

National Drought Summary for March 4, 2025

Summary

In the last week, a few swaths of precipitation occurred across the country, including the Sierra Nevada, northwest California and western portions of Washington and Oregon. Some high elevation areas of the West received precipitation as well, mostly outside of the desert Southwest. Some areas of the Upper Midwest and Northeast received a quarter of an inch of precipitation to locally over an inch. At the end of the current drought monitoring period (Tuesday morning), a powerful storm system was emerging into the Great Plains, delivering thunderstorms, high winds and wind-driven snow to parts of the Great Plains and Midwest. While some of this precipitation fell overnight Monday into early Tuesday morning, most of this precipitation will not be accounted for until next week's U.S. Drought Monitor (USDM) update. Temperatures generally ranged from 5-15 degrees warmer than normal in the Great Plains, with locally warmer readings in the Dakotas and eastern Montana. With some exceptions, temperatures were mostly within 5 degrees of normal across the rest of the Contiguous U.S.

The Southeast U.S. had a mostly dry week, which led to degradations to short- and long-term drought conditions across parts of the Carolinas, Georgia, Alabama and Florida. Mostly dry weather in the lower Midwest and southern Great Plains led to expansion of ongoing abnormal dryness and drought. Drought coverage and severity also increased in the Southwest and in Hawaii, while short-term abnormal dryness developed in south-central Alaska. Improvements to snowpack in parts of Idaho, western Wyoming and southwest Montana led to some improvements to conditions there.

Northeast

Precipitation amounts this week varied from a quarter inch to locally over an inch from western Pennsylvania and West Virginia through New England, while mostly dry weather occurred elsewhere. Temperatures ranging from 3-6 degrees above normal occurred in parts of eastern Pennsylvania, New Jersey and southeast New York. Temperatures were mostly within 3 degrees of normal elsewhere with some local exceptions. Few changes were made to the USDM depiction this week in the Northeast. Short- and long-term severe drought expanded a bit in central Maryland and adjacent south-central Pennsylvania, where soil moisture conditions continued to worsen alongside decreasing streamflow and increasing precipitation deficits. A small-scale increase in severe drought coverage along the New York-New Jersey border occurred due to decreasing streamflow and increasing precipitation deficits.

Southeast

Temperatures across the Southeast this week were mostly within 5 degrees of normal. Most areas in the region had a dry week. Short- and long-term moderate and severe drought developed or expanded across parts of the Carolinas and eastern Georgia this week, where streamflow and soil moisture dropped amid increased precipitation deficits. Smaller-scale increases in abnormal dryness and moderate drought occurred in Alabama after the dry week. Short-term moderate and severe drought expanded in south Florida, where fire danger indices have increased recently. Some improvements to short-term moderate drought occurred in central Florida following heavy rainfall that fell near last weeks Tuesday morning cutoff.

South

Temperatures across the South this week were mostly warmer than normal, with much of Texas and Oklahoma finishing the week 6-10 degrees above normal. A line of thunderstorms associated with this weeks powerful low-pressure systems produced widespread rain of 0.5-1 inches in central and western Oklahoma and central north Texas, though areas east of there did not receive precipitation from this storm system until after the Tuesday morning data cutoff. Scattered drought degradations occurred in the western halves of Texas and Oklahoma, due to increasing precipitation deficits and locally decreasing streamflow and soil moisture. Groundwater and reservoir levels continued to drop in central Texas in the San Antonio area amid very large precipitation deficits, leading to the development of a small area of exceptional drought. Similar conditions in southwest Texas led to the expansion of exceptional drought along the Rio Grande to the El Paso area.

Midwest

Temperatures in the eastern half of the Midwest region were generally near normal to 5 degrees above normal. In the western half of the region, temperatures from 5-15 degrees above normal were common. A half inch or more of precipitation fell across parts of northern Ohio, north-central Illinois and the Upper Peninsula of Michigan, while most other areas were relatively dry this week. Growing precipitation deficits, especially in the short-term, combined with low streamflow and soil moisture, led to the expansion and development of moderate and severe drought in northern Missouri, central and northern Illinois and Indiana. Elsewhere in the Midwest, no changes occurred to the USDM this week, though low seasonal snowfall totals in parts of Minnesota are of growing concern as the transition to spring occurs.

High Plains

Temperatures across most of the High Plains were above normal, with most locations east of the Rocky Mountains finishing the week between 9 and 15 degrees warmer than normal. Some precipitation fell in mountainous areas of Colorado and Wyoming, and snow occurred Monday night into Tuesday morning in parts of the northeast Colorado plains into western and central Nebraska. Most of the High Plains region east of the Rocky Mountains did not see any changes to ongoing drought or abnormal dryness, except for southern Kansas, where abnormal dryness expanded in response to unusually dry weather in the last few months. In western Colorado, moderate and severe drought expanded in coverage due to very low snowpack and growing precipitation deficits. Recent precipitation in west-central Wyoming led to localized improvements to drought conditions there.

West

Precipitation fell across higher elevations of California, northern Idaho and western areas of Oregon and Washington this week. For the most part, drier weather occurred elsewhere. Temperatures were warmer than normal in most of the West, with the warmest conditions of 9-15 degrees above normal occurring in the central and eastern plains of Montana. Recent improvements to snowpack in northeast Nevada, Idaho and southwest Montana led to localized improvements to drought conditions. Meanwhile, to the south across Utah, Arizona and New Mexico, this weeks continued dry weather led to widespread drought degradation as short- and long-term precipitation deficits grew amid soil moisture, streamflow and groundwater deficits. Drought conditions are especially bad from Phoenix westward to far southeast California, where exceptional drought developed this week.

Caribbean

Variable rainfall amounts occurred in Puerto Rico this week, with mostly dry conditions prevailing along the north-central coast, while a few locations elsewhere received at least 2 inches of rainfall. Temperatures were mostly a degree or two warmer than normal. Puerto Rico remained free of drought or abnormal dryness.

Neither dryness nor drought exists across the U.S. Virgin Islands, despite near- or slightly below-normal rainfall in recent weeks. Following last years wetness, vegetation remains relatively robust, while depth to groundwater as shown by a network of U.S. Geological Survey wells has only recently begun to increase. February rainfall across the territory, as reported by cooperative and volunteer (CoCoRaHS) observers, generally ranged from 2 to 3 inches on St. Thomas and St. John, and 2 to 4 inches on St. Croix. Standardized Precipitation Index values are trending in the direction of abnormal dryness, but have not yet reached that threshold.

Pacific

Very low snowpack led to the development of abnormal dryness in south-central Alaska, while abnormal dryness continued in southwest and southeast Alaska. Temperatures ranged from 6 to locally 15 degrees warmer than normal in central, south-central and parts of southeast Alaska. Temperatures were mostly within 3 degrees of normal in southwest Alaska and in the North Slope area.

Mostly warmer-than-normal temperatures occurred in Hawaii this week, with many locations finishing the week at least 2-4 degrees above normal. A recent dry spell along with decreasing streamflow in many locations led to expansion and degradation in drought conditions from Oahu eastward, especially on the windward (eastern) sides of the islands.

In the U.S.-Affiliated Pacific Islands, there were subtle changes to the previous depiction. In the Federated States of Micronesia, abnormal dryness (D0-S) on Woleai was eradicated by more than 6 inches of rain during the 7-day drought-monitoring period, while moderate drought (D1-S) persisted across Yap and Pingelap. A recent report from Woleai indicated that water tanks are full and vegetation is healthy. Meanwhile, an unconfirmed report from Yap indicated there have been some spot fires. In the Republic of the Marshall Islands (RMI), the depiction for Wotje was changed from abnormal dryness (D0-S) to moderate drought (D1-S), due to nearly continuous dryness during the first 2 months of 2025, aside from 2 weeks in February. D1-S was retained for Kwajalein, RMI, where January-February rainfall totaled 3.32 inches. The depiction for Utirik, RMI, was set at D1-S, following the receipt of data from an automated rain gauge. Similarly, automated data from Mili, RMI, showed a February rainfall total of 16.60 inches. In the Marianas, several days of soaking rainfall on Guam and Rota totaling 3.93 inches during the drought-monitoring period at Guam International Airport and more than 4 inches in several locations led to improvement from moderate drought (D1-S) to abnormal dryness (D0-S). However, rain remained mostly south of Saipan, where severe drought (D2-S) persisted. Neither dryness nor drought was observed across American Samoa and the Republic of Palau.

Looking Ahead

Through the evening of Monday, March 10, the National Weather Service Weather Prediction Center is forecasting parts of coastal and high elevation California, along with portions of the high elevation West to receive 0.75 or more inches of precipitation, though this is mostly expected to miss New Mexico, Montana, northern Idaho, Washington and Oregon. A few other corridors of at least a half inch of precipitation are forecast across northern Nebraska, from southeast Oklahoma to South Carolina and the

Florida Panhandle, and in New England. Some areas of the Southeast may receive at least 1 inch of rainfall.

Looking ahead to March 11-15, the National Weather Service Climate Prediction Center forecast favors above-normal precipitation in the northern Contiguous U.S. and strongly favors above-normal precipitation in the western, and especially southwestern, U.S. Below-normal precipitation is favored in most of Texas, especially in far southern reaches of the state. Colder-than-normal temperatures are favored across the West, while warmer-than-normal weather is favored across most of the central and eastern Contiguous U.S.

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