

National Drought Summary for May 13, 2025

Summary

Precipitation fell across much of the U.S. this week, with heavier amounts (> 1 inch) falling from portions of the central and southern Plains eastward to the East Coast, and also in parts of the West, Hawaii, and southern Alaska. Much of the Southeastern U.S., from eastern Texas to North Carolina, reported weekly rainfall totals between 2 to 10 inches, while similar amounts (2 to 6 inches) were reported in parts of the Northeast. Above-normal precipitation supported drought improvements across large portions of the South, Southeast and Northeast, and in parts of the Southwest and High Plains. Conversely, weekly precipitation totals were below normal across much of the West to the Midwest. Drought and abnormal dryness were expanded or intensified in northern portions of the West and Midwest, as well as parts of the Southwest and High Plains. Temperatures were above normal across much of the U.S. this week, with areas of the north-central U.S., from central Montana to Minnesota, reported temperatures 9 to 20 degrees above normal. Below-normal temperatures were observed from the southern Plains to parts of the eastern Midwest, where departures were up to 10 degrees F below normal, with the largest departures being reported in parts of Texas.

Northeast

Precipitation fell across much of the Northeast this week, with heavier amounts (1 to 4 inches above normal) being reported across much of the region. The heaviest weekly rainfall totals (3 to 5 inches) were observed in parts of eastern Pennsylvania, New York and New England, resulting in improvements of moderate to severe drought (D1-D2) in this area. The above-average rainfall justified the removal of severe drought (D2) in southern New York and northern New Jersey, and improvements to severe drought in eastern Pennsylvania. Moderate drought (D1) was removed from New Hampshire and improved central Massachusetts, southern New York, New Jersey, Pennsylvania, and Maryland, while abnormal dryness (D0) was also improved across much of the region. For the week, average temperatures varied across the region, with above-normal temperatures being observed along the coast and below-normal temperatures being observed in the interior portions of the Northeast. Weekly temperature departures ranged from 6 degrees F below normal to 6 degrees F above normal.

Southeast

Heavy rainfall was observed across much of the Southeast this week, with precipitation totals ranging between 1 to 8 inches above normal. Above-normal weekly rainfall totals, with amounts up to 600% above normal, along with improvements shown in short-term SPI/SPEI, streamflow and soil moisture data, supported widespread improvements to

drought made across the region this week. Severe drought (D3) was removed from northern Florida, while moderate to severe (D1-D3) and abnormal dryness (D0) were improved across much of the state. Improvements to severe drought (D2) were made along the Carolina Coast, while moderate drought (D1) and abnormal dryness were improved across much of the region. No degradations occurred this week across the Southeast region. Temperatures varied across the region, with above-normal temperature being observed along much of the coast and Florida, while below-normal temperatures were reported along the western portions of the Southeast.

South

Cooler temperatures dominated the South this week, with departures ranging up to 9 degrees F below normal. However, small areas of Texas, Oklahoma, Mississippi, and Tennessee observed temperatures slightly above normal this week, with temperatures between 1 to 3 degrees F above normal. Precipitation varied across the region this week, with heavier amounts (1 to 8 inches) falling across much of Louisiana and Mississippi, and in parts of Oklahoma, Texas, and southern Arkansas. Moderate to exceptional drought (D1-D4) was improved in parts of western, central, and southern Texas, while moderate to severe drought (D1-D2) was improved in western Oklahoma. Improvements to abnormal dryness (D0) were made in Oklahoma and Texas, and abnormal dryness was removed from southern Mississippi and southern Louisiana. Drought reduction and improvements were based on precipitation totals, short-term SPI/SPEI, NDMC short-term blends, and improvements to streamflow and soil moisture data.

Midwest

Above-normal temperatures, with departures ranging between 1 to 20 degrees F above normal, were observed across most of the Midwest this week, with the largest temperature departures being observed in northern Minnesota. In contrast, temperatures were below normal across Ohio and Kentucky, and in parts of Michigan, Missouri, Illinois, and Indiana. Precipitation was reported across the southern and eastern portions of the region this week, with the greatest amounts falling in areas free of drought and abnormal dryness. However, precipitation was below normal across much of the region, with rainfall totals between 50% or less over the past 30 days. Growing precipitation deficits and degrading conditions, shown in short-term indicators, streamflow, and soil moisture, resulted in the expansion of moderate drought (D1) and abnormal dryness (D0) in central Minnesota, in southern portions of Wisconsin, Michigan, and Iowa, as well as northern portions of Missouri, Illinois, and Indiana.

High Plains

Warm temperature dominated the High Plains this week, with departures ranging up to 20 degrees F above normal, especially along the northern portions of the region, while cooler-than-normal temperatures were observed along the southern border.

Precipitation fell across the western and southern portions of the region this week; however, in most areas, amounts were insufficient for significant improvement.

Beneficial heavy precipitation (1 to 3 inches) in eastern Colorado and Kansas led to improvements in moderate to severe drought (D1-D2) and abnormal dryness (D0) in these areas. Conversely, dry conditions resulted in the introduction and expansion of drought. Extreme drought (D3) was introduced in western Nebraska, and moderate to extreme drought (D1-D3) expanded in western Colorado and eastern Nebraska.

Abnormal dryness was also expanded in southern Wyoming this week.

West

Average temperatures were above normal across nearly the entire region this week, while below-normal temperatures were observed across much of New Mexico, and in parts of Arizona and along the coast of Washington, Oregon, and California, where temperatures were between 1 to 6 degrees F below normal. Conversely, Montana observed temperatures ranging between 3 to 15 degrees F above normal this week. Precipitation varied across the region this week, with beneficial amounts falling in parts of the Southwest and southern Montana. Exceptional drought (D4) was improved along the Nevada-Arizona border, while extreme drought (D3) was trimmed back in southern Utah, southern Nevada, eastern California, and western Arizona. Severe drought (D2) was improved in parts of Utah, Arizona, while moderate drought (D1) was reduced in Montana. Conversely, above-normal temperatures and below-normal precipitation resulted in the expansion of exceptional drought in southern New Mexico, severe drought in Montana, and moderate drought in northern portions of Washington, Idaho and Montana. Abnormal dryness (D0) was also expanded in western Washington, northeast Oregon, northern and southern Idaho, and in southern California this week.

Caribbean

Puerto Rico remains drought-free this week based on recent precipitation, vegetation health and soil moisture data.

Near- to above-normal rainfall was recorded across the U.S. Virgin Islands this past week, keeping the territory free from any dryness or drought designation. On St. Croix, over 3.5 inches fell on some locations just southwest of Christiansted, but most locations in and near the city reported 1.25 to 1.75 inches. Farther west on St. Croix, generally 2.0 to 2.5 inches fell on the Frederiksted area, and similar totals were

recorded in and around Charlotte Amalie and Nadir on St. Thomas. Meanwhile, precipitation totals were a bit lower on St. John, but still sufficient to ward off any dryness or drought given antecedent conditions. Between 0.65 and 1.45 inches fell on most locations around Cruz Bay and Myall Point, and 1.57 inches was observed on Windswept Beach.

Pacific

Conditions have been wet across most of Alaska this month, resulting in improvements to abnormal dryness (D0) in southeast Alaska this week.

In Hawaii, while showers were generally focused over windward coasts and slopes, strong trades allowed some showers to spill into leeward areas. Notably, Kauai and Oahu experienced enhanced showers during the first half of the week, leading to improvements on these islands. In contrast, Maui and the Big Island saw drought expansion due to missed precipitation, low streamflows, and declining vegetative health.

Flooding is more of a concern than dryness across American Samoa. At Pago Pago, just under 10 inches of rain fell this past week, bringing the May total to almost 16 inches with more than half of the month to go. Dryness does not look to be a problem in the near future.

In contrast, drought conditions persisted or deteriorated across the Northern Marianas. Saipan remained in extreme drought (D3) while Rota and Guam dropped into severe drought (D2) from moderate drought. Several wildfires have broken out on Guam, and farmers have reported serious crop stress in some areas. Anywhere from a few tenths of an inch to about half an inch fell on most of the region last week. Since the first of May, between 0.3 and 0.4 inch fell on Saipan and Guam while just over an inch was reported at Rota. Intense rainfall (near 17 to over 21 inches) pounded the island chain back in October 2024, but since then, rainfall has been much more sparse. Year-to-date rainfall at Rota is only 10.35 inches (normal 19.15) while Saipan recorded 10.85 inches since December (normal 15.5). Farther south, Guam has recorded 24.58 inches since November 2024 (normal 32.85). In all cases, this is considerably lower than the 4 or more inches considered ideal each month for keeping up with demand.

Across the Federated States of Micronesia (FSM), areas of drought persisted on the eastern and western fringes, but other locations are now free of dryness and drought. In eastern sections, Pingelap reported just over one-half inch, keeping severe drought (D2) entrenched there. Along the western fringes, data from Yap were incomplete last week, but moderate drought (D1) was kept the same as last week since no significant rainfall was apparent based on other sources. At Kapingamarangi in south-central Micronesia, over 4 inches of rain fell last week, bringing an end to the abnormal dryness (D0) assessed the prior week. Other locations reporting 4 to 5 inches of rain last week (more than enough to match demand) included Kosrae, Lukunor, and Pohnpei while

Chuuk almost reached that range (3.7 inches). Nukuoro was considerably drier last week, recording just over three-quarters of an inch, but antecedent rains kept any dryness designation at bay.

Last week was a mixed bag for the Marshall Islands, but some degree of drought continued to affect most locations. The exception was in southeastern sections. Mili recorded 3.81 inches of rain last week while Majuro only reported a significantly lower amount (just over one-half inch) but antecedent rains held off any designation this week. In contrast, all of the northeastern locations are now mired in extreme drought (D3). Wotje reported about 1.1 inches this week, which helped a bit with the surface moisture situation, but did not appear to be sufficient to bring the locations out of D3. Utirik drops into severe drought (D3) this week with no measurable rainfall observed. To the west, Kwajalein received enough rain (1.92 inches) to justify improvement to D1 (moderate drought), but conditions remained largely unchanged in west-central and southwestern parts of the country. Ailinglapalap reported just over one-half inch of rain, prompting a continuation of D2 (severe drought), while the 1.33 inches reported at Jaluit did not appear sufficient to implement any change to their D1 (moderate drought) designation, which is the same as last week.

Looking Ahead

During the next five days (May 13-17, 2025), the slow moving upper low across the Southeast U.S. will be weakening and evolving into an open trough by Thursday as it exits the East Coast. Another upper trough and closed low across the Northern Rockies mid-week will sustain a surface low crossing the Northern Plains and then into south-central Canada by the end of the week, with heavy rain for the Dakotas/Minnesota and late season mountain snow for the northern Rockies. Going into Thursday, the heavier rainfall reaches eastern North Dakota into northern Minnesota, with some of the guidance indicating the potential for 1-2 inch rainfall totals with some embedded convection. Very warm weather will continue across the Upper Midwest for the middle of the week, with highs reaching 85-90 degrees on Wednesday across the eastern Dakotas and much of Minnesota. The anomalous warmth then shifts eastward to the Great Lakes and Ohio Valley regions to close out the week, and much of the East Coast Friday into Saturday ahead of the cold front. Very hot conditions are expected across southern Texas for the entire forecast period with highs exceeding 100 degrees near the Rio Grande, and HeatRisk reaching the major category for these areas. In contrast, chilly conditions are likely for the Intermountain West and Northern Rockies with highs running 5-15 degrees below average with the upper level trough and increased cloud cover.

The Climate Prediction Centers 6-10 day outlook (valid May 18-22, 2025) favors above-normal precipitation across most of the U.S., with below-normal precipitation favored in portions of the West Coast states and the Florida Peninsula. Increased probabilities for

above-normal temperatures are forecast for Hawaii, from the southern Plains to the Southeast, and in parts of California, Nevada, and southern Alaska.

Author(s)

Richard Tinker, NOAA/NWS/NCEP/CPC

Rocky Bilotta, NOAA/NCEI