Oklahoma Drought Continues to Expand

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With some areas of the state awaiting their first drop of rainfall since the end of September and a wheat crop left thirsting for water in powdery dry soils, drought made yet another advance across Oklahoma according to the latest U.S. Drought Monitor report. That report, released on Thursday morning, indicated an eight percent increase in extreme-exceptional drought across the state, from 68 percent to 76 percent. Exceptional drought alone increased from 27 percent to 32 percent. The entire state remained in severe-exceptional drought. The Drought Monitor’s intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst category. The lack of rainfall remained the main culprit, but strong winds and unseasonably warm weather certainly contributed to the intensification.

This type of rebound is nothing new during a two year drought cycle in which relief has seemed to be a “one step forward, two steps back” process. The last major improvement in the state’s drought status occurred on Oct. 16 with a 14 percent drop in extreme-exceptional drought, from 81 percent to 67 percent. The rain has stayed away since then, however. According to data from the Oklahoma Mesonet, it has been up to 55 days since parts of northern Oklahoma have seen a day with at least a quarter of an inch of rainfall, and up to 41 days without a tenth of an inch. The state has seen an average of 1.1 inches of rainfall since October began to fall more than 3 inches below normal and rank as the eighth driest Oct. 1-Nov. 8 since 1921. West central Oklahoma has barely had enough rain to wet the gauge with an average of 0.11 inches, about four percent of normal over that period.

This two-year drought cycle can trace its beginnings back to October 2010. The dry weather extended through the spring of 2011 before exploding during the brutal 2011 summer, the hottest on record for any state since records began in 1895. Widespread relief arrived in fall 2011, lasting through April 2012. The rains stopped abruptly at that point and drought quickly made a comeback with the aid of another hot, dry summer. The May-October statewide rainfall deficit was nearly 11 inches, the second driest such period in Oklahoma since records began in 1895. North central Oklahoma’s average of 7.6 inches through that span was more than 13 inches below normal and ranked as the driest since 1895.

The impacts to Oklahoma agriculture and water have been severe. The latest “Oklahoma Crop Weather Report” from Oklahoma’s office of the USDA’s National Agricultural Statistics Service finds 88 percent of the state’s topsoils and 94 percent of its subsoils rated in poor or very poor condition. One year ago, those values were at 63 percent and 91 percent, respectively. The report also noted 73 percent of the state’s pasture and rangeland in poor or very poor condition. The portion of the Oklahoma wheat crop rated poor or very poor rose from 12 percent to 30 percent over the last week. The damage done to the topsoil became evident on Oct. 19 when strong winds lifted dust across Interstate 35, dropping visibilities down to zero in a scene reminiscent of the historical Dust Bowl storms. The shroud of dust caused a chain reaction wreck of as many as three dozen vehicles. Eleven of the state’s major reservoirs are at less than 70 percent of capacity, up from just three at the beginning of May. Lake Altus is in the worst shape at 17 percent normal capacity. Canton Lake, an important part of Oklahoma City’s water supply chain, is at 42 percent.

Rain is forecast for the weekend, arriving with a strong cold front. This system does not appear to be a drought-breaker, however, although eastern Oklahoma is expected to get up to a couple of inches of rain according to the National Weather Service. Lighter amounts of less than a half of an inch are forecast for western Oklahoma at this time. Looking farther ahead, another rain chance appears possible around the middle of next week, although the timing remains uncertain. December, January and February are normally the three driest months of the year in Oklahoma before the rains pick up again during spring.

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