Drought Returns in June July 3, 2017

June, normally a pillar of Oklahoma's spring rainy season, was very much a disappointment in that regard. Unfortunately, that lack of significant moisture fueled a quick return to drought across parts of the state. Central Oklahoma became particularly dry with deficits of more than 8 inches accumulating since the beginning of May. According to preliminary data from the Oklahoma Mesonet, the month finished with a statewide average of 2.97 inches, 1.55 inches below normal to rank as the 43<sup>rd</sup> driest June since records began in 1895. Central Oklahoma's average of 1.94 inches fell nearly 3 inches below normal to rank as that region's 18<sup>th</sup> driest June. Oklahoma City experienced its second driest June and driest May-June period on record with 0.11 inches and 1.21 inches, respectively. The Mesonet site at Spencer recorded a hundredth of an inch during June, barely enough to wet the rain gauge. While most of the state was dry, there were a few areas that enjoyed a moisture surplus for the month. Parts of east central Oklahoma finished 3-5 inches above normal, while isolated areas in the southwest and far western Panhandle came out ahead as well. Webbers Falls led the state with 9.65 inches during June. Despite the dry May and June, 2017 remained above normal through the first six months with a statewide average of 20.91 inches, the 26<sup>th</sup> wettest such period on record.

In spite of the slant towards dryness during June, there was still plenty of severe weather. The most intense storms were saved for the last week of the month. Hail to the size of baseballs was reported across southwestern Oklahoma on the 30<sup>th</sup>. There were even a couple of possible tornado sightings in the far western Panhandle on the 25<sup>th</sup>. The state's tornado count for the year had climbed to 62 at the start of June according to preliminary data from the National Weather Service, including 50 that touched down during May. The 1950-2016 annual average is 56.

Mother Nature made up for the disappointing rain totals by offering extended breaks from the summer heat. Highs were mostly in the 70s and 80s the weekend of June 23-25, and some highs only reached the 60s early in the month. Summer still peaked through at times, of course. The Mesonet recorded at least one triple-digit temperature on 14 of the 30 days in June, and heat index values soared as high as 112 degrees on a couple of occasions. The statewide average temperature was 76.7 degrees, 0.2 degrees above normal to rank as the 52<sup>nd</sup> coolest June on record. The month's highest temperature was 106 degrees at Hooker on the 17th. The lowest temperature was 46 degrees at Kenton on June 14. The year was still on pace to finish as one of the warmest on record. The January-June statewide average of 58.6 degrees was 2.9 degrees above normal, the fourth warmest such period on record.

The bursts of summer heat, combined with strong winds and lack of rainfall, created a "flash drought" scenario – a relatively rapid return to drought compared to the normal long-term development of the hazard. Per the U.S. Drought Monitor, the state progressed from no drought at the beginning of the month to 13 percent on June's final report. The amount of the state in abnormally dry condition, signaling areas where drought could develop if significant moisture remained absent, exploded from 3 percent to 57 percent during the month.

The July temperature outlook from the Climate Prediction Center (CPC) showed increased odds of above normal temperature over the western two-thirds of the state, but no clear indication for the eastern third. The odds are tilted for above normal precipitation for the eastern half of the state. According to CPC's drought outlook for July, drought will tend to persist or intensify across western Oklahoma, but improve in central Oklahoma. No drought development within Oklahoma is indicated on the July drought outlook.