

National Drought Summary for October 29, 2024

Summary

The dry pattern that has been impacting much of the country has continued into this current period. The wettest areas were along the coast in the Pacific Northwest, with some locations recording over 2 inches of rain for the week. Other areas receiving some precipitation were in the Four Corners region, the Midwest and parts of the South, but many of these totals were minimal and did little to impact the drought conditions. The Southern Plains and South were the warmest regions, with departures of 10-12 degrees above normal this week. Almost the entire country was warmer than normal, with only areas of the Northeast and Pacific Northwest having near to slightly below normal temperatures. As the month is ending, many locations will be at or near record dryness across the country. For the Lower 48 states, there has not been this much drought shown on the U.S. Drought Monitor since December 2022. Areas of the Southeast that were impacted by significant precipitation associated with landfalling hurricanes have dried out rapidly, with some locations recording zero precipitation since the hurricanes. Some precipitation development at the end of the current period could help ease conditions into the next week, but that will be determined on the next map.

Northeast

Temperatures were near to slightly above normal for the week in the region with only minimal precipitation recorded over portions of northeast New York and northern areas of Vermont and New Hampshire. Abnormally dry conditions expanded over New York, northern Vermont and New Hampshire and into southwest Maine as well as in southern Connecticut. Moderate drought expanded over southern New York and Long Island and across more of northern New Jersey and eastern Pennsylvania. Severe drought expanded to include all of southern New Jersey and Delaware, and a new area of severe drought emerged in Massachusetts. Severe drought also expanded in southwest Pennsylvania. Moderate drought expanded in northern Virginia and eastern Maryland, while abnormally dry conditions emerged in most of the rest of Virginia.

Southeast

Isolated and light rain was recorded over portions of the Carolinas and eastern Tennessee but many of these events were minimal and the region remained dry, on the cusp of widespread flash drought development. Along with the dryness, temperatures were warmer than normal over the region with most areas 2-6 degrees above normal and isolated areas of greater departures. This week brought widespread additions of abnormally dry conditions, and many areas have been historically dry since the tremendous rains impacted the region with the landfalling hurricanes. Moderate drought

expanded over the coast of South Carolina and moderate drought expanded over southern and eastern Alabama. Severe drought expanded to include more of southwest and northern Alabama. Moderate drought emerged in the panhandle of Florida with abnormally dry conditions now covering much of the northern portion of the state.

South

Temperatures were well above normal over the region with areas of north Texas and much of eastern Oklahoma 12-16 degrees above normal for the week. Some very light rains were reported in central Arkansas, but much of the region was dry this week. With the fall warmth and dryness impacting the region, drought intensified and expanded. In Oklahoma, the north-central and eastern portions of the state saw severe and extreme drought expand, with some moderate drought expanding in the east. Widespread degradation took place over much of northern and eastern Texas and into the southern portions of the state, where almost every drought category intensified, most now in severe drought or worse. Moderate and severe drought expanded over portions of West Texas as well. In Arkansas, most of the western portions of the state had degradation this week, now in severe to extreme drought. Moderate drought expanded over southeast Arkansas. Severe drought emerged in northwest and southwest Louisiana, and moderate drought expanded over more of the east and southeastern areas. In Mississippi, moderate and severe drought expanded in the southern half of the state and in a small area of the northeast part of the state. In Tennessee, the short-term dryness allowed slight expansion of the severe and moderate drought in the southern portions of the state. Abnormally dry conditions filled in the rest of northern Tennessee.

Midwest

Temperatures were near normal in the eastern portion of the region while the southern and western areas were 4-8 degrees above normal for the week. Some rain fell from northern Missouri into southeast Iowa and northern Illinois, but this rain did little to improve the drought that is established over the area. The region saw widespread degradation this week with moderate and severe drought expanding over lower Michigan, and severe drought expanding over northwest Ohio, northern Indiana, and northern Illinois. Moderate drought pushed south in Illinois and Indiana while abnormally dry conditions expanded across almost all of Kentucky. In southwest Missouri, severe and extreme drought expanded along with a push of moderate drought to the east. Severe drought also expanded along with moderate drought in western and northwest Missouri. In Iowa, moderate and severe drought expanded in the west and eastern portions of the state. In Wisconsin, moderate drought expanded in the central portions of the state and severe drought expanded in the northwest. Moderate drought expanded in northern Minnesota and severe drought expanded in both the southwest and southeast areas of the state.

High Plains

Dryness again dominated the region with only areas of far southeast Nebraska and northeast Kansas, northeast Wyoming and northwest South Dakota recording any significant precipitation. Coupled with the dryness, temperatures have been unseasonably warm for the region with most all areas 4-8 degrees above normal for the week. Drought expanded and intensified across the region this week with severe and extreme drought expanding over western North Dakota, and moderate drought and abnormally dry conditions expanding over the southeast. Severe and extreme drought expanded over much of western and southern South Dakota and also over western and northern Nebraska. Eastern Nebraska saw both moderate and severe drought expand. In Kansas, severe and extreme drought expanded over the southeast while severe drought expanded over the northeast and western portions of the state. Moderate drought also expanded in western Kansas. In northeast Colorado, moderate drought and abnormally dry conditions expanded, with both moderate and severe drought expanding in southeast Colorado. Southeast Wyoming saw expansion of moderate, severe, and extreme drought while eastern Montana had severe and extreme drought expand to the west.

West

The West was the one region that had substantial precipitation during the week, with rains in the areas of central to northeast Arizona, western Colorado, central to western Wyoming, central Utah, southern Oregon into Idaho and along the coastal areas of the Pacific Northwest. Minimal improvements were made to the abnormally dry conditions along the Oregon coast. Moderate drought improved in northern California and northern Nevada as well as into southern Oregon and Idaho. Abnormally dry conditions disappeared from the rest of southwest Colorado. Severe and extreme drought expanded in northern Colorado into southern Wyoming and severe drought expanded in western Wyoming.

Caribbean

No changes were made in Puerto Rico this week.

A heat wave continued across the U.S. Virgin Islands (USVI) during this U.S. Drought Monitor (USDM) week (October 23-29), and unstable air associated with a tropical wave and nearby frontal boundary generated showers across the islands. Weekly rainfall totals exceeded an inch in some areas, although other parts of the islands received less than a fourth of an inch. St. Croix was mostly dry this week and satellite observations

showed spotty areas of stressed vegetation, but no widespread drought stress was evident on the satellite data, a couple stations recorded around an inch of rain, and groundwater levels held steady. Groundwater levels declined slightly this week on St. John, but were still in the upper third of the recent historical record, and rainfall reports ranged from 0.62 to 1.48 inches. With the last several months having above-normal rainfall, both St. Croix and St. John continued free of drought and abnormal dryness. St. Thomas had some good rains, with heavier amounts ranging from 1.63 to over 2 inches, and groundwater levels increased. The recent rains were enough to end the abnormal dryness on St. Thomas, so all three islands were free of drought and abnormal dryness this week.

Pacific

No changes were made in Alaska this week.

In Hawaii, moderate drought was improved on the Big Island. On Oahu, heavy rainfall boosted streamflow on the Koolau slopes, where moderate drought improved and some abnormally dry conditions disappeared. In Maui, the windward sides saw moderate drought shrink, and on Lanai and Kahoolawe, severe drought expanded.

In the U.S.-Affiliated Pacific Islands (USAPI) during this U.S. Drought Monitor (USDM) week (October 23-29), a couple tropical disturbances combined with a monsoon trough to bring widespread heavy rain to the Marianas and western parts of Micronesia. Eastern parts of Micronesia were entertained by a dance between ridges, which brought drier weather, and troughs, which brought wetter weather. Meanwhile, south of the equator, in American Samoa, an active trough brought several inches of rain to Tutuila this week, ending a string of several dry weeks. Pago Pago recorded 3.27 inches of rain this week, with 2.38 and 4.46 inches falling at the automated stations at Toa Ridge and Siufaga Ridge, respectively. Pago Pago has 4.17 inches for the month, which is above the monthly minimum needed for most water needs. Consequently, the D0-S in Tutuila was ended.

The tropical disturbances eventually developed into Tropical Depression Kong-rey over the Marianas, bringing 5 to nearly 15 inches of rain this week to Rota and Saipan, causing flash flooding on Saipan. Guam was further south and received less rain, only about 2 inches. But this has been a wet month for the Marianas, so Guam, Saipan, and Rota continue at D-Nothing (no drought or abnormal dryness).

D-Nothing continued in the Republic of Palau. Over 2 inches of rain was recorded this week at Koror and Airai, and the month has been wet.

In the Federated States of Micronesia (FSM), western parts (Yap State) have been wet, with weekly rainfall totals ranging from 2.38 inches at Ulithi to 10.22 inches at Woleai (a minimum of 2 inches is needed to meet most water needs). Eastern and southern parts

have been dry, with weekly totals less than an inch. Most areas were wet last week. Monthly rainfall totals have generally been above the 8-inch minimum needed to meet most water needs, except in eastern (Kosrae State) and southern parts of the FSM. Pingelap had 2.72 inches of rain last week but recorded only 0.21 inch this week with 3.78 inches for the month so far, causing D0-S (Abnormal Dryness) to continue. At Kapingamarangi, a tenth of an inch (0.09) of rain fell this week, marking the sixth consecutive dry week, with only 2.05 inches for the month so far. If no more rain falls this month, October 2024 will rank as the sixth driest October in 35 years of data, which translates to a percentile of 0.17, which is moderate drought. Consequently, the status was worsened from D0-S to D1-S (Moderate Drought). Fananu had no data, so no analysis could be made, and D-Nothing continued at the rest of the FSM locations.

In the Marshall Islands, troughs gave rain this week to Majuro (4.56 inches) and Wotje (2.15 inches), while the other stations were dry (less than an inch). But last week was wet, and most locations (except Jaluit) had monthly totals more than the monthly minimum needed to meet most water needs, so D-Nothing continued. An analysis could not be made at Mili and Utirik due to no data.

Looking Ahead

Over the next 5-7 days, it is anticipated that the dry pattern will break over much of the Plains, Midwest and into the South, with widespread precipitation from north Texas to Wisconsin. The Western portions of the country will also be in a more active pattern, with the coastal areas, the Great Basin, and part of the Rocky Mountains seeing some precipitation. Temperatures will continue to be warmer than normal out in front of the precipitation, with the eastern Midwest, South, and East all anticipated to be warmer than normal, including departures of 13-15 degrees above normal in the Ohio River basin. Cooler- than-normal temperatures will settle in over the West, with departures of 10-13 degrees below normal over much of Nevada.

The 6-10 day outlooks show that the best chance for above-normal temperatures is over the East while much of the West has the best chance for below-normal temperatures centered on the Southwest. The greatest chance for above-normal precipitation is over the southern Rocky Mountains with above normal chances in the Plains and into the Midwest while the greatest chance for below-normal precipitation is over northern California and much of the West.

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