National Drought Summary for July 16, 2024

Summary

Over the past week, remnants of Beryl made their way up into the Midwest, bringing with them significant precipitation from east Texas all the way into Michigan. Another shot of significant rain at the end of the current period in the Midwest kept the region quite wet overall. Significant precipitation along the eastern seaboard from New Jersey into the Carolinas was welcomed, but isolated to coastal areas. Much of the rest of the country was quite dry with only pockets of light precipitation. The warmest temperatures were over the West, with departures of 3-6 degrees above normal widespread, and from Washington to California, with departures 9-12 degrees above normal. The coolest temperatures were also associated with areas that picked up the best rains as temperatures from Texas into Arkansas and Missouri were up to 3 degrees below normal. Areas of the Northeast were also warmer than normal with departures of 6-9 degrees above normal.

Northeast

The entire region was warmer than normal this week. The warmest areas were from eastern New York up to Maine, with some pockets having departures of 8-10 degrees above normal. Above-normal precipitation was recorded in the northern portions of the region from New York into Maine where more than 200% of normal precipitation was measured. Areas from southern New Jersey into eastern Virginia also picked up more than 200% of normal precipitation this week. Most other areas were drier than normal, which allowed for some expansion and intensification of the drought status. Abnormally dry conditions were expanded in southern New Hampshire and central Pennsylvania. Moderate drought was introduced into portions of eastern Pennsylvania and northern New Jersey and also expanded in central New Jersey. Moderate and severe drought were expanded in southern Pennsylvania, west Virginia and northern Virginia. Severe drought was expanded and extreme drought introduced over much of West Virginia and northern Virginia. The coastal areas from southern New Jersey to southeastern Virginia did see a category of improvement to the moderate drought and abnormally dry conditions where the greatest rains took place.

Southeast

Spotty summer showers in Florida, Georgia and Alabama were combined with more widespread rain along the coast of North Carolina south into South Carolina and Georgia this week. Temperatures were above normal over most of the area, with the warmest temperatures in northern Florida and into southern Georgia and South Carolina where departures were 3-5 degrees above normal. The coastal rains in the

Carolinas allowed for some improvements to the moderate drought and abnormally dry conditions here. Moderate drought was also improved in central Florida along with improved abnormally dry conditions. The rest of the region was highlighted by degradation, mainly on the short-term indicators as conditions are changing rapidly. Most of northern Alabama and Mississippi had a full category of degradation this week, with expansion of moderate and severe drought conditions. Moderate and severe drought expanded over much of Tennessee as well this week with a new pocket of extreme drought in southern Tennessee into northern Alabama. Another new pocket of extreme drought was introduced in western Alabama and into eastern Mississippi, and extreme drought was expanded slightly in eastern South Carolina along with a new pocket of extreme drought in northern North Carolina.

South

It was a mostly dry week over the region with much of the area experiencing temperatures that were 2-3 degrees below normal. With short-term dryness returning to portions of north Texas and southern Oklahoma, abnormally dry conditions were expanded this week. Throughout the rest of the region, no other significant changes were made this week, with status quo common across the region.

Midwest

Temperatures were mixed, between near normal to slightly below normal for much of the region to 2-4 degrees above normal over the northern and eastern extent of the region. Precipitation was substantial in portions of southern Wisconsin, Illinois and Indiana where some areas were 400-800% of normal for the week. With the continued wet pattern over much of the region, abnormally dry conditions were removed from Iowa and northeast Missouri. A full-category improvement took place over all of Illinois and Indiana, leaving behind a few pockets of abnormally dry conditions. Abnormally dry conditions were improved over central Michigan and into western Ohio. Dryness was more apparent over the rest of the region where degradation took place over much of southern and southeast Ohio and into much of eastern Kentucky this week.

High Plains

A few pockets of above-normal precipitation were recorded in northwest South Dakota and north central North Dakota as well as in areas of eastern Kansas at the end of the current period. Much of the rest of the region was dry or received minimal amounts of precipitation. Abnormally dry conditions were expanded in northwest and southeast Kansas as well as in eastern Colorado and western Nebraska. Moderate drought was introduced over eastern Colorado and expanded in northwest Nebraska and southwest South Dakota as well as in eastern portions of Wyoming. Moderate and severe drought expanded in central Colorado as the foothills remained dry. After several weeks of wet weather, some drying out is taking place in portions of the region, which is welcomed in some circumstances.

West

Warmer-than-normal temperatures dominated the region, with only portions of western Colorado and New Mexico below normal for the week with departures of up to 3 degrees below normal in New Mexico. Portions of central Washington and Oregon into northern California had temperatures 9-12 degrees above normal. Isolated rains in New Mexico and Arizona as well as portions of central California were the only precipitation events of significance in the region. In response to the recent heat and dryness, a large swath of abnormally dry conditions was expanded this week from northern Nevada and southern Idaho into northern Utah. Abnormally dry conditions were also expanded in northwest California, western Nevada, southern Colorado and southwest Utah. Moderate drought was expanded over more of central Oregon with more abnormally dry areas added in the west. Moderate drought was expanded in western Wyoming, and Montana had severe drought expand broadly in the west while a new pocket of extreme drought was introduced.

Caribbean

For the week of July 10 to 16, the U.S. Virgin Islands (USVI) maintained its drought-free status. Weekly reports from a network of about a dozen volunteer (CoCoRaHS) observers noted rainfall totaling 0.96 to 2.20 inches on St. Thomas; 1.04 to 1.63 inches on St. John; and 0.32 to 0.77 inches on St. Croix. The U.S. Geological Survey well data stayed steady from last week with St. Croix at 24 ft. below surface, St. Johns at 8 ft. below surface, and St. Thomas at 5.5 ft. below surface. Satellite data (VHI) showed no vegetative drought stress in the USVI.

No changes were made in Puerto Rico this week.

Pacific

Abnormally dry conditions improved in portions of southern Alaska and expanded in portions of eastern Alaska.

Moderate drought was expanded on the Big Island of Hawaii.

For the drought-monitoring period ending July 16, there was neither dryness nor drought in American Samoa and the Republic of Palau. Pago Pago International Airport received 1.19 inches of rain this week and Palau received 2.14 inches, bringing the monthly totals for Ameriana Samoa and the Republic of Palau to 3.73 inches and 6.02 inches, respectively.

Conditions across the Federated States of Micronesia remain drought free except for Ulithi and Yap. While Ulithi remained in long-term moderate drought conditions (D1-L), Yap improved from severe short-term drought (D2-S) to short-term moderate drought (D1-S) after receiving 1.54 inches this week and 3.07 inches last week (July 3-9), bringing the monthly total to 4.89 inches. No data was available for Fananu or Pingelap was insufficient for analysis.

In the Republic of the Marshall Islands, drought was limited to Wotje, which degraded from short-term severe drought (D2-SL) to short-term extreme drought (D3-S) conditions. While Wotje received over an inch of rain (1.45 inches) last week for the first time in six weeks, only 0.32 inches fell this week. Kwajalein (2.62 inches), Ailinglapalap (4.68 inches), Majuro (1.54 inches) and Jaluit (0.18 inches) remained drought-free during the drought-monitoring period (July 10 to 16). No data was reported for Mili or Utirik.

Conditions improved in the southern Mariana Islands of Guam and Rota where abnormal dryness was lifted to no abnormal dryness or drought conditions. Guam received 1.81 inches and Rota 1.55 inches, indicating conditions continue to improve. Saipan, with less than half an inch of rain, has seen multiple weeks of low precipitation and a total of an inch for the month, indicating short-term abnormal dryness conditions are persisting.

Looking Ahead

Over the next 5-7 days, an active pattern appears to be developing from the Southwest, Plains, and into the Southeast and eastern seaboard. The most significant precipitation is anticipated over New Mexico, southern Colorado, northeast Texas, and from Louisiana through Virginia. Dry conditions are anticipated over much of the West and Midwest during this period. Cooler-than-normal temperatures are anticipated over much of the Plains, South and into the Southeast, with some departures from normal approaching 9-11 degrees below normal in portions of Nebraska, Kansas and into Colorado and New Mexico. Warmer-than-normal temperatures will dominate the West with departures of 11-13 degrees above normal over the Great Basin and into the northern Rocky Mountains. Near-normal temperatures are anticipated over other areas.

The 6-10 day outlooks show that the greatest chances of below-normal temperatures will be over the southern Plains into portions of the South, Southwest and southern Midwest. The greatest probability of experiencing above-normal temperatures during

this time will be over the West and the Florida peninsula and portions of the Northeast. The highest probability of above-normal precipitation will be over Texas with the area from the Southwest into the Mid-Atlantic also expected to have above-normal chances of above-normal precipitation. The area with the greatest chances of below-normal precipitation will be over the northern Rocky Mountains into the northern High Plains.

Author(s)

Brian Fuchs, National Drought Mitigation Center

Lindsay Johnson, National Drought Mitigation Center