Drought and Wildfires Plague August Gary McManus Associate State Climatologist Oklahoma Climatological Survey September 06, 2012

According to data from the Oklahoma Mesonet, August finished one degree above normal to rank as the 53rd warmest on record and a half an inch below normal to come in as the 42nd driest. Those records date back to 1895. Despite those seemingly benign statistics, August actually had weather to suit just about all summer appetites. The month started with one of the hottest stretches the state has ever experienced, moved to mild and wet for a spell, then ended once again on the hot side. Unfortunately, that brief fall-like interlude in the middle of the month did little to quell the ongoing flash drought event that began in late spring. The U.S. Drought Monitor report released on August 28 showed 37 percent of Oklahoma mired in exceptional drought, with 90 percent portrayed in extreme-exceptional drought. The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst category. To exemplify the drought's rapid advance, only 17 percent of the state was in drought at the end of May and five percent was in exceptional drought at the beginning of August. Vegetation that had flourished in the wet and unusually warm winter and early spring became prime fuel for wildfires thanks to the heat and drought. More than 100,000 acres across the state burned in early August, with one fatality east of Norman attributed to wildfire.

The weather during early August was as intensely hot as nearly any in the state's history with temperatures ranging from 105-115 degrees across much of Oklahoma. August 1 became the state's 10th hottest day on record with a statewide average temperature of 93.7 degrees. That is still 1.2 degrees less than Oklahoma's hottest day on August 12, 1936. Oklahoma City tied its all-time record high temperature and broke its all-time record warm low temperature on the same day, August 3, with readings of 113 degrees and 84 degrees, respectively. The highest temperature recorded by the Oklahoma Mesonet during the month was 115 degrees from Kingfisher on August 1. On the cool side, several Mesonet stations reached a minimum temperature of 50 degrees on August 20.

The end of August also brings the climatological summer to a close, and it was obviously a hot and dry one. The statewide average rainfall total during summer fell 3.7 inches below normal to rank as the 14th driest on record. The summer also ranked as the 12th warmest on record at 2.5 degrees above normal. The first eight months of the year ended as Oklahoma's warmest January-August period on record at 4.3 degrees above normal. August was the 24th month out of the last 29 to finish warmer than normal, beginning with April 2010.

The September temperature and precipitation outlooks from the National Weather Service's Climate Prediction Center (CPC) hold few clues on what to expect for the next month. Most of the state is given equal chances for above-, below- or near-normal rainfall and temperatures, although the eastern half of the state is given slightly increased odds for warmer than normal weather. Farther out, the world awaits the arrival of El Niño. That warming of the waters in the tropical eastern Pacific Ocean can impact weather patterns across the globe. One of its impacts is to provide increased chances for cooler and wetter weather across the southern tier of the United States during the cool season (October-March). The impacts are often not as strong for Oklahoma as its counterparts farther south and east, but data suggest moderate-to-strong El Niño events increase the odds for a wetter cool season across Oklahoma. In the event of a weak El Niño, drier weather is often the result. While El Niño is almost certain, and has possibly already developed, its intensity is still uncertain at this time.