at Oklahoma City, Muskogee, McAlester and Bartlesville on the 20<sup>th</sup> according to National Weather Service (NWS) reports. The cool weather continued for several more days with additional record lows reported through the 25<sup>th</sup>. The first week of the month was a scorcher, nevertheless. The Mesonet recorded 143 instances of heat index values of 110 degrees or more during that period, including a miserable 117 degrees at Eufaula and Okmulgee on the seventh. On the month's final day, temperatures had reached into the mid- to upper-90s across much of the western half of the state, and even a triple-digit reading at Freedom. The summer and January-August statewide average temperatures were both near normal.

With the dry conditions mounting across the southeast, flash drought conditions continued to intensify in that region. Dead and dormant vegetation, desiccated soils and flagging streamflows were some of the key indicators of the spreading hazard. By the end of August, more than 18 percent of the state was considered in at least abnormally dry conditions according to the U.S. Drought Monitor, and nearly 9 percent in moderate drought. There were no drought or abnormally dry designations in Oklahoma at the end of July.

Drought is expected to persist or even intensify through September where it exists now across the southeast, with some development likely farther to the west and north, according to the Climate Prediction Center (CPC). The CPC sees increased odds for above normal temperatures across far eastern Oklahoma during September, with similar odds for above normal precipitation in the northwestern half of the state, especially the Panhandle.