

National Drought Summary for November 5, 2024

Summary

Over the last week, weather systems tracked over the southern Plains and into the Midwest, bringing much-needed precipitation. Some areas of Arkansas and Missouri reported over 10 inches of rain for the week. The active pattern also continued over the Pacific Northwest, with the coastal areas and inland recording 2-4 inches of rain that helped to alleviate dryness. Temperatures over the West were below-normal for the week, by as much as 6-9 degrees in parts of Nevada, Utah and Arizona. The rest of the country had warmer-than-normal temperatures, especially in Texas and into Louisiana, Mississippi, Arkansas and Alabama, where they were 9-12 degrees above normal. Many areas that received rain during the period had these rains come on the cusp of record-setting dryness in October, but many records were still set for areas that didn't receive rain at the end of October and early November.

Northeast

Temperatures were generally 3-6 degrees above normal for much of the Northeast. Dryness continued, with only some portions of northern New York, New Hampshire, and Vermont recording near-normal precipitation. With the continued dryness, drought issues continue to develop, with abnormally dry conditions spreading through much of New York, Pennsylvania and more of New England. Moderate and severe drought conditions spread over more of eastern Pennsylvania, New Jersey, Delaware, and eastern Maryland, with extreme drought conditions emerging in southern New Jersey.

Southeast

The week brought some scattered precipitation into portions of Alabama, South Carolina, and eastern Florida, with dryness prominent for much of the rest. Temperatures were generally 4-8 degrees above normal. During the week, short-term dryness continued, following historic flooding in some areas. Abnormally dry conditions spread to all of western North Carolina with moderate drought also expanding in the northeast part of the state. Moderate drought expanded in the coastal areas of South Carolina and into eastern Georgia. Moderate and severe drought expanded over eastern Alabama and in southern Alabama into the Florida Panhandle. New areas of extreme drought emerged in central and southwest Alabama with extreme drought also expanding in northern Alabama. Moderate and severe drought conditions expanded slightly over the coastal areas of Virginia, while abnormally dry conditions spread to the rest of western Virginia.

South

Temperatures were 12-15 degrees above normal over much of the South, with areas of the Texas Panhandle into Oklahoma 6-9 degrees above normal. Much of Oklahoma and north Texas and Arkansas received significant precipitation, with widespread reports of 800% of normal rain for the week. The dryness continued over much of Tennessee and into northern Mississippi as the active rain patterns brought some rains, but not the significant and widespread rains that were more common in the West. A full category improvement was made over much of Oklahoma and northern Texas and western Arkansas, with extreme drought removed from the region. Extreme drought emerged in southeast Mississippi. Severe drought improved in Louisiana with moderate drought and abnormally dry conditions also improving in southern Louisiana.

Midwest

Most of the Midwest was 9-12 degrees above normal for the week. The coolest temperatures were in the Upper Midwest, where it was only 3-6 degrees above normal. Widespread and significant precipitation arrived in many areas of the Midwest but many of the eastern areas were dry throughout the period. Over 800% of normal rain was recorded in much of southern Missouri and central Iowa and Wisconsin as several rain events moved through this area. There is a wide swath of southern Missouri into northern Arkansas where CoCoRaHS observers reported 10+ inches of rain for the current Drought Monitor period. The rains brought widespread improvements to drought, with full-category improvements through much of Missouri, into most of Iowa and Wisconsin. Drought conditions improved by a full intensity level and some drought was removed completely. Drought eased in central Minnesota and southern Missouri had multiple-category improvements. Moderate drought expanded slightly in western Minnesota, eastern Indiana, and western Ohio. Severe drought expanded over more of northwestern Ohio, while severe drought receded over northern portions of Michigan. Abnormally dry conditions spread through the rest of Kentucky while moderate drought crept into southern portions of the state.

High Plains

Significant rains fell over much of Kansas, into southeast Nebraska and southeast Colorado. Rain and snow fell from portions of eastern Colorado into Wyoming and into the Dakotas too, reversing the trend of very dry conditions. Not all areas were as fortunate, with northeast Colorado, western Nebraska, eastern and southwest South Dakota and northwest North Dakota remaining dry this week. The region was split, with temperatures in the western areas 3-6 degrees below normal, and temperatures 9-12

degrees above normal in much of eastern Nebraska and eastern Kansas. Much of eastern Kansas saw a full category of improvement this week, with extreme drought being removed from the southeast. Severe drought was removed from far southeast Nebraska. In western North Dakota and in eastern Montana, severe and extreme drought expanded slightly. Some improvements were made to abnormally dry conditions over central to southern Colorado and to moderate drought over northeast Colorado. Moderate drought expanded across central South Dakota this week.

West

Precipitation was scattered over much of the West, with the greatest rain over the Pacific Northwest, where 200% of normal rain was recorded for the week in much of Oregon and Washington. Cooler-than-normal temperatures dominated the region with many areas of Nevada, Utah, and Arizona and into western Wyoming 6-9 degrees below normal for the week. Dryness continued to dominate much of Montana with abnormally dry conditions expanding to fill the rest of the state and moderate and severe drought expanding in the west. Abnormally dry conditions spread to the rest of central Utah while moderate drought and abnormally dry conditions improved over much of western Oregon and Washington. Some improvements were made over eastern New Mexico this week as a result of the continued wetter conditions.

Caribbean

No changes were made for Puerto Rico this week.

Generally, wet conditions with heavy scattered showers prevailed across the U.S. Virgin Islands.

On St. Thomas, rainfall totals this week ranged from 0.74 inches at VI-ST-14 (Nadir 0.3E/Tropical Marine) with 6 days missing to 5.72 inches at VI-ST-13 (Charlotte Amalie 1.2 NNW). VI-ST-5 (Charlotte Amalie West 4.2 WNW) and VI-ST-15 (Charlotte Amalie West 1.3N) reported 4.29 inches (2 days missing) and 4.79 inches (1 day missing), respectively. In addition, Cyril E. King AP reported 1.42 inches of rain.

The depth to water level Grade School 3 well (St. Thomas, USVI) on Nov. 5, 2024, was 2.77 feet below land surface, which is a significant decrease in depth to water level as compared with Oct. 22, 2024, when the depth to water level was 10.21 feet. Thus, St. Thomas remained free of drought.

On St. Croix, the weekly rainfall amount ranged from 1.94 inches at VI-SC-20 (Frederiksted 1.7 ESE) to 7.03 inches at VI-SC-30 (Christiansted 1.7 SW). Intermediate values included 6.1 inches at VI-SC-10 (Christiansted 1.6 E), 5.62 inches at VI-SC-25

(Christiansted 4.4W), 5.09 inches at VI-SC-23 (Christiansted 6.5 W), 5.08 inches at VI-SJ-9 (Trunk Bay 0.2 W), 3.34 inches at VI-SC-34 (Frederiksted 1.9NE), 3.33 inches at VI-SJ-5 (Cruz Bay 1.6 E), 3.12 inches at VI-SC-29 (Frederiksted 2.5 NNE), and 2.66 inches at VI-SC-35 (Frederiksted 1.3 ENE). Also 1.22 inches of rain was observed on Henry Rohlsen AP. Due to the recent rains, the depth to water level at Adventure 28 Well (St. Croix, USVI) on Nov. 5, 2024, was 19.26 feet below land surface. Thus, St. Croix remained free of drought.

On St. John, rainfall amounts reported at VI-SJ-5 (Cruz Bay 1.6 E) and VI-SJ-9 (Trunk Bay 0.2 W) were 3.33 and 5.08 inches, respectively. In addition, Rafe Boulon (VI-SJ-3: Windswept Beach) received 2.76 inches of rain. The depth to water level at Susannaberg DPW 3 well (St. John, USVI) on Nov. 5, 2024, was 7.00 feet below land surface, which has slightly increased this week as compared to last week, when it was 8.46 feet. St. John remains free of dryness.

Pacific

No changes were made for Alaska this week.

In Hawaii, rains brought some relief, especially on the Big Island, where over 10 inches of rain fell and caused flooding. Conditions improved on the Big Island, Maui, and Molokai. Moderate drought improved on the Big Island and abnormally dry conditions improved on all three islands.

Wet conditions continued across the Marshall Islands this week. Ailinglapalap reported 6.17 inches of rain, remaining free from dryness. This week, Jaluit received 1.71 inches of rain, remaining free of drought. Majuro, Kwajalein, and Wotje reported 3.01, 2.70 and 1.45 inches of rain this week, respectively. Thus, these islands remain drought-free. No depiction was made for Milli and Utirik due to missing data.

Western Micronesia received heavy showers this week. Heavy showers were observed on Yap, Kosrae, Woleai, and Ulithi, reporting 3.77, 3.28, 2.96, and 2.86 inches of rain, respectively, allowing the islands to remain free of drought. Pohnpei, Lukunoch and Nukuoro reported 2.95, 1.64, and 0.09 inches of rainfall this week, respectively. Pingelap reported 4.5 inches of rain this week and improved from abnormally dry to drought-free conditions. On Chuuk, only 0.09 inches of rain (two days missing) was observed this week. However, due to wet conditions that prevailed for the past several weeks, the island remains in normal condition. Kapingamarangi received only 1.0 inches of rain this week, remaining in short-term moderate drought. No depiction was made for Fananu and Utirik due to missing data.

Normal conditions continued across American Samoa. Pago Pago reported 3.56 inches of rain this week, remaining free of drought. In addition, Siufaga Ridge and Toa Ridge observed 0.95 and 0.42 inches of rain this week, respectively.

Wet conditions prevailed across Palau. Heavy scattered showers (2.34 inches of rain) were reported on Palau IAP (Airai) this week, allowing the island to remain free of drought.

Normal conditions prevailed across the Mariana Islands this week. The weekly rainfall total report showed that on Rota and Guam, 1.20 and 1.13 inches of rain was observed this week, respectively. Also, Saipan (IAP, manual gauge) and Saipan (ASOS) received 0.23 and 0.42 inches of rain with one day missing. Thus, these islands remained in near-normal conditions

Looking Ahead

Over the next 5-7 days, it is anticipated that the wet pattern will continue over much of the southern Plains and into the South, Southeast, and Midwest. The active pattern along the coastal areas of the Pacific Northwest will also continue. Greatest precipitation is anticipated over the southern Plains, western Tennessee, western Kentucky, northern Mississippi, southern Georgia, western South Carolina and the Pacific Northwest coast, where 3 or more inches of rain is anticipated. Much of the West will remain dry. Temperatures will remain cooler than normal over much of the West with departures of 10-12 degrees below normal over northern New Mexico and southern Colorado. Much of the eastern half of the country will be warmer than normal, while areas of the Midwest and South are anticipated to be 10-12 degrees below normal for the week. Hurricane Rafael has formed in the Gulf of Mexico and is projected to track westward. It may not make landfall until the middle of next week but could impact the dryness over the South and southern Plains depending on its path.

The 6-10 day outlooks show that the probability of above-normal temperatures will be greatest over the eastern half of the United States, especially over the Midwest and into the Southeast. Chances of cooler-than-normal temperatures are greatest over the West, in particular over California and Nevada. Most of the country has a good chance of recording above-normal precipitation during the period, especially over the Pacific Northwest.

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