Drought Accelerates In November Heat

Dec. 1, 2016

Mother Nature did little during November to sooth those areas in Oklahoma most impacted by drought. Significant rains were scattered and temperatures were well above normal – as was the Oklahoma wind. All those factors contributed to drought intensification. According to preliminary data from the Oklahoma Mesonet, the statewide average rainfall total was 1.23 inches, 1.28 inches below normal and ranked as the 41st driest November since records began in 1895. The four sites in McCurtain County led the state with more than 4 inches of rain, the only Mesonet stations out of 119 to eclipse that mark. Valliant led the way with 4.93 inches. Southwestern Oklahoma also saw significant moisture with more than 2 inches across Greer, Kiowa and Comanche counties. Hooker and Goodwell brought up the rear with 0.04 inches and 0.02 inches, respectively. Sixty-three of those 119 stations recorded less than an inch of rain for the month. November brought climatological autumn to a close and as expected, it finished much drier than normal. The September-November statewide average of 6.44 inches was more than 3 inches below normal to rank as the 36th driest fall on record. The January-November period was extremely dry from much of eastern into central Oklahoma. The east central region was more than 10 inches below normal to rank as the 24th driest on record, while southwestern Oklahoma enjoyed a surplus of more than 3 inches and a ranking of 27th wettest. Statewide, the average fell more than 4 inches below normal to rank the year thus far as the 53rd driest on record.

The statewide average temperature was 5.3 degrees above normal at 54.6 degrees to rank as the third warmest November on record. High temperatures rose into the 70s and 80s with unusual regularity well into the month. Buffalo topped the Mesonet with a reading of 90 degrees on the 16th breaking the all-time statewide high for that date. The previous record high for Nov. 16 was 89 degrees set at Ft. Reno more than a decade before statehood in 1894. Periodic cold fronts meant occasional forays into freezing weather, especially in the dry air across northwestern Oklahoma. Hooker and Beaver reached 12 degrees on the 19th for the lowest readings. The Mesonet site at Eva in Texas County fell to 32 degrees or lower for a total of 100 hours to lead the state. Nearly the entire state had experienced a hard freeze of at least 28 degrees by the end of the month. The near historic warmth of October and November pushed climatological fall to end as the 2nd warmest on record at 65.6 degrees, 4.8 degrees above normal, still well below 1931’s 66.4 degrees. The first 11 months of 2016 rose 2.6 degrees above normal, the third warmest such period on record.

Drought erupted and intensified from the beginning of the month according to the U.S. Drought Monitor, rising from 36 percent of the state on Nov. 1 to nearly 57 percent of the state by month’s end. That is the highest percentage of the state in drought since 59 percent on May 5, 2015. The biggest increase came in the more intense drought categories, with severe drought increasing from 8 percent to 16 percent and extreme drought emerging at 3 percent. The Drought Monitor’s intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification. Drought increased from 14 percent of the state to 57 percent during autumn. Oklahoma was drought free at the beginning of 2016.

The December temperature and precipitation outlooks from the Climate Prediction Center (CPC) were noncommittal for Oklahoma save for slightly increased odds of above normal precipitation across far southeastern Oklahoma. CPC’s U.S. Monthly Drought Outlook for December therefore showed some drought improvement across far southeastern Oklahoma. Otherwise, drought is expected to persist in the state where it currently exists. No drought development is forecast.

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