Uneven Rains Simplify Drought Picture Gary McManus
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As a transition period between summer and fall, Mother Nature often provides Oklahoma with a wildly varying tale to tell during September. This year was no exception. At first glance, a description of Oklahoma's weather during September seems fairly straightforward –a toasty month with an abundance of moisture in the west and too little in the east. The state's weather story is never quite that simple, of course. Far northwestern Oklahoma was actually the driest region of the state, and parts of eastern Oklahoma enjoyed a surplus. That disparate rainfall pattern put a halt to budding dry conditions across parts of western Oklahoma, but intensified drought across eastern sections of the state. According to preliminary data from the Oklahoma Mesonet, the statewide average rainfall total was 3.14 inches, 0.39 inches below normal. Regionally, the Panhandle suffered its 18th driest September at more than an inch below normal, west central Oklahoma saw bountiful moisture for their 16th wettest, and east central Oklahoma plunged more than 2 inches below normal to rank as their 35th driest. Walters led all Mesonet sites with 7.01 inches of rain for the month while Goodwell barely wet the gauge at 0.06 inches. The rainfall for the first nine months of the year was just as discordant as September with a surplus of more than 5 inches in the southwest and a deficit greater than 5 inches in both the northeast and east central sections. The statewide average for that January-September period was 26.97 inches, about 1.5 inches below normal. September ended as the 55<sup>th</sup> wettest on record statewide while January-September ranked as the 57<sup>th</sup> wettest. Those records date back to 1895.

Unlike rainfall, the temperature statistics were demonstratively more uniform. Despite a few glimpses of fall, September was unusually warm across the entire state. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature was 74.7 degrees, 2.4 degrees above normal and the 34<sup>th</sup> warmest September on record. The Mesonet recorded triple-digit high temperatures seven times during September with Buffalo leading the way at 101 degrees on the 19<sup>th</sup>. Winter made a brief appearance at the end of the month with five readings in the 30s, bottoming out at 37 degrees at two Panhandle stations – Eva and Kenton – on the 26<sup>th</sup>. September's heat added to what has become a decidedly warm year thus far with the January-September statewide average jumping 1.8 degrees above normal, the 14<sup>th</sup> warmest such period on record.

While the dry conditions across western Oklahoma were eliminated by month's end, drought remained and even intensified across the eastern one-third of the state. Nearly 34 percent of the state was considered abnormally dry by the U.S. Drought Monitor at the beginning of September, and that category had been reduced to 23 percent on the month's final map. Actual drought, from moderate to severe, had jumped from 14 percent to 19 percent. The worst hit area remained from Pontotoc County down through Atoka County in the southeast as well as from Wagoner County through Cherokee County in the northeast. Those areas were labeled "severe" by the Drought Monitor. Surrounding those two areas, moderate drought extended from the Red River to near the Kansas border. The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification.

The outlooks for October from the Climate Prediction Center (CPC) see increased odds for above normal temperatures across the entire state and below normal precipitation across the southeastern quarter. CPC's U.S. Monthly Drought Outlook indicates the drought across eastern Oklahoma will either persist or intensify throughout October, although the seasonal outlook released earlier in September expected drought removed by the end of December.

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