

September Sees Relief on the Thermometer, Not the Rain Gauge

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While little relief from drought was found in September, the reprieve from the intense summer heat was nearly instantaneous. After three summer-like days to begin the month, fall weather kicked into high gear and temperatures plummeted. The hottest summer in Oklahoma history soon gave way to the 30th coolest September since records began in 1895. The statewide average temperature for the month was 70.9 degrees according to preliminary data from the Oklahoma Mesonet, 1.6 degrees below normal. Unfortunately, similarly good news did not arrive for most of drought-stricken Oklahoma. The statewide average precipitation total finished at 1.66 inches for a deficit of 2.15 inches, the 20th driest September on record. The northeastern quarter of the state did see some relief, however, with drought-reducing rainfall totals of 3-4 inches. The rest of the state languished in dusty dry soils with totals of less than 1.5 inches in most areas. The Oklahoma Mesonet site at Oilton led the state with 4.47 inches while the south central town of Durant failed to record a quarter of an inch of moisture.

The end of September also brings the end of the water year (October 1-September 30). That period also encompasses the current drought, whose genesis occurred around this time last year with the arrival of La Nina in the equatorial pacific waters. This water year finished as the second driest on record for Oklahoma with a statewide average precipitation total of 20.26 inches, 16.43 inches below normal. The driest such period on record was 18.69 inches from the 1955-1956 water year. For the Panhandle, west central, central and southwestern parts of the state, it was easily the driest water year on record. Southwest Oklahoma's water year average of 12.68 inches was more than 18 inches below normal and nearly 5 inches drier than the previous record low total of 17.45 inches, again from the 1955-56 water year.

The latest U.S. Drought Monitor graphic from the National Drought Mitigation Center continues to show over 66 percent of the state is impacted by "exceptional" drought, the worst such designation possible. Recent improvements were seen in east central Oklahoma with much of the northeastern one-quarter labeled in "extreme-severe" drought, the second and third worst drought designations. Three months ago, only 33 percent of the state had the exceptional drought label. The latest U.S. Drought Monitor map indicates the entire state suffering from severe-to-exceptional drought impacts.

The re-emergence of La Nina in the equatorial pacific waters last month does not bode well for the drought-plagued Southern Plains and Oklahoma. The climate phenomenon, marked by cooler than normal sea surface temperatures, often brings warmer and drier weather to the southern one-third of the United States from late-fall through spring. Any hint of drier than normal weather is unwelcome news to Oklahoma's agricultural industry. Oklahoma has experienced approximately \$1.6 billion dollars in losses due to the current drought, according to estimates by Oklahoma State University's Division of Agricultural Sciences and Natural Resources. Conditions entering this La Nina episode are much worse than at this time last year when only four percent of the state had any type of drought designation.

The latest U.S. Seasonal Drought Outlook from the National Weather Service's Climate Prediction Center predicts drought to persist or intensify for all of Oklahoma through the end of 2011. Some improvements are possible in northeastern Oklahoma and the western Panhandle, however. With La Nina's return, continued drought into 2012 appears likely.