Although the spring rainy season got a late start in 2014, not arriving in earnest until the third week of May, it continued with sustained vigor through the last day of June. According to preliminary data from the Oklahoma Mesonet, the month finished as the 23rd wettest June on record for the state with an average total of 5.82 inches, a surplus of 1.56 inches. Those records date back to 1895. North central Oklahoma, one of the areas hit hardest by drought since the beginning of the year, saw its fifth wettest June with an average of 8.18 inches, 4.24 inches above normal. On the local level, six Mesonet stations recorded at least 9 inches of rain for the month, all located across northern Oklahoma. Buffalo led the state with 10.44 inches of rain, 6.36 inches above normal. Cherokee and Lake Carl Blackwell reported 10 inches with Alva, Breckenridge and Freedom exceeding 9 inches. Kenton recorded the state's lowest total at 0.83 inches. The Mesonet recorded at least an inch of rain somewhere in the state on 19 days during June. Not all areas were as fortunate with the plentiful moisture, unfortunately. Locations along the Red River fell 2-4 inches below normal for the month. Durant reported 2.44 inches, more than 3 inches below normal. The statewide average temperature was 77.1 degrees, 0.6 degrees above normal and the 54th warmest June on record. Grandfield topped the month's temperature scale with a high of 107 degrees on June 4 and Kenton reached 43 degrees on June 10 for the state's lowest reading. The last few days of June were oppressively hot with heat index values well into the triple-digits across most of Oklahoma.

Except for delaying the wheat harvest and localized areas of flash flooding, the excess moisture was of great benefit to the state. The U.S. Drought Monitor, which had already seen a bit of improvement during the last two weeks of May, continued to portray a drought of lessening intensity across much of Oklahoma. The percentage of the state in at least severe drought dropped from 73 percent at the end of May to 66 percent at the end of June, and the percentage of exceptional drought dropped from more than 26 percent to about 11 percent. The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification.

Severe weather was sporadic and generally consisted of high winds and flooding, although there were reports of large hail with some of the stronger storms. The Mesonet site at Beaver recorded the top wind gust of 85 mph on June 30 with Minco right behind at 83 mph on June 23. Much of the Panhandle was hit by damaging winds on June 30. The Mesonet recorded severe wind gusts (57 mph or greater) on 13 of June's 30 days. Preliminary reports from the National Weather Service (NWS) indicate at least four tornadoes touched down in Oklahoma during June. All four were of the weaker variety (EF1 or lower), although the tornado that struck Adair on June 28 damaged several structures, including the Adair Fire Department. The other three confirmed twisters occurred in rapid succession in Beaver County on June 22. That brings the preliminary January-June twister count to 11, the second lowest total for the first six months of the year since accurate records began in 1950. Only 1988's count of 10 is lower. Oklahoma averages eight tornadoes during June, and the average January-June total is 47. All tornado data for 2014 are considered preliminary until verified by NWS personnel.

The July outlooks from the NWS' Climate Prediction Center indicate a chance for below normal temperatures and above normal precipitation in the far western Panhandle, but no clear signal for the rest of the state in either category. The U.S. Monthly Drought Outlook for July portrays drought as persisting or intensifying across the southern half of the state and into the Panhandle, with some improvement or removal likely across the northern half. Drought development is indicated across southeastern Oklahoma.