

National Drought Summary for August 5, 2025

Summary

It was a week with a lot of change noted in areas of dryness and drought across the U.S. Heavy to locally excessive rainfall engendered broad areas of improvement in much of the Southeast, the lower Great Lakes Region, the central and northern Great Plains, and many locations across the High Plains and adjacent southern Rockies. Meanwhile, continued subnormal precipitation and episodes of unusually hot weather, low humidity, and high winds led to large areas of deterioration in the central and northern Rockies. In the central and northern Rockies. Also, emerging short-term precipitation deficits led to the introduction of scattered areas of abnormal dryness (D0) over parts of the Middle and Lower Mississippi Valley, the Tennessee Valley, and near the western foothills of the western Appalachians. A few spots of deterioration were also introduced in western portions of the Southeast (where typical summer shower and thunderstorm activity has been less robust than usual) and Southwest (where subnormal monsoonal rains have been observed).

Northeast

Very warm weather with persistently below normal precipitation for the past few weeks has allowed short-term moisture deficits to develop in a number of locations. Conditions have been the most anomalous across northern New England and far Upstate New York, where several areas of abnormal dryness (D0) were introduced. D0 was also brought in to parts of the immediate southern New England coast. A small area in southeastern New Hampshire and adjacent Massachusetts saw D0 conditions eradicated after 1 to 2.5 inches of rain fell this past week, but robust precipitation was not common across areas of existing dryness. Short-term precipitation deficits were also emergent in parts of New Jersey and Pennsylvania, but no dryness designation seemed appropriate yet, although these areas will need to be monitored for deterioration in the next few weeks if precipitation doesn't return to near normal. Farther south, relatively heavy rain fell on the small area of D0 over and near Baltimore, MD, with 1.5 to locally 3 inches falling on central and northern parts of the area. Improvement was limited to the wettest areas, however, as subnormal streamflows remained a concern.

Southeast

Heavy to excessive rainfall, with totals of 1.5 to locally almost 6 inches, doused areas from southwestern Virginia through southern and western North Carolina, South Carolina, much of Georgia and adjacent northern Florida, and eastern Alabama. The heaviest amounts fell on a solid swath from southern North Carolina through western and central South Carolina into northeastern, central, and southwestern Georgia. Between 3 and 5 inches doused almost this entire region while similar totals were more scattered over the remainder of the affected region. This precipitation robustly improved the moisture budget, so extant areas of dryness and drought (D0 to D1) were improved by one category, restricting D0 coverage to areas in moderate drought last week, plus a few locations where notable moisture deficits persisted despite the rainfall. But there were a few areas that missed out on the heavy rainfall, mostly in

the northern and southwestern reaches of the Southeast Region. This prompted some expansion of abnormal dryness (D0) in part of eastern North Carolina and scattered patches across central and western Alabama and western Mississippi. There was even a bit of moderate drought (D1) development in southwestern Alabama. Overall, despite the rainfall, topsoils were short or very short of moisture across 35 percent of South Carolina, 39 percent of Georgia, and 48 percent of Mississippi according to the U.S. Department of Agriculture (USDA), although some measurements were taken before the totality of the weeks rain fell. About 15 percent of the Mississippi soybean crops were in poor or very poor condition.

South

Outside southern and western Texas, not much dryness or drought has been observed across the South Region. But after a few relatively dry weeks, short-term precipitation shortfalls have developed in portions of Arkansas and Tennessee, leading to the introduction of a few patches of abnormal dryness (D0) in areas of significant 30-day rainfall shortages and near- to below-normal 60-day totals. A much larger proportion of these two states report 30-day precipitation deficits, but above-normal 60-day totals precluded more expansive D0 development this week, although the situation will need to be monitored going forward. In Tennessee, some patches of abnormal dryness and isolated moderate drought (D0 and D1) was assessed last week. In the easternmost parts of the state, heavy rains engendered a bit of improvement, but the burgeoning dryness farther west allowed a few additional spots of moderate drought to develop. To the west, rainfall was sufficient to end the fledgling area of abnormal dryness in southwestern Oklahoma, but more widespread and intense drought continued to cover large parts of western and southern Texas. Moderate to heavy rainfall was observed over parts of the drought-affected region, leading to some improvement in the Big Bend and along the northern fringe of the region. Substantial rainfall evaded areas farther to the south, however, allowing for some expansion of D0 and D1 conditions in the southernmost parts of the state. Since early May, rainfall totals exceed 3 inches in portions of south-central Texas, and approach 6 inches in part of the Big Bend. Despite recent improvement in much of the state, however, a small patch of exceptional drought (D4) persisted in upper South Texas, and severe drought continued in adjacent areas as well as parts of the Rio Grande Valley and Big Bend. But despite recent drought improvement, 22 percent of the Texas cotton crop and 48 percent of its oat crop was in poor to very poor conditions, according to USDA.

Midwest

Substantial but spotty rainfall led to a mixed bag of changes in the Midwest region. Increasing 30- and 60-day rainfall deficits prompted the introduction of abnormal dryness (D0) in part of south-central Kentucky, where conditions are similar to those observed across Arkansas and Tennessee. Well to the north, deteriorating conditions were also noted in a few spots across the Lower Peninsula of Michigan. In much of the central and southwestern Lower Peninsula, rainfall shortages date back at least 6 months, with deficits of 4 to locally 8 inches recorded since early February in portions of the affected region. More recently, shorter-term deficits have slowly increased there, leading to a bit of expansion of severe drought (D2) conditions in east-

central locations, and some increase in D0 and D1 coverage farther west close to Lake Michigan. In contrast, central portions of the Midwest Region have received significant rainfall during the past 1-2 weeks, leading to some improvement in the dryness and drought that extended from extreme west-central Ohio westward over parts of northern Indiana and northeastern Illinois. Dryness was eradicated in much of east-central Indiana, and the coverage of D0 and D1 declined elsewhere in this swath, particularly near southwestern Lake Michigan. Some moderate drought also persisted in east-central Illinois, with a small area of D0 expansion brought in just to the east, and area which has missed much of the recent rainfall. Along the western tier of the Midwest Region, increasing short-term rainfall deficits were noted over the southern half of Missouri, similar to the situation across Arkansas and much of Tennessee. Some areas of abnormal dryness (D0) emerged this week in locations where 60-day or longer-term precipitation was a bit below normal. From northern Missouri northward, very little dryness and drought was present, and there is even less coverage this week. Recent rainfall brought an end to the small area of abnormal dryness (D0) in southern Iowa, and nondescript conditions kept D0 and D1 unchanged in extreme northwestern Minnesota.

High Plains

Rainfall varied in intensity across the High Plains Region, with abundant rainfall amounts falling on a large part of the Plains while lesser, subnormal totals were observed in the higher elevations farther west. A similar pattern has been observed periodically for several weeks now, resulting in significantly worse conditions in the western part of the region than farther east. A solid swath of moderate drought (D1) or worse covers most of southern and western Wyoming and the western half of Colorado, with severe drought (D2) covering a large part of this region, and extreme drought (D3) noted in a sizeable portion of west-central and northwestern Colorado. This represents a significant increase in the extent of D2 and D3 coverage compared to last week. In contrast, another wet week led to a continued reduction in the coverage of the abnormal dryness (D0) to locally severe drought (D2) over the Great Plains. A broken pattern of heavy rainfall with upwards of 3 inches reported in spots prevailed from northern Kansas through much of the Dakotas, although higher amounts were more common in some areas than others. The improvements left severe drought confined to part of south-central Nebraska and adjacent Kansas, southwestern Nebraska, and a small area in south-central South Dakota. Moderate drought (D1) coverage also decreased, mainly across Nebraska and a few adjacent locations in the far eastern sections of Colorado and Wyoming. The USDA reported short or very short subsoil moisture across about one-third of Colorado and two-thirds of Wyoming. In addition, 17 percent of the Colorado corn crop was in poor or very poor condition, and drier weather earlier in the summer has left one-third of the Nebraska oat crop in poor or very poor condition.

West

Heavy precipitation prompted significant areas of improvement across the southeastern and northern sections of the West Region, but hot and dry weather has caused dryness and drought to intensify in central parts of the Region, across Utah, eastern Nevada, and

northeastern Arizona (similar to the situation in western parts of Colorado and Wyoming). Reports of 2 or more inches of rain were fairly common across southeastern and north-central through northwestern Montana as well as northeastern New Mexico, with lesser amounts in other parts of these states. These rains brought 2-week totals to between 2 and 5 inches in much of New Mexico and Montana, with locally higher totals, especially in north-central Montana and northeastern New Mexico. This prompted broad improvements through both states, but even so, areas that missed most of the rain in these states remained entrenched in drought. Exceptional drought (D4) persisted in part of southwestern New Mexico, and extreme drought (D3) remained across north-central and southwestern parts of the state, along with a significant swath of west-central Montana. Moderate to severe drought still affected a large part of the remainders of these states despite improvements, and only the southeastern quarter of Montana and northeastern New Mexico have completely emerged from any designation of dryness or drought. Farther west, showery weather has occurred periodically for the past few weeks in central and eastern Oregon, leading to a reduction in the coverage of dryness and drought there. Across central parts of the West Region from eastern Nevada through Utah, rainfall has been far less generous, and drought either persisted or deteriorated here. The entire region is experiencing at least moderate drought at this point, with widespread D2 conditions across eastern and western Utah, and adjacent Nevada. Some expansion of extreme drought (D3) occurred in east-central and northeastern Utah, where conditions have been similar to those observed across western parts of Colorado and Wyoming. Elsewhere, no changes were observed, and broad areas of drought remained entrenched. USDA reports that 50 percent of the Barley crop and 48 percent of the spring wheat crop in Washington was in poor or very poor condition, as were 26 percent of the barley crop and 47 percent of spring wheat in Montana. In addition, 90 percent of Nevada rangeland was in poor or very poor condition.

Caribbean

Locally heavy tropical showers brought an end to abnormal dryness (D0) in some areas near the southwest coastline, but nondescript conditions elsewhere allowed the scattered patches of D0 to persist.

Dry conditions persisted this week over the U.S. Virgin Islands this week, with only isolated areas receiving more than an inch of rain this week. On St. John, Rafe Boulon/Windswept Beach reported 1.47 inches of rain this week. The depth to water level at Susannaberg DPW 3 well (St. John, USVI) on August 5 was 12.9 ft below land surface. The analysis showed a steady decrease in water level since May 18, when the water level was 8.34 ft, but a significant drop from the November 19, 2024, level at 0.32 ft. The current water level has dropped approximately 3.3 ft lower over the past year, where the reported water level was 7.94 ft below the land surface on July 29, 2024. This weeks 1- and 3-month SPI values indicated slightly drier conditions, consistent with the depiction of abnormal dryness (D0-S) on St. John, while longer timescales (6-, 9- and 12-month) showed wetter signals. St. Croix degraded from abnormal dryness (D0-S) to moderate drought (D1-S) all but one CoCoRaHS station reporting less than 0.4 inches of rain this week. The depth to water level at Adventure 28 Well (St. Croix, USVI) on August 5 was 17.18 ft below land surface. The analysis showed a steady decrease in

water level (3.25 ft) since 13.93 on May 25, 2025, but a significant increase of 7.1 ft over the past year, where the water depth was 24.26 ft below land surface on August 6, 2024. This weeks 1- and 3-month SPI values showed further drying on the island, while wetter conditions were shown in longer timescales. St. Thomas also saw continued drying and degradation from abnormal dryness (D0-S) to moderate drought (D1-S), where a total of 0.025 inches of rain was reported this week. The depth to water level at Grade School 3 well (St. Thomas, USVI) on August 5 was 9.22 ft below land surface. This is down by 9.2 ft from the 0.04 value on November 17, 2024, but about 3.3 ft below the water level value from last year (7.08 ft on August 6, 2024).

Pacific

Anomalously warm and dry weather has continued across the North Slope, where abnormal dryness (D0) expanded considerably. Farther south, due to scattered showers and somewhat lower temperatures and higher humidity than most recent weeks, a few areas of D0 were removed, specifically in the Koyukuk River area and the central Interior. But D0 conditions persisted in the Northwest Arctic Borough, the upper Yukon Valley, the upper Tanana Valley, and the interior Southeast.

Fairly typical dry summertime conditions prevailed across the islands, with some rainfall observed in windward areas. As a result, conditions remained generally unchanged except in parts of the southeastern Big Island, where D0 areas intensified into moderate drought (D1). Currently, scattered areas of D0 exist in the northwestern half of the state while more severe dryness, with broad areas of drought topping out at D3 in northern interior parts of the Big Island.

Conditions remained wet in the American Samoa this week, following the wettest July on record with Pago Pago, Siufaga Ridge and Tao Ridge recording 21.14, 17.65 and 19.81 inches of rain, respectively. This week, Pago Pago reported just under 1 inch (0.97 inches). American Samoa remained free of drought and abnormal dryness (D0-S).

Palau remained free of drought or abnormal dryness (D0-S) this week following a very wet July with 15.5 inches of rain recorded. The Koror COOP site reported a weekly rainfall total of 1.65 inches, making up the total of the precipitation for August.

Wet conditions persisted over the Mariana Islands this week following an extremely wet July that more than doubled the four-inch threshold to meet water needs for the month. The southern islands, Rota and Guam, received weekly rainfall totals of 2.8 and 3.45 inches, respectively. Tinian and Saipan only reported weekly totals of 0.09 and 0.6 inches which does not meet the islands one-inch minimum threshold to meet water needs. The Marianas remained free of drought and abnormal dryness (D0-S) this week.

Conditions were mixed across the Federated States of Micronesia this week, though all locations remained free of drought or abnormal dryness (D0-S). Kosrae (5.44 inches), Pohnpei (4.42 inches), Lukunoch (3.29 inches), Chuuk (2.03 inches) and Kapingamarangi (2.49 inches) reported weekly rainfall amounts. Several locations, including Nukuoro (1.88 inches), Yap (0.76 inches), Pingelap (0.36 inches) Woleai (0.1.75 inches), Pingelap (0.36 inches) and Yap (0.76

inches) reported rainfall totals below the 2-inch minimum threshold for water needs. Data for Fananu and Ulithi were insufficient to make any assessments this week.

Dry conditions eased across most of the Republic of the Marshall Islands this week. The rain measured at Kwajalein (2.11 inches), Ailinglapalap (2.36 inches) and Wotje (2.70 inches) were above the 2-inch minimum for water needs this week, leading to improved drought conditions for each location. Ailinglapalap and Kwajalein improved from short term moderate drought (D1-S) to abnormal dryness (D0-S) and Wotje improved from short-term severe drought (D2-S) moderate drought (D1-S) this week. Conversely, conditions were wet over Mili and Utirik, reporting weekly rainfall totals of 1.26 and 1.85 inches, respectively. Mili remained free of drought and abnormal dryness (D0-S) and Utirik remained in short-term moderate drought (D1-S) this week. Data on Jaluit were insufficient to make any assessments this week.

Looking Ahead

From August 7 to 11, an area of showers and thunderstorms off the Southeastern Coast may develop into a tropical system according to the National Hurricane Center, but this is far from certain. Any organized system is expected to remain off the East Coast, but early in the period the disorganized convection is expected to impact the South Atlantic Coastline. Generally 1 to locally over 3 inches of rain are forecast for coastal sections of South Carolina, Georgia, and northern Florida while similar amounts are forecast along the central and eastern Gulf Coast, and much of the Florida Peninsula. Between 1 and 3 inches are anticipated near a frontal system stretching from the Middle Mississippi Valley into the Great Lakes Region, and amounts in the lower part of that range are forecast in scattered parts of the central and northern Plains. Moderate amounts of several tenths to around an inch should fall in many areas from the Upper Mississippi Valley into the Northern Intermountain West, portions of the central Plains, and areas near the Southeastern and Gulf Coasts. Light precipitation is possible in parts of the central and eastern Four Corners States, the central Ohio Valley, the southern Appalachians, the mid-Atlantic, and upper New England. Other areas are expecting little if any precipitation. Meanwhile a cooler than normal but moderating air mass should allow temperatures to average near or slightly below normal in the Southeast and mid-Atlantic while daily highs should average a few degrees below normal in and around the northern High Plains. In most other locations, temperatures should average a little above normal as above-normal temperatures begin to slowly cover most of the Contiguous States. The greatest positive temperature departures are expected where above-normal temperatures have already settled in, specifically parts of the interior West and the Northeast, where highs will average 6 to 12 deg. F in spots.

The Climate Prediction Centers 6-10 day outlook (valid August 12-16, 2025) features significant uncertainty in the precipitation outlook. Odds for above-normal precipitation exceeding 40 percent across most of Alaska outside the northeast and southwest sections, and nowhere else. There are, however, fairly broad areas with slightly enhanced chances (33 to 40 percent) for wetter than normal wetter; specifically, the remainder of Alaska, the northern tier of the Contiguous 48 States, the Sonoran Desert, the eastern Great Plains, the Mississippi and Ohio Valleys, the Great Lakes Region, the upper Southeast, the mid-Atlantic, and inland sections of the Northeast and New England. Drier than normal conditions are slightly favored in the Great

the temperature forecast, with above-normal temperatures favored across a large part of the Contiguous States, and Hawaii. The best odds (over 70 percent) cover the Northeast and New England while the central West Coast, parts of the Four Corners States, the eastern Great Lakes, the mid-Atlantic, the coastal Southeast, and the Florida Peninsula have 60 to 70 percent chances for unusually high temperatures. Only Alaska and the northern High Plains are not areas where warmer than normal conditions are favored. In fact, subnormal temperatures are favored over most of Alaska, with odds topping 60 percent in northwestern parts of the state.

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