August Spurns Summer Aug. 31, 2017

August is often Oklahoma's most brutal summer month. The spring rains become a distant memory, heat gains momentum through July, and the state's landscape turns a sickly shade of yellow. With drought intensifying along with the heat this summer, August looked bleak once again. However, Mother Nature was in a charitable mood. The upper-level heat dome – a common visitor to the Southern Plains in late summer – shifted to the west and brought Oklahoma under northwesterly flow aloft. That change meant more cool fronts and storm systems to interact with the rich moisture flowing north from the Gulf of Mexico. With that favorable pattern in place through much of the month, Oklahoma enjoyed one of its most mild and wet Augusts on record.

According to preliminary data from the Oklahoma Mesonet, the statewide average precipitation total was 6.42 inches, 3.47 inches above normal and the second wettest August since records began in 1895. August 1915 holds the top spot with 6.48 inches. The Oklahoma City East site led the Mesonet with 13.04 inches, but there were plenty of hefty totals during the month. Ten Mesonet sites recorded at least 10 inches, and 79 received between 5 and 10 inches. Buffalo had the lowest total with 1.55 inches. Climatological summer (June 1-Aug. 31) was the 29th wettest on record with a statewide average of 12.24 inches, 1.89 inches above normal. The January-August average of 30.59 inches was 5.73 inches above normal to rank as the eighth wettest such period on record.

Those that don't favor summer's usual fare can thank the string of cool fronts, abundant rainfall and its associated cloudiness for the delightfully mild August. According to preliminary data from the Mesonet, the statewide average temperature was 76.4 degrees, 4.4 degrees below normal to rank as the sixth coolest August on record. The Mesonet's 121 stations recorded a temperature of at least 100 degrees 22 times, and those occurred on only two days – Aug. 5 and Aug. 19. Freedom and Kingfisher led the state with 103 degrees on Aug. 5 while Eva had the lowest temperature at 47 degrees on the month's final morning. Climatological summer ended as the 29th coolest on record with a statewide average of 78.7 degrees, about a degree below normal. The mild August put a dent in 2017's march towards a top-10 warmest ranking, but the first eight months of the year remained 1.8 degrees above normal at 64 degrees, the 11th warmest January-August on record.

Flooding was the biggest weather hazard Oklahomans faced during August, given the frequent downpours. Flash flooding resulted in numerous water rescues across the Oklahoma City area on both Aug. 22 and Aug. 25, and in the Tulsa area on Aug. 15. The Tulsa area faced a more violent weather hazard early on the sixth with the touchdown of four tornadoes. The strongest tornado, rated an EF-2 on the Enhanced Fujita scale, injured more than two dozen people and caused significant damage to businesses in the midtown Tulsa area. Three additional EF-1 tornadoes struck Broken Arrow, Chelsea, and Oologah. Drought impacts virtually disappeared thanks to the generous rainfall amounts. According to the U.S. Drought Monitor, 19 percent of the state was considered in drought and another 30 percent abnormally dry at the beginning of the month. Drought had been totally eliminated and only two percent of Oklahoma was still abnormally dry by the end of August.

The September outlooks from the Climate Prediction Center (CPC) indicate increased odds of below normal temperatures and precipitation across most of the state. However, no drought is expected to develop in September according to CPC's September Drought Outlook.