

National Drought Summary for April 30, 2024

Summary

During the late week and weekend, a large severe weather outbreak brought large hail, damaging winds and numerous intense tornadoes to parts of the central and southern Great Plains and Midwest. The storm systems responsible for the severe weather outbreak also brought widespread moderate and heavy rain amounts to the central U.S., leading to widespread improvements in drought and abnormally dry conditions. To the southwest of the heavy rainfall, in northwest Oklahoma and southwest and central Kansas, severe drought expanded as flash drought continued to take hold during a very dry late winter and early-mid spring, leading to reports of very poor wheat conditions and dust storms. Recent dry weather over the last month, combined with a mostly dry week, led to the development of more areas of abnormal dryness and moderate drought over scattered parts of the Southeast, Tennessee and southeast Kentucky. Conditions mostly remained unchanged in the western U.S., though a few improvements occurred in Colorado and Utah after recent precipitation, while conditions worsened in parts of southeast Montana and the Black Hills region of South Dakota and adjacent northeast Wyoming amid recent dry weather. Heavy rains in the northeast part of Puerto Rico eased drought and abnormal dryness there as streamflows improved and crop stress lessened.

Northeast

Weather in the Northeast this week was mostly dry, though a few areas in the northwest part of the region saw 0.50-1 inches of rain, with locally higher amounts. Generally, the southwest part of the region was warmer than normal, while northern and eastern New England were colder than normal. Warmer-than-normal areas were mostly 2-6 degrees above normal, while colder-than-normal locations were mostly 2-6 degrees below normal. The Northeast remained free of drought this week, and abnormal dryness was removed from Nantucket, where groundwater levels continued to recover this week.

Southeast

Aside from parts of northern Alabama, weather in the Southeast this week was mostly dry. Temperatures in the region were mostly within 4 degrees of normal, with warmer-than-normal temperatures being most common in Alabama and Virginia. As short-term precipitation deficits grew this week and streamflow lessened, abnormal dryness grew in coverage in northeast Alabama, northern Georgia and parts of the Carolinas and Virginia. A separate area of degradation occurred in central to southern portions of the Florida Peninsula, where short-term moderate drought developed and abnormal dryness expanded amid dry recent weather, high evaporative demand and locally

decreasing streamflow. Officials in Brevard County, Florida, noted several recent brush fires and expressed concern for more as short-term dryness and drought continued.

South

Weather conditions varied widely across the South region this week, with heavy rain falling in parts of Oklahoma, Texas, Arkansas and Louisiana, while other areas were left mostly or completely dry. Temperatures were mostly warmer than normal across the region, especially in Oklahoma and Texas, where weekly readings came in 4-8 degrees above normal, with a few local readings even warmer than that. A few spots in central Texas and the Trans-Pecos region saw improvements to drought or abnormally dry conditions after recent rainfall. In eastern and parts of northern Oklahoma, recent heavy rainfall led to improving conditions. Meanwhile in Tennessee, short-term dryness continued, leading to the expansion of moderate drought and abnormal dryness in eastern Tennessee and the expansion of abnormal dryness in western parts of the state. Flash drought continued to worsen in parts of northwest Oklahoma and adjacent portions of the Texas and Oklahoma panhandles, where severe drought expanded amid quickly drying soils and growing short-term precipitation deficits.

Midwest

Wetter weather occurred in most of the Midwest region this week. Aside from far eastern Kentucky and eastern Ohio, most areas saw at least half an inch of rain. Much heavier amounts occurred in parts of the region, especially in Missouri, where rainfall totals mostly ranged from 2 to 5 inches, with some embedded higher amounts. Widespread improvements to ongoing drought occurred in Minnesota, Iowa and Missouri, with a few areas of two-category improvements occurring in west-central Missouri where some of the highest rainfall amounts fell. While beneficial, lighter rain amounts farther east in Wisconsin and northern Michigan were mostly not enough to warrant improvements, given significant long-term dryness.

High Plains

Moderate to heavy precipitation fell across much of the High Plains region this week, excluding central and southwest Kansas and northeast Wyoming and southeast Colorado. Mostly warmer-than-normal temperatures occurred in Kansas, Colorado, Wyoming and the western Dakotas, while elsewhere, temperatures were mostly within a couple degrees of normal. While the storms responsible for the rain brought damaging hail and tornadoes in parts of the region, the rainfall helped to alleviate drought conditions in many areas. Eastern Kansas and Nebraska saw improvements in some

areas, with parts of southeast Kansas seeing two-category improvements in the areas of heaviest rainfall. Meanwhile, in tandem with severe drought expansion in northwest Oklahoma, severe drought conditions expanded in central and southwest Kansas after another mostly dry week. Flash drought conditions in this region have led to dust storms and very poor wheat conditions.

West

Weather conditions were variable across the West this week. Precipitation amounts from 0.5 to 2 inches (locally higher) fell in western parts of Washington and Oregon. Elsewhere, precipitation amounts varied from none to locally up to 2 inches, especially in some high-elevation areas. Temperatures were mostly near normal or a couple degrees below normal in Washington, Oregon, California, Arizona and western New Mexico, while near-normal or warmer-than-normal temperatures prevailed elsewhere. Drought conditions remained mostly unchanged across the region. In northeast Utah, abnormal dryness and moderate drought were reduced in coverage after recent wet weather and low evaporative demand. In southeast Montana, moderate drought grew in coverage as short-term precipitation deficits grew alongside decreasing streamflow and soil moisture.

Caribbean

Heavy rains, locally exceeding 5 inches, fell across western portions of Puerto Rico this week. This led to improvements in streamflow and the alleviation of crop stress and short-term precipitation deficits. Therefore, moderate drought in northwest Puerto Rico was removed, and abnormal dryness coverage was reduced. Aside from a few stations, temperatures in Puerto Rico this week were mostly 1-4 degrees warmer than normal.

This week, near-normal conditions continued across the U.S. Virgin Islands. St. John experienced its third-wettest April since 2007, with rainfall amounts from April 1-29 up to 6.86 inches. This is also the third-wettest January to April period on record (1984-2024) at Windswept Beach, with 15.28 inches recorded. On St. John, rainfall amounts reported between 1.2 to 3.2 inches for a total of 3.23 inches of rain during the USDM week. The depth to water level at Susannaberg in St. John on April 30 was 10.71 ft below land surface, an improvement of 0.94 ft this week due to the recent rains maintaining drought-free conditions on St. John.

On St. Croix, precipitation was observed this week. The weekly rainfall amount across the island ranged from 0.24 to 2.43 inches. Due to these rains in recent days, the depth to water level at Adventure 28 Well in St. Croix improved by 1.4 feet from April 23-30, from 27.94 to 26.54 feet below land surface. Thus, St. Croix remained drought free.

On St. Thomas, heavy rainfall fell this week, ranging from 1.11 inches to 5.30 inches. Despite recent rains, the depth to water level in the islands Grade School 3 well on April 30 was 8.35 ft below land surface, steady from last week (8.52 ft). Despite the heavy rain that fell this week, St. Thomas remained in abnormally dry conditions (D0) this week due to lingering longer-term dryness.

Pacific

No changes were made in Alaska this week, as abnormal dryness continued in parts of southeast Alaska. Further degradations may be made soon if drier weather continues. Precipitation in south-central and southeast Alaska this week was mostly 1-3 inches below normal. While temperature anomalies varied across the state, warmer-than-normal temperatures prevailed in most areas outside of the North Slope and parts of southwest Alaska.

No changes were made in Hawaii this week, as a trade wind pattern continued to deliver wetter weather to windward sides of the islands (especially Maui and the Big Island), while keeping leeward sides drier. Temperature anomalies varied across the state, though several sites on the Big Island measured temperatures a few degrees above normal for the week.

Wet conditions continued across the Marshall Islands this week. Ailinglapalap reported 1.89 inches of rain, remaining in abnormally dry conditions (D0). This week, Jaluit received 1.20 inches of rain, remaining free of drought due to the wet conditions in the previous weeks. Majuro reported 2.56 inches of rain this week, following two weeks of good rainfall for a total of 8.21 inches in the past three weeks. Thus, continuing improvements in Majuro to short-term moderate drought conditions (D1-S). Wet conditions occurred on Wotje, which reported 1.5 inches of rain. Despite this recent precipitation, Wotje in short- and long-term extreme drought conditions (D3-ST). Kwajalein reported 0.44 inches of rain this week, though five days of observations were missing. Kwajalein remains in short-term moderate drought after receiving less than 2 inches of weekly total rainfall in the past four weeks. No depiction was made for Milli and Utirik due to missing data.

South and eastern Micronesia received some precipitation this week. Pingelap reported 0.79 inches of rain this week with two days missing and remains in normal condition. In addition, Woleai received 1.08 inches of rain this week (with 5 days of data missing), maintaining short-term severe drought conditions (D2-S). Heavy showers were observed on Pohnpei, reporting 4.53 inches (with 4 days of missing data). This continues two straight weeks of precipitation over 3 inches for Pohnpei, totaling 20.41 inches over 3 weeks. Lukunoch also received 3.32 inches, with three days of missing data, adding to two straight weeks with heavy precipitation totaling 12.71 inches for the last 3 weeks. Kosrae, Nukuoro, Kapingamarangi, and Pingelap reported 1.44, 0.79, 1.17, and 0.79 inches respectively of rain this week, with all but Pingelap missing two

days of missing data which had three days of missing data, keeping these locations free of drought. Chuuk Lagoon remained in abnormally dry conditions with 1.05 inches reported and two days of data missing.

On Ulithi, dry conditions persisted with only 0.18 inches of rain was reported this week, though five days of data was missing, thus remaining in the short-term exceptional drought category (D4-S). Similarly, Yap received 0.39 inches of rain this week, with three days of missing data, maintaining short-term exceptional drought conditions (D4-S). No depiction was made for Fananu due to missing data.

Wet conditions were observed across American Samoa. Pago Pago reported 1.48 inches of rain this week, with three days of data missing, remaining free of drought. In addition, Siufaga Ridge and Toa Ridge observed 2.49 and 1.51 inches of rain this week, respectively.

Wet conditions prevailed across Palau, with Koror COOP station also reporting 2.41 inches of rain, maintaining to drought-free conditions this week. No conditions were reported in Airai this week.

Heavy showers were observed over Guam, with conditions remaining dry over the northern Mariana Islands. The weekly rainfall total report showed that 5.89 inches fell over Guam, with two days of missing data, leading to improved conditions of short-term severe drought (D2-S). No reports of rain were observed on Saipan this week, as the island received only 0.09 inches of rain. Thus, Saipan remained in extreme drought conditions (D3). Rota received only 0.39 inches of rain (with three days missing) to remain in short-term moderate drought (D1).

Looking Ahead

Between the evening of Wednesday, May 1 (time of writing), and the evening of Monday, May 6, the National Weather Service Weather Prediction Center is forecasting moderate to heavy rain amounts from central Texas and northern Louisiana northward into the mid-Missouri and upper-Mississippi River valleys. In this region, rainfall amounts are forecast to range from a half inch to locally as high as 3 inches, especially in parts of Oklahoma, Texas and northern Louisiana. Similar precipitation amounts are also forecast in western Washington and Oregon, while some precipitation exceeding 1 inch is also forecast in parts of the northern Sierra Nevada. Mostly dry weather is forecast for eastern Colorado, New Mexico, Arizona, southwest Nevada, southern California and deep south Texas.

For May 7-11, the National Weather Service Climate Prediction Centers forecast favors colder-than-normal weather across much of the western U.S., with the highest confidence for colder-than-normal weather centered over Idaho and northern Nevada. Warmer-than-normal weather is expected in much of the southeast half of the

contiguous U.S., especially from Texas northeast to the mid-Atlantic. Above-normal precipitation is favored in the northern U.S., especially eastern Montana, while below-normal precipitation is favored in coastal California, southern New Mexico and southern and western Texas, southeast Louisiana and most of Florida.

During the May 7-11 period, colder-than-normal temperatures are favored in southwest, south-central and southeast Alaska, and across all of Hawaii. All of Alaska is favored to receive above-normal precipitation, with confidence highest outside of the far west and northwest. With the exception of the Big Island, the forecast slightly favors above-normal precipitation in Hawaii.

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